



## ORDINARY COUNCIL MEETING

Tuesday 26<sup>th</sup> February 2019  
6:00pm

Community Hub  
Room 1  
48 Burns Street, Maryborough

### AGENDA

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- 9. Documents for Sealing Confirmation Nil
- 10. Notices of Motion Nil
- 11. Urgent Business
- 12. Confidential Business Nil
- 13. Meeting Close

## 5 CONFIRMATION OF THE MINUTES OF PREVIOUS COUNCIL MEETINGS

**Author:** Manager Governance Property and Risk

**Responsible Manager:** Chief Executive Officer

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### SUMMARY/PURPOSE:

To present for confirmation, the minutes of the Ordinary Council Meeting held on 18 December 2018 and the Special Council Meeting held on 4 February 2019.

### POLICY CONTEXT:

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Organisation

Outcome: Central Goldfields Shire is proactive, well governed, professional and financially sustainable organisation.

4.3 Objective: Provide leadership in governance and Council decision making

### BACKGROUND INFORMATION:

The minutes of meetings remain unconfirmed until the next meeting of Council.

### REPORT:

Section 93 of the *Local Government Act 1989* requires Council to keep minutes of each meeting of the Council and Special Committees, and for minutes to be submitted to the next appropriate meeting for confirmation.

### CONCLUSION:

The unconfirmed minutes of the Ordinary Council Meeting held on 18 December 2018 and the Special Council Meeting held on 4 February 2019 are presented for confirmation.

### ATTACHMENTS:

1. Minutes of Ordinary Council Meeting held 18 December 2018.
2. Minutes of Special Council Meeting held 4 February 2019.

### RECOMMENDATION:

*That Council confirms the Minutes of the Ordinary Council Meeting held on 18 December 2018 and the Minutes of the Special Council Meeting held on 4 February 2019.*



## **ORDINARY MEETING OF COUNCIL MINUTES**

Tuesday 18 December 2018  
6:00pm

Council Chamber  
Room 1 Community Hub  
48 Burns Street  
Maryborough

### **MEMBERSHIP**

Administrator Noel Harvey  
Administrator Karen Douglas  
Administrator Hugh Delahunty

To be confirmed at the Ordinary Council Meeting  
scheduled for 26 February 2019



# UNCONFIRMED MINUTES

## 1. COMMENCEMENT OF MEETING AND WELCOME

The meeting commenced at 6.00pm

The Chair, Administrator Noel Harvey read the Council Prayer and acknowledgement statement:

### **Council Prayer**

Almighty God, we ask you to be present in this Council.

Direct and guide our deliberations.

We ask you to grant us wisdom and sensitivity as we deal with the business of our Shire.

May each decision that we make advance the wellbeing of all our residents.

This we pray. Amen.

### **Acknowledgement of Country**

I acknowledge the Traditional Owners of the land on which we are meeting. I pay my respects to their Elders, past and present, and the Elders from other communities who may be here today.

## PRESENT

Administrator Noel Harvey  
Administrator Karen Douglas  
Administrator Hugh Delahunty

## IN ATTENDANCE

Chief Executive Officer, Lucy Roffey  
General Manager Corporate Performance, Paul Brumby  
General Manager Infrastructure, Assets and Planning, Rebecca Stockfeld  
General Manager Community Wellbeing, Brenton West

## 2. APOLOGIES

Nil

## 3. LEAVE OF ABSENCE

Nil

## 4. DISCLOSURES OF CONFLICTS OF INTEREST

Nil

## 5. CONFIRMATION OF THE MINUTES OF THE PREVIOUS COUNCIL MEETING

The purpose of this report was to present for confirmation, the minutes of the Ordinary Council Meeting held on 27 November 2018.

### **Council Resolution**

*That Council confirms the Minutes of the Ordinary Council Meeting held on 27 November 2018.*

**Moved** Administrator Delahunty  
**Seconded** Administrator Douglas

**CARRIED**

# UNCONFIRMED MINUTES

## 6. REPORTS FROM COMMITTEES

### 6.1 NOTING OF THE APPROVED MINUTES OF SPECIAL COMMITTEE MEETINGS

The purpose of this report was to present for noting the confirmed minutes of Council's Special Committees established under section 86 of the Local Government Act 1989.

#### Council Resolution

*That Council notes the confirmed minutes of the:*

1. *Audit and Risk Committee Meeting 10 September 2018 (confirmed 4 December 2018).*
2. *Talbot Town Hall Committee Meeting 24 September 2018 (confirmed 19 November 2018).*
3. *Go Goldfields Collaborative Table 10 October 2018 (confirmed 12 December 2018).*

**Moved**                      **Administrator Douglas**  
**Seconded**           **Administrator Delahunty**

**CARRIED**

## 7. PETITIONS

Nil

## 8. OFFICER REPORTS

### 8.1 ASSEMBLIES OF COUNCILLORS

The purpose of this report was to provide the record of any assembly of Councillors, which has been held since the last Council Meeting, so that they are recorded in the minutes of the formal Council Meeting.

#### Council Resolution

*That Council note the record of Assemblies of Councillors as outlined in the report.*

**Moved**                      **Administrator Delahunty**  
**Seconded**           **Administrator Douglas**

**CARRIED**

### 8.2 COMMUNITY ENGAGEMENT – COMMUNITY VOICE PANEL

The purpose of this report is to provide an update to Council on the delivery of Council's *Engaging Central Goldfields: A Community Engagement Framework* and the establishment of a Community Voice Panel.

#### Council Resolution

*That Council:*

## UNCONFIRMED MINUTES

- 1. Endorse the establishment of the Central Goldfields Shire Community Voice Panel*
- 2. Commence the Expression of Interest process for the establishment of the Central Goldfields Shire Community Voice Panel*
- 3. Review the membership and functionality of the Central Goldfields Shire Community Voice Panel after 12 months*

**Moved**            **Administrator Douglas**  
**Seconded**      **Administrator Delahunty**

**CARRIED**

### **8.3 PUBLIC NOTICE – INTENTION TO LEASE PART OF MARYBOROUGH AERODROME – AMBULANCE VICTORIA**

The purpose of this report is to recommend that Council enters into a site lease agreement with Ambulance Victoria for site 1/136 located at 152 Leviathan Road, Maryborough Aerodrome.

#### **Council Resolution**

*That Council:*

- 1. Formally advertise its intention to enter into a 21 year lease agreement with Ambulance Victoria for site 1/136 located at 152 Leviathan Road, Maryborough Aerodrome (comprising an area of 408m<sup>2</sup>), with an initial term of seven years plus two options for a further seven years each, at a rental of \$104 plus GST per annum.*
- 2. Invites public submissions on this proposal under Section 223 of the Local Government Act 1989.*
- 3. Receives public submissions during the notice period ending 5.00pm on Tuesday 5 February 2019 and schedules a Hearing Meeting at 5.30pm on Tuesday 12 February 2019 to consider submissions.*

**Moved**            **Administrator Delahunty**  
**Seconded**      **Administrator Douglas**

**CARRIED**

### **8.4 INTENTION TO LEASE MARYBOROUGH AND DUNOLLY SES SITES**

The purpose of this report is to recommend that Council enters into leases with the Victorian State Emergency Service (VICSES) for two existing volunteer SES unit sites on Council land located in Maryborough and Dunolly.

#### **Council Resolution.**

*That Council:*

- 1. Authorises Council officers to undertake lease negotiations with the Victorian State Emergency Service on the MAV lease template for the following two sites;*  
*Site 1 – 70 Burns Street, Maryborough*

## UNCONFIRMED MINUTES

- *lease term of ten years (initial term of five years plus one further term of five years)*
- *rental of \$1.00 per annum (if demanded) and;*

*Site 2 – 51 Broadway, Dunolly*

- *lease term is 40 years (initial term of ten years plus three further terms of ten years)*
  - *rental of \$1.00 per annum (if demanded)*
2. *Notes that when leasing land to a public body, that there is no requirement to give public notice of Council's intention to lease land in accordance with Section 190 of the Local Government Act 1989.*
  3. *Authorises the Chief Executive Officer to sign and seal all documentation required to effect the lease agreements with the Victorian State Emergency Service for the sites that they currently occupy at 70 Burns Street, Maryborough and 51 Broadway, Dunolly.*

**Moved**            **Administrator Douglas**  
**Seconded**      **Administrator Delahunty**

**CARRIED**

### **8.5 PLANNING PERMIT APPLICATION 094/18 FOR THE USE AND DEVELOPMENT OF A RENEWABLE ENERGY FACILITY (90MW SOLAR FARM), AND CREATION OF AN ACCESS TO A ROAD IN A ROAD ZONE CATEGORY 1, AND ASSOCIATED WORKS AT 3348 PYRENEES HIGHWAY, CARISBROOK; 3080 PYRENEES HIGHWAY, MOOLORT; AND 160 BALD HILL ROAD, CARISBROOK**

Council has received a planning permit application (PA094/18) proposing the use and development of a renewable energy facility (90 MW solar farm), and creation of an access to a road in a Road Zone Category 1, and associated works at 3348 Pyrenees Highway, Carisbrook; 3080 Pyrenees Highway, Moolort; and 160 Bald Hill Road, Carisbrook.

Public notice of the application has resulted in 22 submissions including 18 written objections.

The application has been assessed against the policy and specific controls of the planning scheme and it is considered that the proposal meets relevant policy in the planning scheme.

### **Council Resolution**

*That Council:*

1. *notes that a planning permit application for a telecommunications facility has been received which will be associated with the renewable energy facility and is currently being advertised through the planning process;*
2. *confirms that these two related applications should be considered by Council at the same time; and*
3. *defers consideration of planning permit application 094/18 for the use and development of a renewable energy facility (90 MW solar farm), and creation of an access to a road in Road Zone Category 1, and associated works at 3348 Pyrenees Highway, Carisbrook; 3080 Pyrenees Highway, Moolort; and 160 Bald*

## UNCONFIRMED MINUTES

*Hill Road, Carisbrook to a time when both applications can be considered concurrently.*

**Moved**        **Administrator Delahunty**  
**Seconded**   **Administrator Douglas**

**CARRIED**

### **8.6        NOVEMBER 2018 FINANCIAL REPORT**

Monthly financial reports are presented to Council to show Council's financial performance and how it is tracking against the current budget (which is the adopted budget updated to include the carry forwards adopted at the October 2018 Council meeting).

#### **Council Resolution**

*That Council receives and notes the attached November 2018 Financial Report showing progress against the budget, as presented.*

**Moved**        **Administrator Douglas**  
**Seconded**   **Administrator Delahunty**

**CARRIED**

## **9            DOCUMENTS FOR SEALING CONFIRMATION**

### **9.1        DOCUMENTS FOR SEALING CONFIRMATION REPORT**

The purpose of this report is to present to Council for noting, documents that have been signed under Council's common seal, via delegation, since the last Ordinary Council meeting.

#### **Council Resolution**

*That Council note that the contract documentation relating to Contract G1279-2018 with Boral Resources (Vic) Pty Ltd for Annual Spray Sealing was signed and sealed by the Chief Executive Officer under delegation on behalf of Council, in accordance with the following resolution of Council made 27 November 2018:*

- *Award the Annual Spray Seal contract for 2018/19 G1279-2018 to Boral Resources (Vic) Pty Ltd for \$775,497.80 (GST Inclusive).*
- *Authorise the Chief Executive Officer to sign and affix the Common Seal to the contract documentation for Contract G1279-2018 for Annual Spray Sealing 2018/2019.*

**Moved**        **Administrator Delahunty**  
**Seconded**   **Administrator Douglas**

**CARRIED**

## **10          NOTICES OF MOTION**

Nil

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### **11 URGENT BUSINESS**

Nil

### **12 CONFIDENTIAL BUSINESS**

Nil

### **13 MEETING CLOSURE**

Administrator Harvey thanked Melanie Rogers for her work on the Governance Reform Project and wished her all the best in her retirement.

The Chair, Administrator Noel Harvey declared the meeting closed at 6.18pm

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To be confirmed at the Ordinary Council Meeting  
held on 26 February 2019.

Chair, Administrator Noel Harvey



## **SPECIAL MEETING OF COUNCIL MINUTES**

Monday 4 February 2019  
6:00pm

Council Chamber  
Room 1 Community Hub  
48 Burns Street  
Maryborough

### **MEMBERSHIP**

Administrator Noel Harvey  
Administrator Karen Douglas  
Administrator Hugh Delahunty

To be confirmed at the Ordinary Council Meeting  
scheduled for 26 February 2019

# UNCONFIRMED MINUTES

## 1. COMMENCEMENT OF MEETING AND WELCOME

The meeting commenced at 6.00pm

The Chair, Administrator Noel Harvey read the Council Prayer and acknowledgement statement:

### **Council Prayer**

Almighty God, we ask you to be present in this Council.

Direct and guide our deliberations.

We ask you to grant us wisdom and sensitivity as we deal with the business of our Shire.

May each decision that we make advance the wellbeing of all our residents.

This we pray. Amen.

### **Acknowledgement of Country**

I acknowledge the Traditional Owners of the land on which we are meeting. I pay my respects to their Elders, past and present, and the Elders from other communities who may be here today.

## PRESENT

Administrator Noel Harvey  
Administrator Karen Douglas  
Administrator Hugh Delahunty

## IN ATTENDANCE

Chief Executive Officer, Lucy Roffey  
General Manager Infrastructure, Assets and Planning, Rebecca Stockfeld  
General Manager Community Wellbeing, Brenton West  
Manager Governance Property and Risk, Megan Kruger

## 2. APOLOGIES

Nil

## 3. LEAVE OF ABSENCE

General Manager Corporate Performance, Paul Brumby

## 4. DISCLOSURES OF CONFLICTS OF INTEREST

Nil

## 5. OFFICER REPORTS

### **5.1 PLANNING PERMIT APPLICATION 094/18 FOR THE USE AND DEVELOPMENT OF A RENEWABLE ENERGY FACILITY (90 MW SOLAR FARM), AND CREATION OF AN ACCESS TO A ROAD IN A ROAD ZONE CATEGORY 1, AND ASSOCIATED WORKS AT 3348 PYRENEES HIGHWAY, CARISBROOK; 3080 PYRENEES HIGHWAY, MOOLORT; AND 160 BALD HILL ROAD, CARISBROOK**

The purpose of this report was to consider the planning permit application (PA094/18) proposing the use and development of a renewable energy facility (90 MW solar farm), and creation of an access to a road in a Road Zone Category 1, and associated works at 3348 Pyrenees Highway, Carisbrook; 3080 Pyrenees Highway, Moolort; and 160 Bald Hill Road, Carisbrook received by Council.



# UNCONFIRMED MINUTES

## Council Resolution

*That Council consider the planning permit application PA094/18, objections received and all matters required to be considered for the Use and Development of a Renewable Energy Facility (solar farm), access to Pyrenees Highway (RD1Z) and associated works at 3348 Pyrenees Highway, Carisbrook: 3080 Pyrenees Highway, Moolort; and 160 Bald Hill Road, Carisbrook (Crown Allotments 13A, 13B, 13C, 14A, 14A1, 14B, 14B1, Section 4, Lots 1, 3, 5, 6 & 7 on TP098420N) and determine to issue a Notice of Decision to Grant a Planning Permit subject to the following conditions:--*

### **1. Amended Plans Required**

*Before the developments starts, plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be generally in accordance with the plans submitted with the application but modified to show:*

- a) A 30 metres minimum separation between the edge of the solar arrays and the edge of the four ecologically constrained areas identified in the Flora and Fauna Assessment report (Biosis, 2018) and the edge of the native vegetation buffers along the south and west boundaries of the facility.*
- b) A 10 metres wide fuel-reduced area around the perimeter of the site which is to contain a perimeter road complying with the CFA access requirements. This fuel-reduced area may be constructed within the 30 metres buffer areas described in (a) above, but the perimeter road must not itself be closer than 15 metres from the edge of these areas.*
- c) The location of the static water supply tanks required for fire suppression purposes.*
- d) Detailed planning drawings of the development including floor and elevation plans of all proposed buildings, access roads and parking areas.*

*Before the use of the solar energy facility commences, all buildings and works as shown on the endorsed plans must be completed to the satisfaction of the responsible authority.*

### **2. Layout not altered**

*The use and development of the land for a solar energy facility as shown on the endorsed plans must not be altered or modified except with the prior written consent of the Responsible Authority.*

### **3. Decommissioning Plan**

*The following requirements must be met when the solar energy facility permanently ceases operation:*

- a) Within three months of the solar energy facility use ending, a decommissioning management plan prepared by a suitably qualified person must be submitted to the satisfaction of the responsible authority. When approved, the plan will be endorsed and will form part of the permit. The plan must include but is not limited to:*

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- i. identification of structures to be removed, including but not limited to all solar panels, substation, buildings if they are not useful for ongoing use) and electrical infrastructure;*
  - ii. details of how the land will be rehabilitated to allow it to be used for agricultural purposes (or proposed alternative use).*
- b) Within 12 months of the endorsement of the decommissioning management plan, the decommissioning must be completed to satisfaction of the responsible authority*

### **4. Access**

- a) Primary vehicular access to and from the property must be provided from the Pyrenees Highway. Only this access must be used during the construction phase of the development.*
- b) Secondary vehicle access via Bald Hill Road is permitted for ongoing use and development subject to upgrading the road from the Pyrenees Highway to the proposed access point to meet the Rural Access 1 (RA1) standard as defined in Councils Road Management Plan (RMP). In addition a vehicular crossover/driveway in accordance with IDM standard drawing 255 must be installed. All work must be undertaken to the satisfaction of the Responsible Authority and prior to the commencement of development of the site.*
- c) The applicant/owner must make further application for and have approved a driveway crossing permit for crossover/driveway works. All works constructed or carried out must be in accordance with the approved plan/permit.*
- d) Once constructed the crossover must be thereafter maintained by the landowner to the satisfaction of the Responsible Authority.*
- e) Any disused crossovers are to be removed and replaced with table drain and the nature strip levelled to the satisfaction of the Responsible Authority.*

### **5. Water Supply**

- a) The location of water access points and the quantity of water supply is to be established through a comprehensive risk management process that considers the credible on site hazards. In the event of a fire (either Structural Fire or Bushfire), sufficient water is to be available and accessible to fire appliances to ensure that fire suppression activities are not hindered in any way. Water access points are to be clearly identifiable and unobstructed to ensure efficient access.*
- b) Static water storage tank installations are to comply with AS 2419.1 and the following additional conditions:*
  - i. The static water storage tanks shall be of not less than 45,000 litres effective capacity and must be above ground and constructed of concrete or steel. The location and number of tanks should be determined as part*

## UNCONFIRMED MINUTES

*of the site's risk management process and in consultation with a CFA Delegated Officer.*

- ii. The static storage tanks shall be capable of being completely refilled automatically or manually within 24 hours.*
- iii. The static storage tanks shall be fitted with a hard suction point and connections and adapters which meet the requirements of the CFA.*
- iv. Access to the hard suction points shall also meet the requirements of the CFA.*
- v. An external water level indicator is to be provided to the tank and be visible from the hardstand area.*
- vi. Signage identifying the static water storage tank as being available for fire-fighting purposes shall be fixed to each tank to the satisfaction of the CFA.*
- vii. Signage indicating the direction to the static water tank(s) shall be provided at the front entrance to the site to the satisfaction of a CFA Delegated Officer.*

### **6. Loading and Unloading**

- a. The loading and unloading of vehicles and the delivery of goods to and from the site must at all times be undertaken entirely within the boundaries of the site and be so conducted as to cause minimum interference with other traffic to the satisfaction of the Responsible Authority.*
- b. The surface of loading areas and access roads must be constructed and maintained to the satisfaction of the Responsible Authority to prevent dust and drainage run-off causing a loss of amenity to the site or broader area. All such surfaces and roads to be constructed to an all-weather standard to ensure all-weather use and access.*

### **7. Car parking**

- a. Prior to the commencement of use, areas on the subject land must be set aside for parked vehicles, crossovers, driveway and access lanes as shown on endorsed plans and/or approved engineering plans must be:*
  - i. Constructed to the satisfaction of the Responsible Authority;*
  - ii. Properly formed to such levels that they may be used in accordance with the plans;*
  - iii. Surfaced with an all-weather standard to the satisfaction of the Responsible Authority;*
  - iv. Drained and maintained to the satisfaction of the Responsible Authority.*

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- v. *Parking spaces, access lanes and driveways must be kept available for these purposes at all times.*
- vi. *All parking spaces must be designed to allow all vehicles to drive forwards both when entering and leaving the property.*

### **8. Drainage**

- a. *All storm water must be accommodated and treated within the subject land.*
- b. *All storm water and surface water drainage from the proposed buildings, hard standing areas, driveways and yards must be designed to be contained within the site and designed for storm water quality and quantity to comply with the Best Practice Environmental Management Guidelines for Urban Storm water (CSIRO) 1999 to the satisfaction of the Responsible Authority.*
- c. *The legal point of discharge of storm water is to be to the north of the site to the existing culvert under the Maryborough Castlemaine Rail line.*
- d. *A Stormwater Management Strategy detailing all proposed storm water quality works within the subject land must be submitted to and approved by the Responsible Authority prior to the commencement of any drainage works on site.*

### **9. Waste Disposal**

- a. *The treatment of waste and litter from the operation of the site is to be undertaken in accordance with the endorsed Environmental Management Plan.*
- b. *No stockpiling of waste or litter is to occur on the site, all waste is to be disposed off site to the satisfaction of the Responsible Authority.*
- c. *All waste pick-up vehicles/trucks to be covered with secure covers, which are used to prevent dust or spillage of waste on departure from the site.*

### **10. Amenity**

*The amenity of the area must not be detrimentally affected by the use or development through the:*

- *Appearance of any buildings, works or materials*
- *Emission of noise, smell, waste water and waste products.*
- *Presence of vermin*
- *Discharge of polluted water or run off onto the site and or watercourses within or outside of the boundaries of land*
- *Reflection, Glint or Glare from the solar panels*

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## **11. Site Lighting**

*No external floodlighting shall be installed without the permission of the Responsible Authority*

*Where external lighting is provided (including security lighting) it must be fitted with suitable baffles and located so as to prevent the emission of direct light onto adjoining properties or roadways to the satisfaction of the Responsible Authority.*

## **12. Glare**

*Prior to the screen plating being established and to the satisfaction of the Responsible Authority, the solar farm must only operate within the following parameters:*

- a. Operation of a single axis tracking system with a maximum rotation of 60 degrees and a resting angle of 60 degrees.*
- b. Backtracking procedures to operate within normal parameters to maintain low angles of incidence relative to the sun.*
- c. Avoid 'resting' PV modules at 0 degrees, horizontal to the ground, notably during early morning due to potential increase in glare as identified in the modeling.*

## **13. Noise**

*The use and development must comply with relevant Environment Protection Authority noise guidelines including the EPA Publication 1411 Noise from Industry in Regional Victoria, 2011 for the operational phase and EPA Publication 1254, Noise Control Guidelines, 2011 for the construction phase*

## **14. Electromagnetic Interference**

*The use and development must comply with any exposure limits set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)*

## **15. Asset Protection**

*At any time the permit holder must ensure that the operation and condition of Council assets are not damaged by the new construction works. If the Responsible Authority deems Council assets have been detrimentally affected or damaged by development construction access, then the assets will be required to be repaired and reinstated by the permit holder to the satisfaction of the Responsible Authority.*

## **16. Sediment Control**

*The applicant / owner shall restrict sediment discharges from the construction site in accordance with Construction Techniques for Sediment Pollution Control (EPA1991) and Environmental Guidelines for Major Construction Sites (EPA 1995).*

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### **17. Civil Construction Requirements**

*Before the development starts, detailed plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and will then form part of the permit. The information submitted must show any relevant details listed in the Council's Infrastructure Design Manual (IDM) and be designed in accordance with the requirements of that manual, including:*

- a) details (and computations) of how the works on the land are to be drained;*
- b) details of how the drainage design allows for the continuation of existing overland flow paths across the land and ensures the prevention of erosion of the land;*
- c) carparking areas, circulation lanes and access shall be designed and constructed in accordance with AustRoads Publication 'Guide to Traffic Engineering Practice: Part 11 Parking,' 'Australian Standard AS2890.1-2004 (Off Street Parking)' & 'AS2890.6 (Off Street Parking for People with Disabilities);'*
- d) details of how lighting within the site is designed, baffled and located to effectively illuminate all pertinent public areas without spilling onto the road reserve or adjoining land, to the satisfaction of the responsible authority*
- e) details on how noise emitted from the land during the operation of the facility will not exceed the recommended levels set out in EPA Publication 1411 Noise from Industry in Regional Victoria, 2011 as amended and replaced;*
- f) details of the boundary fencing of the land.*

*Before the operation of the solar energy facility commences all buildings and works as shown on the endorsed plans must be constructed in accordance with the endorsed plans to the satisfaction of the responsible authority unless alternative approval provided, in writing, by the Manager Infrastructure:*

### **18. Landscape Plan**

*Before the development starts, three copies of a landscape plan consistent with the Landscape Plan submitted with the application must be submitted to and approved by the responsible authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must be drawn to scale with dimensions and must include:*

- a) a survey of all existing vegetation and natural features showing plants (greater than 1200mm diameter) to be removed;*
- b) a schedule of the trees and shrubs proposed to be planted in association with the landscape screening buffers along the south and west boundaries of the site, including the location, number and size at maturity of all plants. The planting is to be consistent with the details described in the Landscape & Visual Assessment report (Xurban 2018).*
- c) a maintenance and monitoring program to ensure the ongoing health of the landscaping, including weed management and the replacement of dead or diseased plants.*

## UNCONFIRMED MINUTES

*All species selected must be to the satisfaction of the responsible authority.*

*Before the commencement of the use or by such a later date as is approved by the responsible authority in writing, landscaping works shown on the endorsed plan must be carried out and completed to the satisfaction of the responsible authority.*

*Once the landscaping planting is carried out the landscaping must be maintained including the replacement of any dead or diseased plants to the satisfaction of the responsible authority.*

### **19. Landscape to be planted and maintained**

*Before the commencement of the development, the landscaping works, comprising the landscape screening buffers as described in the Landscape & Visual Assessment report (Xurban 2018), shown on the endorsed Landscape Plans must be carried out and completed to the satisfaction of the Responsible Authority.*

*The landscaping shown on the endorsed plans must be maintained to the satisfaction of the Responsible Authority, including that any dead, diseased or damaged plants are to be replaced.*

### **20. Temporary and permanent fencing**

*Before the development starts:*

- a) the four ecologically constrained areas identified on the endorsed plans are to be enclosed by permanent fences which are to be setback a minimum of 15 metres from the edges of these areas. These habitat protection areas shall be maintained as no access areas.*
- b) temporary protection fences consisting of star pickets and flagging or similar to the satisfaction of the responsible authority must be erected at a minimum distance of 15 metres from the edges of native vegetation buffer areas proposed along the south and west boundaries of the site. Except with the written consent of the Responsible Authority, the following activities are prohibited within the area contained within these fenced areas:*
  - i. Vehicular or pedestrian access*
  - ii. Trenching or soil excavation*
  - iii. Storage or dumping of any soils, materials, equipment, vehicles, machinery or waste products*
  - iv. Entry and exit pits for underground services*
  - v. Any other actions or activities that may result in adverse impacts to retained native vegetation.*

*The temporary protection fences must remain in place until all works and development are completed to the satisfaction of the Responsible Authority.*

## **UNCONFIRMED MINUTES**

### **21. Construction Management**

*Prior to commencement of works, a Construction Management Plan to the satisfaction of the responsible authority must be prepared, submitted to and implemented to the satisfaction of the responsible authority. The plan must show:*

- a) measures to control erosion and sediment and sediment laden water runoff, including the design details of structures;*
- b) measures to retain dust, silt and debris on site, both during and after the construction phase;*
- c) locations of any construction waste and the method of disposal, equipment, machinery and/or earth storage/stockpiling during construction;*
- d) existing conditions survey of public roads that may be used in connection with the construction of the facility*
- e) where access to the site for construction vehicle traffic will occur;*
- f) tree protection zones;*
- g) the location of trenching works, boring, and pits associated with the provision of services;*
- h) the location of any temporary buildings or yards;.*
- i) details of any treatment required for the portion of Bald Hill Road adjacent to the subject site to minimise dust during the construction phase*
- j) heavy vehicle movements*
- k) construction times*
- l) details of a site contact/site manager*
- m) details of how the construction phase will comply with EPA Publication 1254, Noise Control Guidelines, 2011 as amended and replaced.*
- n) Details of how the construction phase will comply with the requirements of the CFA.*

*During the construction phase all measures identified in the endorsed construction management plan must be implemented to the satisfaction of the responsible authority.*

### **22. General Amenity – Environmental Management Plan**

*Before the use commences, an Environmental Management Plan must be prepared, approved and implemented to the satisfaction of the responsible authority. The Environmental Management Plan must include:*

- a) overall environmental objectives for the operation of the solar energy facility and techniques for their achievement;*



## UNCONFIRMED MINUTES

- b) *day-to-day management requirements for the use of the solar energy facility and proposed agricultural use of the land;*
- c) *procedures to ensure no significant adverse environmental impacts occur as a result of the use;*
- d) *identification of possible risks of operational failure and response measures to be implemented;*
- e) *A pest animal and plant management plan.*
- f) *a program for recording and reporting environmental incidents or non-compliances with this permit and for responding to complaints during operation of the solar energy facility.*

*The use must at all times be conducted in accordance with the Environmental Management Plan to the satisfaction of the Responsible Authority.*

### **23. Fire and Emergency Management**

*Before the development starts, plans must be prepared to the satisfaction of the responsible authority and the Country Fire Authority and must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and then form a part of the permit. The plans must include the following:*

- a) *Fire Management Plan;*
- b) *Bushfire Risk Assessment, incorporating water supply requirements;*
- c) *Fuel Reduction and Maintenance Plan;*
- d) *Emergency Management Plan; and*
- e) *Any other risk management information for the site.*

### **24. Goulburn-Murray Water Requirements**

*All construction and ongoing activities must be in accordance with sediment control principles outlined in 'Construction Techniques for Sediment Pollution Control' (EPA, 1991).*

*If applicable, all wastewater from the office must be treated and disposed of using an EPA approved system, installed, operated and maintained in compliance with the EPA Code of Practice – Onsite Wastewater Management, Publication 891.4, and to the satisfaction of council's Environmental Health Department.*

*If applicable, the wastewater disposal area must be located in accordance with Table 5 of the EPA Code of Practice – Onsite Wastewater Management, Publication 891.4, July 2016, from any waterways (including Goulburn Murray Water open channels), drainage lines, dams or bores.*

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### 25. VicRoads Requirements

*The access crossover to the Pyrenees Highway shall be constructed generally in accordance with Beveridge Williams proposal: Project ref 1800070, Stage No. TR, Drawing No. 011, Rev P0.*

*A Construction Traffic Management Plan (CTMP) must be provided for VicRoads review and approval prior to construction commencing. The CTMP must address, in particular, heavy vehicle haulage routes, possible pavement deterioration due to construction traffic and the identification and remediation of any damage. Once approved, the CTMP will become an endorsed document within the Planning Permit.*

### 26. Expiry of Permit

*This permit will expire if one of the following circumstances applies:*

- a) The development is not started within two years of the date of this permit*
- b) The development is not completed within four years of the date of this permit*
- c) The use does not start within two years after completion of the development; or*
- d) The use is discontinued for a period of two years.*

*The Responsible Authority may extend the commencement date if a request is made in writing by the owner or the occupier of the land to which the permit applies before the permit expires or within 6 months afterwards.*

*The Responsible Authority may extend the time within which the development is to be completed if the development has commenced and a request in writing is made by the owner or the occupier of the land to which it applies within 12 months after the permit expires.*

### General Notes

- (a) **VicRoads Note:** Prior to any works commencing within the Pyrenees Highway road reserve, the applicant must enter into a works agreement with VicRoads, confirming design plans and works approvals processes, including the determination of fees and the level of VicRoads' service obligations – contact [western.mail@roads.vic.gov.au](mailto:western.mail@roads.vic.gov.au)*

***Need to transfer licences for unmade Government roads:*** *The licence for the two unmade government roads (Crown Land) within the subject land will need to be transferred to the applicant. Please note that further consents may be required in respect of any proposal to build infrastructure on the land comprised within these roads.*

**Moved**            **Administrator Hugh Delahunty**  
**Seconded**      **Administrator Karen Douglas**

**CARRIED**

## UNCONFIRMED MINUTES

### 5.2 PLANNING PERMIT APPLICATION 131/18 FOR THE DEVELOPMENT OF A TELECOMMUNICATIONS TOWER AT 160 BALD HILL ROAD, CARISBROOK

The purpose of this report was to consider planning permit application 131/18 for the development of a telecommunications tower at 160 Bald Hill Road, Carisbrook received by Council.

#### **Council Resolution**

*That Council consider the planning permit application PA 131/18, objections received and all matters required to be considered for the Development of a Telecommunications Facility at 160 Bald Hill Road, Carisbrook (Lot 7/ TP098420N) and determine to issue a Notice of Decision to Grant a Planning Permit subject to the following conditions:--*

#### **1. Amended Plans Required**

*Before the use or development permitted by this permit commences, amended plans must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be generally in accordance with the plans submitted with the application but modified to show:*

- (a) A site plan, drawn to scale and dimensioned to identify the title boundaries of the lot; existing infrastructure including surrounding roads, railway alignment, services and internal roads; respective setbacks from the northern and western title boundaries of the lot to the location of the proposed telecommunications tower only.*

#### **2. Layout not altered**

*The use and development of the land for a Telecommunications Facility as shown on the endorsed plans must not be altered or modified except with the prior written consent of the Responsible Authority.*

#### **3. Deferred commencement**

*The use and development hereby permitted by this permit must not commence unless and until the associated planning application D094/18 for a Renewable Energy Facility (Solar Farm) is:*

- (a) Approved by the Responsible Authority or VCAT; and*
- (b) A permit is issued for that use and development.*

#### **4. Decommissioning Plan**

*The following requirements must be met when the Telecommunications Facility permanently ceases operation:*

- (a) Within three months of the Telecommunications Facility use ending, a decommissioning management plan prepared by a suitably qualified person must*

## UNCONFIRMED MINUTES

*be submitted to the satisfaction of the responsible authority. When approved, the plan will be endorsed and will form part of the permit. The plan must include but is not limited to:*

- i. Identification of structures to be removed, including but not limited to The concrete tower, buildings (if they are not useful for ongoing use) and electrical infrastructure;*
  - ii. Details of how the land will be rehabilitated to allow it to be used for agricultural purposes (or proposed alternative use).*
- (b) Within 12 months of the endorsement of the decommissioning management plan, the decommissioning must be completed to satisfaction of the responsible authority*

### **5. Loading and Unloading**

- (a) The loading and unloading of vehicles and the delivery of goods to and from the site must at all times be undertaken entirely within the boundaries of the site and be conducted so as to minimise interference with other traffic to the satisfaction of the Responsible Authority.*
- (b) The surface of loading areas and access roads must be constructed and maintained to the satisfaction of the Responsible Authority to prevent dust and drainage run-off causing a loss of amenity to the site or broader area. All such surfaces and roads to be constructed to an all-weather standard to ensure all-weather use and access.*

### **6. Amenity**

*The amenity of the area must not be detrimentally affected by the use or development through the:*

- Appearance of any buildings, works or materials*
- Emission of noise, smell, waste water and waste products.*
- Presence of vermin*
- Discharge of polluted water or run off onto the site and or watercourses within or outside of the boundaries of land*

### **7. Site Lighting**

*No external floodlighting shall be installed without the permission of the Responsible Authority*

*Where external lighting is provided (including security lighting) it must be fitted with suitable baffles and located so as to prevent the emission of direct light onto adjoining properties or roadways to the satisfaction of the Responsible Authority.*

## UNCONFIRMED MINUTES

### 8. Noise

*The use and development must comply with relevant Environment Protection Authority noise guidelines including the EPA Publication 1411 Noise from Industry in Regional Victoria, 2011 for the operational phase and EPA Publication 1254, Noise Control Guidelines, 2011 for the construction phase.*

### 9. Electromagnetic Interference

*The use and development must comply with any exposure limits set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).*

### 10. Radio Emissions

*The use and development must be designed and installed so that the maximum human exposure levels to radio frequency emissions comply with Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz, ARPANSA, May 2002.*

### 11. Asset Protection

*At any time the permit holder must ensure that the operation and condition of Council assets are not damaged by the new construction works. If the Responsible Authority deems Council assets have been detrimentally affected or damaged by development construction access, then the assets will be required to be repaired and reinstated by the permit holder to the satisfaction of the Responsible Authority.*

### 12. Sediment Control

*The applicant / owner shall restrict sediment discharges from the construction site in accordance with Construction Techniques for Sediment Pollution Control (EPA1991) and Environmental Guidelines for Major Construction Sites (EPA 1995).*

### 13. Civil Construction Requirements

*Before the development starts, detailed plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and will then form part of the permit. The information submitted must show any relevant details listed in the Council's Infrastructure Design Manual (IDM) and be designed in accordance with the requirements of that manual, including:*

- a) details (and computations) of how the works on the land are to be drained;*
- b) details of how the drainage design allows for the continuation of existing overland flow paths across the land and ensures the prevention of erosion of the land;*
- c) car parking areas, circulation lanes and access shall be designed and constructed in accordance with AustRoads Publication 'Guide to Traffic Engineering Practice: Part 11 Parking,' 'Australian Standard AS2890.1-2004 (Off Street Parking)' & 'AS2890.6 (Off Street Parking for People with Disabilities);'*

## UNCONFIRMED MINUTES

- d) *details of how lighting within the site is designed, baffled and located to effectively illuminate all pertinent public areas without spilling onto the road reserve or adjoining land, to the satisfaction of the responsible authority*
- e) *details on how noise emitted from the land during the operation of the facility will not exceed the recommended levels set out in EPA Publication 1411 Noise from Industry in Regional Victoria, 2011 as amended and replaced;*
- f) *details of the boundary fencing of the land.*

*Before the operation of the Telecommunications Facility commences all buildings and works as shown on the endorsed plans must be constructed in accordance with the endorsed plans to the satisfaction of the responsible authority unless alternative approval provided, in writing, by the responsible authority.*

### **14. Construction Management**

*Prior to commencement of works, a Construction Management Plan to the satisfaction of the responsible authority must be prepared, submitted to and implemented to the satisfaction of the responsible authority. The plan must show:*

- a) *measures to control erosion and sediment and sediment laden water runoff, including the design details of structures;*
- b) *measures to retain dust, silt and debris on site, both during and after the construction phase;*
- c) *locations of any construction waste and the method of disposal, equipment, machinery and/or earth storage/stockpiling during construction;*
- d) *existing conditions survey of public roads that may be used in connection with the construction of the facility*
- e) *where access to the site for construction vehicle traffic will occur;*
- f) *tree protection zones;*
- g) *the location of trenching works, boring, and pits associated with the provision of services;*
- h) *the location of any temporary buildings or yards;*
- i) *details of any treatment required for the portion of Bald Hill Road adjacent to the subject site to minimise dust during the construction phase*
- j) *heavy vehicle movements*
- k) *construction times*
- l) *details of a site contact/site manager*
- m) *details of how the construction phase will comply with EPA Publication 1254, Noise Control Guidelines, 2011 as amended and replaced.*

## UNCONFIRMED MINUTES

- n) *Details of how the construction phase will comply with the requirements of the CFA.*

*During the construction phase all measures identified in the endorsed construction management plan must be implemented to the satisfaction of the responsible authority.*

### **15. General Amenity – Environmental Management Plan**

*Before the use commences, an Environmental Management Plan must be prepared, approved and implemented to the satisfaction of the Responsible Authority. The Environmental Management Plan must include:*

- a) *Overall environmental objectives for the operation of the Telecommunications Facility and techniques for their achievement;*
- b) *Day-to-day management requirements for the use of the Telecommunications Facility and proposed agricultural use of the land;*
- c) *Procedures to ensure no significant adverse environmental impacts occur as a result of the use;*
- d) *Identification of possible risks of operational failure and response measures to be implemented;*
- e) *A pest animal and plant management plan.*
- f) *A program for recording and reporting environmental incidents or non-compliances with this permit and for responding to complaints during operation of the Telecommunications Facility.*

*The use must at all times be conducted in accordance with the Environmental Management Plan to the satisfaction of the Responsible Authority.*

### **16. Fire and Emergency Management**

*Before the development starts, plans must be prepared to the satisfaction of the Responsible Authority and the Country Fire Authority and must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and then form a part of the permit. The plans must include the following:*

- a) *Fire Management Plan;*
- b) *Bushfire Risk Assessment, incorporating water supply requirements;*
- c) *Fuel Reduction and Maintenance Plan;*
- d) *Emergency Management Plan; and*
- e) *Any other risk management information for the site.*

## UNCONFIRMED MINUTES

### **17. Goulburn – Murray Water Requirements**

*All construction and ongoing activities must be in accordance with sediment control principles outlined in 'Construction Techniques for Sediment Pollution Control' (EPA, 1991).*

### **18. VicRoads Requirements for access considered under D094/18**

*This development is dependent upon the access considered under permit D094/18. In accordance with the VicRoads conditions provided for that permit, a Construction Traffic Management Plan (CTMP) must be provided for VicRoads review and approval prior to construction commencing. The CTMP must address, in particular, heavy vehicle haulage routes, possible pavement deterioration due to construction traffic and the identification and remediation of any damage. Once approved, the CTMP will become an endorsed document within the Planning Permit.*

### **19. Expiry of Permit**

*This permit will expire if one of the following circumstances applies:*

- a) The development is not started within two years of the date of this permit*
- b) The development is not completed within four years of the date of this permit*
- c) The use does not start within two years after completion of the development; or*
- d) The use is discontinued for a period of two years.*

*The Responsible Authority may extend the commencement date if a request is made in writing by the owner or the occupier of the land to which the permit applies before the permit expires or within 6 months afterwards.*

*The Responsible Authority may extend the time within which the development is to be completed if the development has commenced and a request in writing is made by the owner or the occupier of the land to which it applies within 12 months after the permit expires.*

**Moved            Administrator Karen Douglas**  
**Seconded       Administrator Hugh Delahunty**

**CARRIED**



## UNCONFIRMED MINUTES

### 6. MEETING CLOSURE

The Chair, Administrator Noel Harvey declared the meeting closed at 6:35 pm

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To be confirmed at the Ordinary Council Meeting  
held on 26 February 2019.

Chair, Administrator Noel Harvey

## **6.1 NOTING OF THE APPROVED MINUTES OF SPECIAL COMMITTEE MEETINGS AND ADVISORY COMMITTEE MEETINGS**

**Author:** Manager Governance Property and Risk

**Responsible Manager:** Chief Executive Officer

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

To present for noting the confirmed minutes of Council's Special Committees established under section 86 of the *Local Government Act 1989*.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Organisation

**Outcome:** Central Goldfields Shire is proactive, well governed, professional and financially sustainable organisation.

**4.3 Objective:** Provide leadership in governance and Council decision making

### **BACKGROUND INFORMATION:**

In accordance with section 86 of the *Local Government Act 1989*, Council has established Special Committees.

The Terms of Reference for the Special Committees require the minutes to be presented to Council for noting.

Minutes of Special Committees are confirmed/approved at the next scheduled meeting of that Special Committee.

### **REPORT:**

The following special and advisory committees of Council have provided confirmed minutes from their meeting as follows:

- Daisy Hill Community Centre Annual General Meeting Minutes 17 August 2017
- Daisy Hill Community Centre Meeting Minutes 16 August 2018
- Daisy Hill Community Centre Meeting Minutes 20 September 2018
- Talbot Town Hall Committee Meeting Minutes 19 November 2018
- Go Goldfields Collaborative Table Minutes 12 December 2018

### **CONSULTATION/COMMUNICATION:**

Not applicable.

### **RESOURCE IMPLICATIONS:**

No resource implications.

**CONCLUSION:**

Recently received, confirmed minutes of Council's special and advisory committees are presented to Council for noting.

**ATTACHMENTS:**

1. Daisy Hill Community Centre Annual General Meeting Minutes 17 August 2017 (confirmed 16 August 2018)
2. Daisy Hill Community Centre Meeting Minutes 16 August 2018 (confirmed 20 September 2018)
3. Daisy Hill Community Centre Meeting Minutes 20 September 2018 (confirmed 15 November 2018)
4. Talbot Town Hall Committee Meeting Minutes 19 November 2018 (confirmed 21 January 2019)
5. Go Goldfields Collaborative Table Minutes 12 December 2018 (confirmed 13 February 2019).

**RECOMMENDATION**

*That Council notes the confirmed Minutes of the:*

- 1. Daisy Hill Community Centre Annual General Meeting Minutes 17 August 2017*
- 2. Daisy Hill Community Centre Meeting Minutes 16 August 2018*
- 3. Daisy Hill Community Centre Meeting Minutes 20 September 2018*
- 4. Talbot Town Hall Committee Meeting 19 November 2018*
- 5. Go Goldfields Collaborative Table 12 December 2018*

COPY

Doc Id:

Chq:

23 JAN 2018

Refer to:

**MINUTES OF DAISY HILL COMMUNITY CENTRE ANNUAL MEETING**  
**HELD 7.30 pm THURSDAY 17<sup>th</sup> AUGUST 2017**

**PRESENT:** Lorraine and Laurie Nicholls, Councillor Chris Meddows-Taylor, Irene Hibberd, Janet Page, Maree Burns, Rita Wiseman, Pat and Gordon Perry, Neil Auger, Robby Laurie, Wendy and Graeme Newitt.

President Laurie welcomed everyone to the meeting and thanked them for their attendance.

**APOLOGIES:**

*Helen Reid*  
There was an apology from <sup>Moved:</sup> Rita  
Seconded: Janet that the apology be received.

**MINUTES:** The minutes of the previous <sup>annual</sup> meeting were confirmed as read.  
Moved: Pat  
Seconded: Lorraine

**TREASURER'S STATEMENT:**

The Treasurer's report showed an income of \$9,850.88 against an expenditure of \$3,241.39. There were surplus funds of \$24,269.19

Moved: Irene

Seconded: Janet that the audited financial report be adopted.

**PRESIDENT'S REPORT:**

Laurie reported that we have had another successful year, both socially and financially. He thanked all the office bearers for their help, plus all the committee members, who are always willing to help in any way. All the main activities were again successful, starting with the Garage Sale. Unfortunately numbers were down for the annual bus trip to the Werribee Mansion and Zoo, which necessitated us to take a 24 seater bus, instead of the coach. The Christmas in July was a successful night with both the food and the trivia parts being enjoyed. Thank you to John and Helen Reid for organizing the trivia.

The hall is being well used, with some activity happening nearly every day of the week, plus being hired out for private functions.

Laurie thanked Janet and the Patchwork ladies for the beautiful wall hanging they presented to the committee in recognition of their ten year anniversary.

He then invited Councillor Chris Meddows-Taylor to take the chair to preside over the election of office bearers.

Chris declared all positions vacant. He congratulated the committee on another successful year and called for nominations for the new office bearers.

President: Laurie Nicholls nominated by Rita

Vice President: Neil Auger nominated by Gordon

Secretary: Wendy Newitt nominated by Rita

Assistant Secretary: Maree Burns nominated by Irene

Treasurer. Irene Hibberd nominated by Graeme  
Committee to consist of all office bearers and Councillor Chris Meddows-Taylor,  
Pat Perry, Rita Wiseman, Robby Laurie, Gordon Perry, Lorraine Nicholls,  
Graeme Newitt, Janet Page, and Helen Reid.

It was resolved by general agreement that the current charges for hall hire and  
tennis fees remain unchanged.

Chris wished the committee another successful year and handed over to President  
Laurie who closed the meeting.

The meeting closed at 8.08 pm.

**Minutes of DAISY HILL COMMUNITY CENTRE****meeting, held 8.15 pm Thurs 16<sup>th</sup> AUG, 2018**

CENTRAL GOLDFIELDS SHIRE	
DOC ID:	
- 7 JAN 2019	
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**PRESENT:**

Lorraine and Laurie Nicholls, Chris Meddows-Taylor, Irene Hibberd, Janet Page, John Reid, Rita Wiseman, Pat and Gordon Perry, Neil Auger, Graeme Newitt, Maree Burns

President **Laurie** welcomed everyone to the meeting and thanked them for their attendance.

**APOLOGIES:**

There were apologies from Wendy Newitt, Helen Reid & Robbie Laurie.

**MINUTES:**

The minutes of the previous meeting were confirmed as read.

Moved: Gordon Seconded: Janet

**BUSINESS ARISING:**

1. We are covered under the Goldfields Shire & can we use their ABN? Chris will find out.
2. Pat has purchased a vacuum cleaner.
3. BBQ on Sat 1st Sept @ Woollies.  
Helpers - Wendy, Janet, Gordon & John. 2 packets of sausages & onions cut up. We NEED A-frame from Daisy Hill C.C. saying proceeds are for upgrade of tennis courts. Gordon will get A-frame & John will do the sign.
4. Fence at front of building - to be discussed next meeting.
5. Xmas in July successful socially & financially - clearing just under \$900.
6. Send a 'Get Well' card to Robbie Laurie to home address

**CORRESPONDENCE:**

In: Letter from Bunnings Ballarat re BBQ.

'Thank You' from Helen & John Reid for sympathy card sent.

Out: Notice in Maryborough Advertiser re our AGM date.

**FINANCIAL STATEMENT:**

Bank Balance: \$9548.01

Accounts: \$354.40 for electricity

Moved : Irene, Seconded by Lorraine that the bank balance be received & account passed payment.

## GENERAL BUSINESS:

1. Dont forget BBQ at Woollies 9am 1st Sept. Helpers.....
  2. We need another fund raiser for Oct/Nov - any ideas ? No ideas really - came back with Bunnings BBQ, but we have NO IDEA when that will be.
  3. This month we have had 2 extra bookings for the hall:-
    - a. Baby Shower 11th Aug
    - b. Childs Birthday party 18th Aug
  4. Re: 24 Carat Living Magazine - <sup>we</sup>Wendy gets very cross when, once again, Daisy Fill is omitted fro the district map. Chris rectified this for us once, but they have left us out the last couple of times. Could we write to Noel Harvey, The Addy, Tourist information Centre & the Shire or Maria Smith ????
- \* Chris said that he would have words with Natalie at The Advertizer & will also drop a note to Hugh Delahunty re the problem - PLEASE INCLUDE DAISY HILL IN ALL COUNCIL PUBLICATIONS1

Next meeting : Thurs Sept 20th 7.30pm

Meeting closed: 8.50pm

*L Michalls*

## **Minutes of the Daisy Hill Community Centre – 20<sup>th</sup> September 2018- 7:30pm.**

### **Present:**

Laurie & Lorraine Nicholls, Pat & Gordon Perry, Wendy & Graeme Newitt, Maree Burns, Chris Meddows-Taylor, Janet Page, Neil Auger, Irene Hibberd, Robby Laurie, John Reid

President **Laurie** and welcomed those present at the meeting and thanked them for their attendance.

### **Apologies:**

The apologies were received from Rita Wiseman, Helen Reid, Moved Neil/ Lorraine

### **Minutes:**

The minutes of the previous meeting (16<sup>th</sup> August) were confirmed as read Moved Gordon/ Janet

### **Business Arising:**

1. Chris gave details for the use of the Council's ABN. If for a grant, the proposal must go through Council, then use of ABN is allowed.
2. 24 Carat Living. Council has pushed this onto the Advertiser. They are only making a financial contribution. Chris will follow up at the Advertiser to make certain Daisy Hill is included for 2019.
3. Woollies BBQ went quite well making \$220, with a profit to us of \$187.00. Enquire with Woollies for another date early next year. Also follow up with Bunnings
4. Fence: Replacement for broken stays and post. Maree has some posts and Laurie will check for size. Working Bee to be held 9:00am Saturday 6<sup>th</sup> October to fix and a general clean up.
5. Australia Day. Ideas for a Guest Speaker for Saturday 26<sup>th</sup> 2019. Format to be the same as this year with a BBQ. Try to get children to participate, competitions or a fancy dress best outfit.

### **Correspondence:**

A thank you card from Robby, for our Get Well Card

### **Financial Statement:**

Bank Balance: \$9479.64

Account paid ARC Ventures: \$5175.50

Cash from Woollies BBQ: \$187.00

Balance: \$4495.56

Moved by Irene/Pat

### **General Business:**

1. Laurie asked all groups using the Centre to make sure the Air Conditioner is turned off completely before leaving.
2. Meeting dates: It was decided to trial Bi Monthly meetings for the next period.
3. Next Meetings will be Thursday 15<sup>th</sup> November (to discuss Xmas BBQ and Australia Day), and then 17<sup>th</sup> January 2019
4. Need for a Newsletter before the November meeting



5. The need to check with Council on our responsibility regarding fire extinguishers, to cover ourselves with Insurance. John to write to Council and C.F.A. regarding servicing of equipment.
6. Hire of the Hall was brought up with regards to policy for 21<sup>st</sup> birthdays. It was moved by Gordon/ Pat that the Hall would not be available for either 18<sup>th</sup> or 21<sup>st</sup> birthday parties.  
Carried
7. Funding for Australia Day. John was to write to Council for us to be considered in the allocation of funds for the day.

The meeting closed at 8:30 pm

Need to purchase new cord for the flagpole (J.R)

*L. Nicholls*

**Talbot Town Hall General meeting**  
**Held on the 19<sup>th</sup> November 2018**  
**Meeting held at: Talbot Town Hall**  
**Meeting Started at 7.00pm**

**Present:**

Daryl Greenwood, Steven Perry, Tina Fowler, Leanne Boyle, Lynda Kent Gerry Seymour & Maria Wolff

**Apologies:**

Ethan Fowler, Chris Kent

**Minutes of the Previous Meeting:**

Read out

**Moved by:** Leanne Boyle

**Seconded by:** Steven Perry

**Carried**

**Business arising from Previous Meeting**

- **First aid kit** – Leanne and Tina went to purchase and new first aid kit and discovered that the one in the chemist was nearly out of date. So was decided that when they get new stock in we will purchase one then.
- **Floor dust mops** – these have been purchased.
- **Computer** – Has been purchases and is working very well and the face book page is now operational.
- **TTT account** – this now been paid.
- **The roller door** – discuss in general business
- **Power point** – the power point has been checked
- **Market Insurance** – Leanne and Tina have gone to Adroit and they are coming back with a definite quote
- **Market helpers** – redirected to market report
- **Still no reply from council in regards to maintenance list that they requested on the hall**

**Treasurer Report**

As per attached

**Moved by:** Leanne Boyle

**Seconded by:** Maria Wolfe

**Carried**

**Correspondence be dealt with as read**

**Moved by:** Tina Fowler

**Seconded by:** Gerry Seymour

**Carried**

**Correspondence in**

- Fire permits

**Correspondence out**

- Ritch invoice

**Market Report**

read

- **October market** - there was no cleanup crew. Thank you to Steven Perry and His family for cleaning the hall. The young kids are too unreliable; we are only paying them peanut. We need to employ two reliable matured aged males (only because some of the wooden tables are very heavy) and pay then accordingly to set up the hall and clean up after the market.
- **List of BBQ allocations for next year**

**Moved by:** Tina Fowler

**Seconded by:** Leanne Boyle

**Carried**

## **General Business**

**\*The roller door** – it has been recommended that the roller door be locked to the floor as the locking mechanism of the roller door is too weak, it was agreed that this is worth looking into. Leanne to contact Ian Burt.

**\*Purchase of a long handle scrubbing brush, bucket and detergent** for community groups to scrub the concrete after their BBQ. A motion was moved to purchase these items.

**Moved:** Leanne Boyle

**Seconded by:** Daryl Greenwood

Carried

**\*Booking:** Leanne suggested that we should change the booking from the post office to the shop due to the post office changing ownership.

It was discussed and decided that it would stay at the post office for now.

**Moved by:** Lynda Kent

**Seconded by:** Steven Perry

Carried

**\*Community group hall hire** - It was decided that all community group now pay a minimal fee to cover cost like electricity and water

**Moved by:** Leanne Boyle

**Seconded by:** Daryl Greenwood

Carried

**\*Due to the fact we have not heard from council regarding the list of maintenance we have decided to hire a handy man to fix some of the minor repairs.**

**Moved by:** Daryl Greenwood

**Seconded by:** Tina Fowler

Carried

**\*Setup & Cleaning for Market** – A motion was moved to hire Dylan and Steven Perry to set up and clean up after the market \$20.00 each for setting up the hall and \$50.00 each for cleaning up after the market.

**Moved by:** Leanne Boyle

**Seconded by:** Lynda Kent

Carried

**Meeting Closed at: 7.45pm**



# COLLABORATIVE TABLE



Wednesday December 12<sup>th</sup> 2018

## Welcome & Acknowledgement:

Acknowledgement to Country

**Declaration of Conflict of interest:** No conflicts of interest.

## Story to bring the work into the room:

**Short Flix Festival Presentation by Suzi Cordell, Go Goldfields.**

**Minutes from previous meeting:** Minutes have been received.

## Business Arising:

## Actions from previous meeting

## Partnerships Addressing Disadvantage – feedback on application and update

Application was unsuccessful this time. Sandra and Brenton attended a Department of Treasury feedback meeting last Monday, along with consultants Dale Renner and Russ Wood from Latitude Consulting. At the feedback session, it was recommended that we continue to work on an outcomes based funding model for this project. Go Goldfields have strong support from the Department of Education and Training and they have recommended writing to the Treasurer for funding around this initiative.

**Action:** Noel/Brenton write to the Treasurer for further advocacy.

## AGM discussion

Discussed using the February 2019 launch of the Go Goldfields Year in Review Report 2018 as an opportunity for bringing community together to celebrate achievements.

**Story Seats QR Codes** – These are important to tell the story behind the seats so the community understands, however staffing constraints are holding this back. Perhaps this could be a job for the new tourism strategy person.

**Short Flix Festival (presentation and discussion later in meeting)**

**Next Meeting:** Wednesday 13<sup>th</sup> February 2019, 1.00pm-3.00pm. Maryborough Community Hub.

## New Business:

### Reports from around the table

### Reports from each area of work – questions arising

### Family Violence Report:

Raelene Williams: Lots of work has been happening in the last four weeks around consolidating our four work areas into a twelve-month plan. Also had promotion of the '16 Days of Activism'. Currently working with businesses in the community around the 'Champions of Change' and a Gender Equity in the Workplace workshop.

David Sutton: Two female students from Maryborough Education Centre were sponsored to attend the Law Enforcement and Public Health Conference in Toronto in October. They gave a 45-minute presentation on the Respectful Relationships program. They were very impressive and handled the questions directed to them very well. The students will also be presenting to the Family Violence Committee at Maryborough District Health Service this Friday December 14<sup>th</sup>.

### Children & Families Report:

Sharyn Huggett: 'Restacking the Odds' project has been delayed due to issues around Municipal Association of Victoria (MAV) owning the system that holds the data. These are the types of issues that Go Goldfields faces constantly. This is the first time we have had an opportunity to collect data from antenatal right through until the end of Grade 3 for this community. This is process data, not outcome data, which will allow us to see where we need to intervene to have an impact.

David Sutton: The AEDC data shows that the data around vulnerability in oral language has not shifted. This may be due to the influx of new residents/children into our Shire.

Sharyn Huggett: Would really like to dig deeper into this and find out the reasons why.

Kim Skyring: The August survey of parents with babies under twelve months of age has shown that the new mothers' group has made a big difference. Many mothers' are new to our Shire and don't have the social or service connections they need. The mothers' group can help facilitate those connections. There are also barriers around transport.

**Action:** Lucy to advocate for more transport for our Shire at the upcoming Transport Forum.

## Youth & Work Readiness Report:

Sandra is holding the YES Alliance. Sharyn is holding the Youth Services Team. Work Readiness Facilitator position has been advertised.

Sharyn Huggett: The Youth services data is not changing, many youths are facing seven or eight different complexities/barriers.

**Youth Hub** – Council is leading the development of a business plan. A group will convene in January to discuss this. It was agreed that Go Goldfields would use \$10,000 of it's funding to put towards developing a business plan.

**Action:** Brenton to follow up.

## Presentation:

### Short Flix Festival Presentation by Suzi Cordell, Go Goldfields Short Flix Festival Coordinator.

We need to look at the sustainability of this project and where it may lead next. It would be great to see Maryborough become a filmmaking hub, maybe with something like a junior TropFest held every second year.

Some possibilities discussed:

- Tour the films around different schools to inspire others
- DVD's distributed to schools and libraries - Films used as teaching resources in media classes
- Participants enter into other festivals – IndiMax and Suzi happy to help with this
- Opportunities with Castlemaine State Festival and other local festivals
- Develop mentorship role further - Past participants become mentors
- Indimax has offered work experience to the participants
- How can we support the participants in the future
- The next level is for the participants to encourage others to do what they did

**Action:** Agreed to use \$10,000 of Go Goldfields funding to look into further funding opportunities to take this to the next level. There is an obvious alignment between the Short Flix Festival and the advocacy for the Youth Hub. Perhaps a digital hub could be part of the Youth Hub with opportunities for further film making workshops and support for young entrepreneurs.

## Maryborough Court temporary closure – briefing paper

The Maryborough court will close for at least 3-4 months as of 19<sup>th</sup> April 2019. The Loddon Campaspe Community Legal Centre (LCCLC) advocated for a local relocation but it was declined and Castlemaine will be hosting court instead. This causes all sorts of issues for victims of crime travelling to Castlemaine on public transport, perhaps with an alleged perpetrator. Council have spoken with the Court Registrar who have said they don't get involved in these matters, they leave it to communities to advocate.

**Action:** Noel to look into ways to step up and advocate for our community.

## Go Goldfields Communications – Year in Review Report 2018

Go Goldfields have engaged a consultant to produce a Year in Review Report 2018. This is a very important piece of work and a draft report will be circulated to the Collaborative Table (online). Anyone from the Table can come in and meet with the consultant, if they would like to contribute to the report.

## Other Business:

### Advocacy Paper – ChangeFest Policy statement

Collaborative Table agreed to endorse this document.

**Action:** Sandra to follow up.

## Communications from Collaborative Table:

### Critical Messages to Action Groups:

- Agreed to contribute \$10,000 for Youth Hub business plan

### Agreed communication to community:

- Collaborative Table supports further investigation of sustainability of a Short Flix Festival in the Shire to build on the momentum and success

## Actions from this Meeting:

- Noel/Brenton to write to Treasurer for further advocacy around outcomes based funding model
- Lucy to advocate for our Shire at Transport Forum
- Brenton to follow up Go Goldfields to use \$10,000 of it's funding to put towards developing a business plan for Youth Hub.
- Look into further funding opportunities to take Short Flix Festival to the next level.
- Noel to look into ways to step up and advocate for our community around court closure.
- Sandra to follow up endorsement of ChangeFest document.



**Minutes:** Wednesday December 12th 2018 **Where:** The Maryborough Community Hub – Room 1 at 1:00pm **Chair:** Noel Harvey

**Attendees:** Amanda Hubber, David Sutton, Francis Lynch, Sharyn Huggett, Nickola Allan, Kim Skyring, Raelene Williams (left 2.30pm), Callen Parsons (arrived 1.45pm), David Osborn, Caroline Thoroughgood, Maree Elliot, Brenton West, Lucy Roffey (arrived 1.15pm), Ben Rowbottom (arrived 1.25pm). Presentation by Suzi Cordell.

**Notes:** Jodie Bennett

**Apologies:** Sandra Hamilton, Rowena Butler, Paul Huggett, Tom Wills.

**Minutes Confirmed at meeting held on:** Wednesday 12<sup>th</sup> December 2018



## 8.1 ASSEMBLIES OF COUNCILLORS

**Author:** Manager Governance Property and Risk

**Responsible Manager:** Chief Executive Officer

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### SUMMARY/PURPOSE:

The purpose of this report is to provide the record of any assembly of Councillors, which has been held since the last Council Meeting, so that it can be recorded in the Minutes of the formal Council Meeting.

### POLICY CONTEXT:

Section 80A of the Local Government Act 1989 requires the record of any assembly of Councillors to be reported to the next practicable Council Meeting and recorded in the Minutes and to include the names of all Administrators and Council Staff attending, the matters considered and any conflicts of interest recorded.

### BACKGROUND INFORMATION:

The Local Government Act provides a definition of an assembly of Councillors where conflicts of interest must be disclosed.

A meeting will be an assembly of Councillors if it considers matters that are likely to be the subject of a Council decision, or, the exercise of a Council delegation and the meeting is:

1. A planned or scheduled meeting that includes at least half the Councillors and a member of Council staff; or
2. An advisory committee of the Council where one or more Councillors are present.

The requirement for reporting provides increased transparency and the opportunity for Councillors to check the record, particularly the declarations of conflict of interest.

### REPORT:

Outlined below are the details of Assemblies of Councillors since the last meeting:

<b>Date</b>	18 December 2018	<b>Meeting:</b>	Briefing Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO)		
<b>Guests</b>			
<b>Conflict of interest disclosures:</b>	NIL		
<b>Matters Considered</b>	Pre meeting to discuss December Ordinary Council Meeting.		
<b>Date</b>	29 January 2019	<b>Meeting:</b>	Briefing Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO), Brenton West (GMCW), Glenn Deaker (AGMIAP), Megan Kruger (MGPR), James Maw (MSS), Keith Longridge (PO)		
<b>Guests</b>			
<b>Conflict of interest disclosures:</b>	NIL		
<b>Matters Considered</b>	<ul style="list-style-type: none"> <li>Planning Permit Application 131/18 for the Use and Development of a Telecommunications Tower at 160 Bald Hill Road, Carisbrook</li> <li>Planning Permit Application 094/18 for the Use and Development of a Renewable Energy Facility (90 MW solar farm), and creations of an access to a road in a Road Zone Category 1, and associated works at 3348 Pyrenees Highway, Carisbrook; 3080 Pyrenees Highway, Moolort; and 160 Bald Hill Road, Carisbrook</li> </ul>		
<b>Date</b>	29 January 2019	<b>Meeting:</b>	Hearings Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO), Brenton West (GMCW), Megan Kruger (MGPR), James Maw (MSS), Keith Longridge (PO)		
<b>Guests</b>			
<b>Conflict of interest disclosures:</b>	NIL		
<b>Matters Considered</b>	Hearings Meeting for Planning Permit Application 131/18 for the Use and Development of a Telecommunications Tower at 160 Bald Hill Road, Carisbrook		
<b>Date</b>	4 February 2019	<b>Meeting:</b>	Briefing Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO), Rebecca Stockfeld (GMIAP), James Maw (MSS), Tim Blackie (CSP)		
<b>Guests</b>			
<b>Conflict of interest disclosures:</b>	NIL		
<b>Matters Considered</b>	Pre meeting to discuss Special Council Meeting.		
<b>Date</b>	12 February 2019	<b>Meeting:</b>	Strategy Briefing and Hearings Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO), Rebecca Stockfeld (GMIAP), Paul Brumby (GMCP), Brenton West (GMCW), Tamara Marwood (MCE), James Maw (MSS), Tim Blackie (CSP), Keith Longridge (PO)		
<b>Guests</b>	NIL		
<b>Conflict of interest disclosures:</b>	NIL		

<b>Matters Considered</b>	<ul style="list-style-type: none"> <li>• Community Voices Panel</li> <li>• Go Goldfields Year in Review</li> <li>• 12 Month Evaluation Report of Lions Market</li> <li>• Municipal Heatwave Plan</li> <li>• Maryborough Integrated Water Management Plan</li> <li>• Planning Permit Application 133/18 for the Use and Development of a Promotion Sign at 4189 Pyrenees Highway, Flagstaff</li> <li>• Council Plan Action Plan 2018/2019</li> <li>• Ambulance Victoria Lease – Aerodrome</li> <li>• Rating Strategy Report</li> <li>• Finance Report</li> <li>• Porteous Road Bridge Report</li> </ul>		
<b>Date</b>	19 February 2019	<b>Meeting:</b>	Hearings Meeting
<b>Councillor Attendees</b>	Noel Harvey (Chief Administrator), Hugh Delahunty (Administrator), Karen Douglas (Administrator)		
<b>Council Staff Attendees</b>	Lucy Roffey (CEO), Rebecca Stockfeld (GMIAP), James Maw (MSS), Tim Blackie (CSP)		
<b>Guests</b>			
<b>Conflict of interest disclosures:</b>	NIL		
<b>Matters Considered</b>	Hearings Meeting for Planning Permit Application 133/18 for the Use and Development of a Promotion Sign at 4189 Pyrenees Highway, Flagstaff		

**RECOMMENDATION:**

*That Council note the record of Assemblies of Councillors as outlined in this report.*

## 8.2 GO GOLDFIELDS YEAR IN REVIEW

**Author:** General Manager Community Wellbeing  
**Responsible General Manager:** General Manager Community Wellbeing

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### SUMMARY/PURPOSE:

The purpose of this report is for Council to receive the Go Goldfields 2018 Year in Review Report.

### POLICY CONTEXT:

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Community

Outcome: A supported, cohesive community, living a full and healthy life  
1.1 Objective: Building an aspiring community, achieving and living a full life  
Initiative: Continue to deliver the Go Goldfields program and work towards sustainability

### BACKGROUND INFORMATION:

Go Goldfields is the place based, community led, collective impact initiative for the Central Goldfields Shire. Go Goldfields is about creating positive outcomes for children, youth and families in Central Goldfields Shire. It has come together around the shared vision of our community aspiring, achieving and living a full life.

Through a collective impact approach the community is combining skills, knowledge, resources and determination to challenge and change existing systems and address the long-term social issues that impact the Central Goldfields community.

The scope of Go Goldfields work is focused in four key areas –

1. Children and Families
2. Youth
3. Work Readiness
4. Family Violence

### REPORT:

The Go Goldfields Year in Review is conducted annually in order to demonstrate and highlight the aspirations and achievements of the previous year. The document celebrates and shares valued data, experiences and voices of our associated partners, volunteers and participants.



It is used to acknowledge funders and project partners, and is made public in order to give visibility to the work of Go Goldfields and Council

A free community event was conducted on Wednesday 13 February 2019 to launch the Go Goldfields 2018 Year in Review document.

**CONSULTATION/COMMUNICATION:**

Consultation and engagement has taken place with key staff within Council as well as with our partners who contribute to the Go Goldfields work to develop the Year in Review document

**FINANCIAL & RESOURCE IMPLICATIONS:**

The cost of producing the Year in Review document and the associated launch are funded through the Go Goldfields budget.

**CONCLUSION:**

The 2018 Go Goldfields Year in Review is an important document that will play a key role in communicating to the community, council, government, philanthropic funders and other partners the achievements of Go Goldfields.

There will be a Council Report presented to Council for noting at the February Council Meeting.

**ATTACHMENTS:**

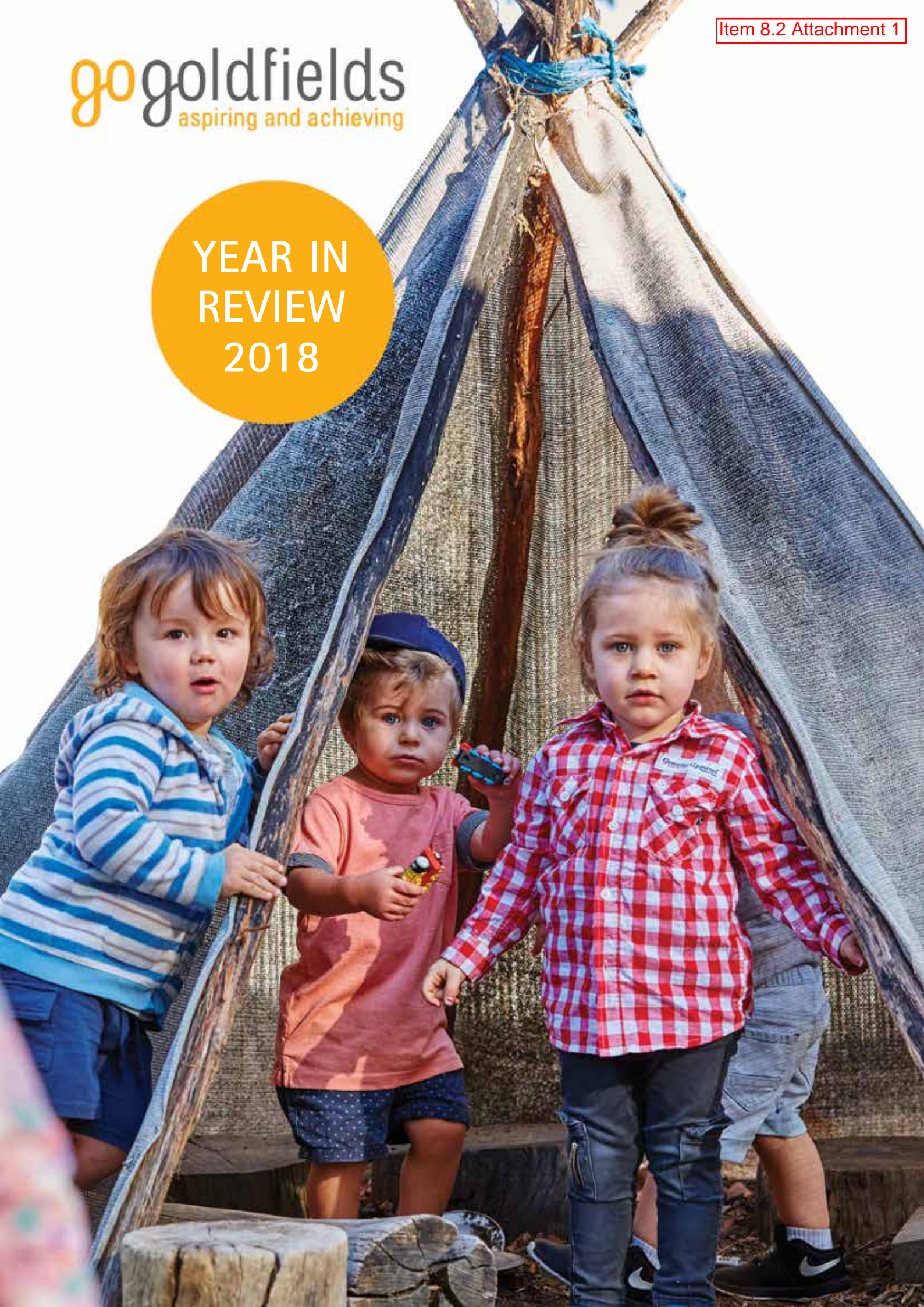
1. 2018 Go Goldfields Year in Review

**RECOMMENDATION:**

1. *That Council receive the 2018 Go Goldfields Year in Review*
2. *That Council acknowledge the work of staff and partners in delivering the critical work of the Go Goldfields initiative*



YEAR IN  
REVIEW  
2018





1	ACKNOWLEDGEMENTS
2	MESSAGE FROM THE CHAIR
3	VISION AND BELIEFS
5	FRAMEWORKS AND PHILOSOPHY
7	PARTNERSHIPS AND COLLABORATION
9	FAMILIES AND CHILDREN
12	YOUTH AND WORK READINESS
14	LITERACY AND ARTS
16	FAMILY SAFETY



# OUR COMMUNITY WORKING TOGETHER TOWARDS A POSITIVE FUTURE

## Acknowledgements

Go Goldfields, and the Central Goldfields Shire, acknowledges the Dja Dja Wurrung people as the traditional custodians of this land. We give thanks for collaboration with Elders and peers, and strive to progress our shared knowledge relationships.

This review details some of our high impact projects, for the purposes of shared consideration and reflection.

Go Goldfields thanks, and acknowledges, all of the voices expressed within this document, especially for their participation and guidance throughout the year.

We honour our Most Significant Change participants, who shared intimate reflections with us through our community engagement processes, and who will remain anonymous.

We also acknowledge the many valuable projects that we have assisted with, supported or initiated over the past year, and the associated community groups, individuals, project workers and supporters, who are not directly referenced within this review.

We are privileged to  
receive support from our  
Funding Partners





# A MESSAGE FROM THE GO GOLDFIELDS COLLABORATIVE TABLE CHAIR

Noel Harvey



*“Go Goldfields is empowering communities to solve problems through collaboration and co-design.”*

**Collaboration means, creating a positive future together. On behalf of the Go Goldfields Collaborative Table, I am pleased to present a year in review, providing snapshots of our achievements and outcomes for 2018.**

Go Goldfields is a place-based initiative addressing complex social issues. The shared common agenda, and overall approach, is to enable the collective aspirations of our community. We achieve this by listening, connecting, supporting and inspiring our many leaders.

We have continued to strengthen alliances, and share decision making, across all areas of our community; people with lived experiences, business owners, service providers, government representatives and our young people.

This year the Collaborative Table worked closely with many partners, as highlighted in the evaluation by the Murdoch Children's Research Institute.

Go Goldfields brings people and organisations together to deliver lasting and meaningful outcomes for our community. One example is the Go Goldfields and Best Start collaboration to adopt a single framework for the children and family planning sector, an incredible achievement that will

continue to have a significant impact for the coming years.

Together we are creating a new community narrative. Go Goldfields is empowering communities to solve problems through collaboration and co-design.

To continue our journey, we need a long-term commitment from government. Securing funding for the next two years for Go Goldfields' delivery has been a critical success for this year. We will continue to work closely with our funders, both government and philanthropic, to sustain long-term positive change.

Our funders understand and embrace the need to invest in early intervention strategies. We have demonstrated that Go Goldfields has the capacity within the local community to create innovative and proven solutions. Given the complexity of issues facing us, we recognise that this is a long journey, requiring patience, fortitude and determination.

I give thanks for the insightful and dedicated role of the Go Goldfields team who work alongside the Collaborative Table, and each focus work area group.

Please join us in celebrating the dynamic year that was, and get ready for 2019.

*We believe that community needs to work together, to challenge and change any system that impedes our goal, to achieve social and economic independence for all citizens.*

*We encourage people to think deeply, and differently, about ways to improve the lives of children, youth and families.*

*We challenge ourselves to be dynamic, to continuously collaborate, to maximize the benefits of co-design, to be accountable, and to ensure long term sustainability in our work.*



# FRAMEWORKS AND PHILOSOPHY

Community connections and aspirations guide our approach to achieving long term change for children, youth and families.

**Our approach is influenced by; Collective Impact, the IAP2 Public Participation Spectrum for increasing levels of public impact, Harwood Institutes Community Rhythms, gender equity and a primary prevention lens, across all areas of work.**

## Our Theory of Change Model

We have developed our framework for long term change from a robust collaborative co-design process, including identification of high leverage and equity-focused strategies which we believe will achieve our desired outcomes. We are creating the conditions for change through developing a shared awareness and understanding of local issues, strengthening partnerships, involving the community in decision making, increasing services collaboration, and responsive advocacy and investment.

There are now many examples of collaborative activity and its resulting changes across the municipality that did not exist a few years ago. Examples include the integrated philosophy of the Goldfields Family Centre, community police collaboration, and a growing number of community members who are passionate and involved in all aspects of this work.

We have systems in place to reflect and measure impact that inform the transformations that are needed. We continue to work together on challenging existing systems so that we can achieve our vision for our community aspiring, achieving to live a full life.

## Collective Impact

Collective impact is a collaborative approach premised on the notion that complex social problems cannot be overcome by working in isolation. By creating the elements that characterise collective impact including collective efficacy, long term population change can be achieved.

## Research and Evaluation

\$100,000 was invested in research and evaluation in the past year. We use data, indicators and a participatory evaluation process known as Most Significant Change.

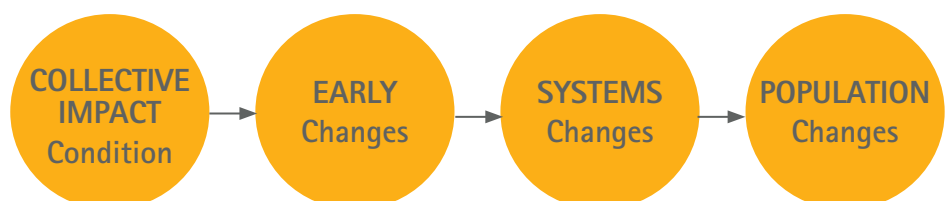
## Focus Work Areas

Partnership groups inform our focus which is arranged in four main areas of work.

These work areas have been determined by community through extensive consultations in previous years and are underpinned by priority needs. Our Arts, Language and Literacy development initiatives are seen as essential mechanisms for engagement, and enhancing community aspirations.

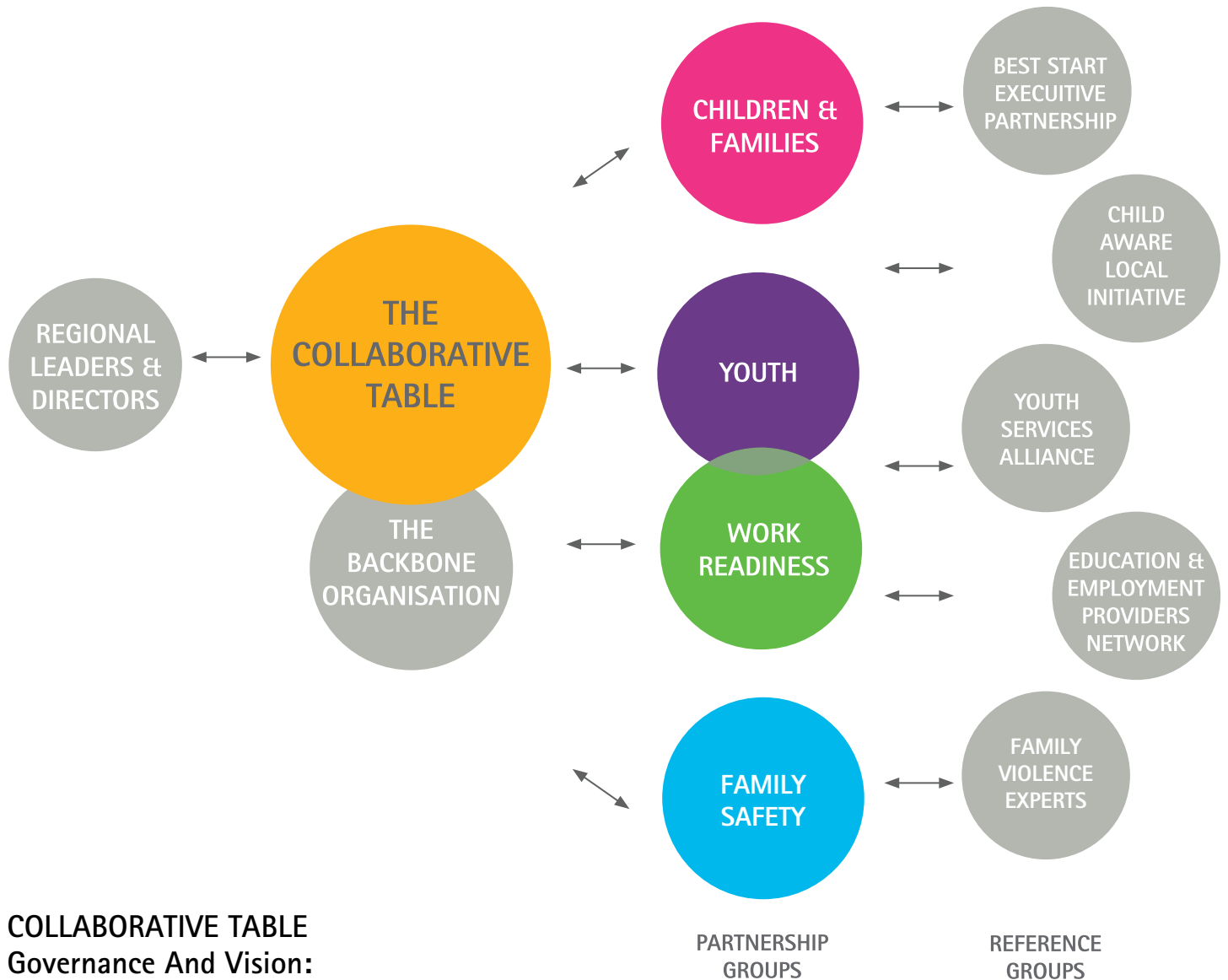
*Community has informed us that we can achieve a common vision for our community aspiring, achieving and living a full life, by focusing our efforts on ensuring;*

- *Children in our community are confident, creative, safe and healthy*
- *Our community celebrates our young people as they strive to reach their potential*
- *Our community has language and literacy skills to support aspiration, and create life opportunities*
- *Everyone can learn, earn, achieve and dream*
- *Everyone lives equally, and free from all forms of violence*



Source: Spark Policy Institute & ORS Impact, 2018

# GO GOLDFIELDS GOVERNANCE MODEL



## COLLABORATIVE TABLE Governance And Vision:

Overall strategy. Holding the work against our community aspirations. Includes service providers, government agencies, peak body groups, research and tertiary organisations, community leaders and businesses. Innovating to achieve our vision for 'our community aspiring, achieving to live a full life'.

## BACKBONE ORGANISATION Facilitation:

Services the entire initiative, mobilising diverse groups and cross-sectoral leadership. Integrating evaluation for reflection and learning.

## REGIONAL LEADERS AND DIRECTORS:

Support alignment of the work across government departments and regional services.

## PARTNERSHIP GROUPS Implementation:

Continual process of planning and doing, grounded in evidence. Creative problem solving. These groups focus on project implementation in the priority areas.

## REFERENCE GROUPS Expertise:

Grassroots and specialist feedback on community priorities. These are made up of community members and experts, which provide input to the decision making on specific areas of interest.





# PARTNERSHIPS AND COLLABORATION

Together we can achieve our vision to be an, aspiring and achieving community.

**Go Goldfields is defined by its partnerships, and collaboration.**

Work undertaken in 2018 shows that our collective impact initiative is thriving. The structures that we have in place provide a sustainable environment for continuing to strengthen collaborative efforts.

We value our genuine relationships with funding partners who actively engage in the work, action groups, alliances and a Collaborative Table, all uniting to facilitate social change.

The Collaborative Table brings together leaders from all parts of the community to govern, lead and hold the work. Members are drawn from across the municipality, and the State. These include; community and business leaders, service leaders, government representatives, peak body and research institution representatives.

The Partnership Groups meet regularly to advance the agendas in each work area, being; Children and Families, Youth, Work Readiness and Family Safety. Progress and challenges are reported to the Collaborative Table. Community members with lived experience of the issues are also sought to provide input to the decision making at regular intervals.

*“It has been said that the easy work has already been done, leaving us to tackle complexity.*

*So if we are to fund for outcomes, it will be necessary to move beyond funding programs alone to also develop financing mechanisms that fund place and complexity.*

*Go Goldfields is now an evolved collective impact site, and has key stakeholders engaged across multiple sectors with trusted relationships in place to enable collaboration, and a culture of innovation and working to outcomes. This makes them an excellent candidate for future funding.”*

Caroline Chernov, ten20 Foundation,  
Executive Director

**Governance** for the Go Goldfields initiative is structured around a 'collaborative table' model. Members of the collaborative table are encouraged to set an example as leaders for the Go Goldfields initiative and the wider Central Goldfields community.

Table members advocate for change within their organisations and circles of influence. They ask community and colleagues for their ideas and opinions and bring that feedback to the Table. They use their insights and passion to inform the work of Go Goldfields and drive positive change where it is most needed, desired and achievable. Table members model the collaborative behaviour, can-do attitude and the passion asked of all the members of Go Goldfields and more broadly of the Central Goldfields community.

**Current Collaborative Table members are;**

Central Goldfields Shire Council Executives and Managers, Anglicare Victoria, Centre for Non-Violence, Committee for Maryborough, Department of Education and Training, Department of Justice, Maryborough District Health Service, Maryborough Education Centre, Murdoch Children's Research Institute, Regional Development Victoria, SABEMO Foundation, Victoria Police and Victorian Council of Social Service and community leaders; Caroline Thoroughgood, Kim Skyring, Maree Elliott and Raelene Williams. We further recognise the representatives of these organisations on our website.

*Children who are loved and safe  
are confident and resilient.*





# CHILDREN AND FAMILIES

Children in our community are confident, creative, safe and healthy.

## Compassionate spaces

**Integrated Family Centre, a safe place where assistance is offered.**

The Goldfields Family Centre provides an integrated service model for young children and their families. It houses long day care, kindergarten, maternal and child health, supported play groups and a toy library, and facilitates access to long day care and visiting specialists such as speech pathologists.



"Life for me was pretty normal. My husband and I were working from home and raising our 18 month old son. We didn't have any family living with us in the community to ask for support, but it was easy because we were both at home.

However in October 2016, my life dramatically changed with the sudden and tragic death of my husband.

After the funeral I went to Melbourne to be with my Mum. But after three months I felt I needed to return to my home (in the Shire) and pick up my life. I knew I was still fragile and needed some support. But I had no idea where to start, so I began searching for local childcare.

I approached the Goldfields Family Centre, and after sharing my story, they were able to squeeze my child in for one day per week. As time went on grief caught up with me and again approaching the Centre, they connected me with services I wasn't aware of in the community.

The support helped me to keep functioning, and I would not have been able to stay here without it. It was more than just respite, it was someone to talk to about my worries – to ask, do I show my son pictures of his Dad? Do I talk about his Dad? The staff reassured me, and did little things by being aware of my birthday and helping my son to make a card, and speaking gently with me about Father's Day.

The support from the Centre, and connecting me to family day care, has allowed me to undertake study; my aim is to be job ready by the time my child starts school."

**Most Significant Change, participant**

**88** *Eligible children enrolled in 4 year old kindergarten.*  
2014 - 80% 2017 - 99.9%

Source: DET data 2017

**88** *Of the average 128 births per year 30% of women are first time mothers.*

Source: DET Maternal & Child Health Services Annual Report, 2018

## Deepening our understanding Berry Street Training

**People in our community are resourced to support children and families who have been impacted by trauma.**

Our aspiration that all children are confident, creative, safe and happy prompted the engagement of Berry Street to provide trauma informed practice training to the service sector workers, and community leaders in the shire, after the success of its training to educators, hosted by Maryborough Education Centre.



As a result of the additional Berry Street training, delivered by Go Goldfields Children and Families Partnership Group a number of kindergarten educators, police officers, social workers, health professionals and early learning educators now have greater capacity to understand, and create positive outcomes for, vulnerable members of our community. Key achievements for the Go Goldfields Children and Families Partnership Group was an increase in understanding, resources and collaboration between early-years services and integrated service delivery bodies.

*“Over 250 people in our community are now trained to better understand the impacts of trauma, creating the best educational outcomes for our most vulnerable learners.”*

Sharyn Huggett, Coordinator Go Goldfields

*“The Berry Street training has provided invaluable education on better understanding, and working effectively with, the most vulnerable members of this community.”*

Emily Robertson, Speech Pathologist

*“The Berry Street training highlighted what resources we do have in the community, and gave many people from different services the opportunity to learn new skills to apply to their practice.”*

Kellie Dunstan, Family Support Worker

**88** Nearly 20% of families in our shire are one parent families, higher than the State average (15.53%), and 83.3% of these are female.

Source: ABS 2016 census data



## Teddy Bears gather for a special picnic

**In recognition of the importance of National Association for Prevention of Child Abuse and Neglect (NAPCAN) week, Children and their families gathered together at the Station Domain Playground for a Teddy Bears' picnic celebrating positive family relationships and connections with others.**

This free, fun and accessible activity showcased how stress-free it can be for families to come together by using existing infrastructure, like local parks and public transport.

Organised at minimal cost the event was made possible through collaboration between community members, organisations and services, which make up the Go Goldfields Children and Families Partnership.

The picnic provided the ideal opportunity to continue the foundation work established from the previous year's campaign 'Hugs and Cuddles'. Our community continues to drive the message in the community and local media that "All Children deserved to be Loved and Safe."

A single mother and her son enjoyed and valued the event. In her feedback, she expressed that she felt comfortable talking to other parents and her son loved socialising, and she has made new friends. As a low-income family she finds it challenging to access day-care for her son to develop his social skills, events like these are essential.

*“The Teddy Bears Picnic was a great way to show community members that it doesn't cost much to get out of the house with their children and to showcase some of the great parks we have available in the shire for families to access.”*

Kellie Dunstan, Family Support Worker





*Our vision is driven by the  
Central Goldfields Youth Alliance,  
a collective of youth service providers  
and key leaders in their fields,  
actively supporting the proposed youth hub.*



# YOUTH AND WORK READINESS

Our community celebrates our young people, as they strive to reach their potential.

## Creativity and empowerment – Short Flix Festival

**We support young people in creative enterprise pursuits.**

Short Flix was an intensive four-month creative film making experience undertaken by ten young people. Working under the expert guidance and mentorship of professional filmmakers, they created their own short films.

Nine short films were presented at a gala red carpet event. Although short, the films relied on the ability of the young people to realize a vision and get locals as well as family and friends on board with their project. This supported cast, supplied materials and costumes, transport, storage, and all the behind the scenes support that is needed to create a film.

*“Participating in the Short Flix Festival has opened new doors for me that might lead to a career in film making.”*

Charlie May Butler, Short Flix participant

Short Flix successfully delivered mentoring based learning, instilled self-directed work planning, and encouraged young people take up leadership roles. Several program participants have also been inspired to pursue careers in the creative industries.

**99** *SHORT FLIX project;*  
370 people attend showings over 3 days  
40+ young people and community members involved.



*“It was great to know that my expertise could help other young people.”*

Ty, Youth Reference Group member

*“The Short Flix program has really helped me develop my skills and experience in the film industry...and I've loved every minute.”*

Harry Cain, Short Flix participant

*“Originally my friend Ryan Prime dragged me into it, but my love for film and the industry has blossomed over the last few months.”*

Avalon Game, Short Flix participant



## Prioritising new youth facilities – Youth Hub

**We do the work to attract the funding and raise awareness. We utilize a collaborative approach to design, and deliver, a youth services hub.**

Our leaders are actively advocating for young people, and their collective vision for the future, at State and Federal government levels. We recognise the priority for a Youth Hub with integrated social services in the Shire, and we aim to attract over \$5 million for such a facility.

Our vision is driven by the Central Goldfields Youth Alliance, a collective of youth service providers and key leaders in their fields, actively supporting the proposed youth hub.

**99** *Central Goldfields Shire total population is 12,995;*  
1,310 aged 15 -24 yrs  
724 aged 10 - 14 yrs  
703 aged 5 - 9 yrs  
586 aged 0 - 4 yrs

Source: ABS 2016 census data

We advocate for the proposed hub by ensuring that it is included and considered in key strategic development plans for the region, including:

- The Central Goldfields Shire Council, Council Plan 2017 - 2021
- The Loddon Campaspe Investment Prospectus
- The Central Highlands Councils Victoria Regional Investment Plan
- Loddon Campaspe Regional Partnership

Furthering the work undertaken in 2018, a feasibility study will be undertaken in 2019, to better understand what needs to be provided, and to further identify potential revenue sources.

*“Help should be available all in one place... but not attached to school, a fun place to hang out... it needs to be on the main street.”*

Young person, Central Goldfields Youth Alliance

*“Place-based, and integrated services mean that there will be lots of reasons for young people to attend the hub, and they won’t be stigmatized for attending.”*

Lucy Roffey, CEO, Central Goldfields Shire Council

## Mentoring towards work readiness

### Everyone can learn, earn, achieve and dream.

This story demonstrates collaborative effort for the shared aspiration that everyone can learn, earn, achieve and dream. Businesses are working with young people to provide opportunities to experience work.

“Last year I received a high number of resumes from young people looking for work after finishing school. There were skill gaps in these young people’s resume writing abilities.

So when I was invited, along with other local businesses, to get involved with the Maryborough Education Centre, I was happy to provide my time in a hope to close this gap. We were asked to assist young people with resume writing and mock interviews.

There was one young person in particular, a fantastic individual, who came from a family that was struggling. He was doing a lot of volunteering and odd jobs – he was a standout. But at school, he did not present like this. He received positive feedback from us, which was so different from the feedback he had been getting at school.

As a result of 15 businesses, 25 services and young people getting together we created more opportunities for work experience and mentoring.”

Windsor Main  
Site Manager, Edlyn Foods



Windsor Main and Mary Steed, Edlyn Foods

*“As a business person I am happy to walk young people through processes and expectations around employment, enabling them to be work ready.”*

Windsor Main, Site Manager, Edlyn Foods



# LITERACY AND ARTS

Our community has language and literacy skills to support aspiration and create life opportunities.

## Public art stories Story Seats – Creative interpretation and expression

Artists, community groups and library staff explored and created stories together, about our community; its characters, places, history and possible future.

The Story Seats project incorporated Go Goldfields art, literacy and communication areas; where unpainted bespoke public bench seats were manufactured and offered to community groups to embellish with stories.

These highly visible, functional and accessible community art works build upon previous Go Goldfields arts projects, such as Vases n' Verses and Imagination Stations.

The twelve seats are artworks in their own right, as well as being practical sculptural objects. The seats will be revealed within the Shire, and form part of a tourism trail, in 2019.

*“The process helped us to realise that our ideas have merit, and are worth pursuing.”*

Anon, Community Participant



## Literacy is Freedom – Australian Literacy and Numeracy Foundation

In 2018, we supported training in Early Language and Literacy as part of an important delivery partnership with Australian Literacy and Numeracy Foundation.

This initiative enabled vital skills enhancement within our community, to deliver foundational language and literacy development to children. Over 90 educators, parents and community members have successfully completed the course.

The sustained presence of training by the Australian Literacy and Numeracy Foundation is resulting in outstanding outcomes for children.

The success of the program has led to expansion of the Beckworth Special Needs Campus at the Maryborough Education Centre, the Supported Playgroup and Maryborough Regional Library.

We are proud of our achievements to build the shared aspirations for early language development in the Central Goldfields community, and have committed to continuing our support of the Australian Literacy & Numeracy Foundation.



*“98% of children participating in the Australian Literacy and Numeracy Foundation program improved their phonemic awareness.”*

Australian Literacy and Numeracy Foundation

*“I’ve learnt more from this course about children’s literacy than I learnt in my entire education degree.”*

Course participant, Primary school teacher

*“Just having this program available for our staff, has made a huge difference for our kids.”*

Course Advocate, Primary school Principal.

**98** 255 Literacy Conversations were held across the shire.

**98** Over 8,000 people attended, or were involved in, the arts in the shire over the past year.

Kay Parkin, Arts Coordinator,  
Central Goldfields Shire Council



**Always learning – literacy consultation & strategy**

Literacy development affects all of us profoundly.

In preparing for a Shire-wide literacy strategy, 255 interviews were held in 2018 to contribute to the Central Goldfields Literacy Strategy Consultation. These interviews were held in schools, libraries, street curbs and kitchen tables. Our vision is that everyone gains high level language and literacy skills. When a community achieves these skills, opportunities abound and collective impact strengthens. The Central Goldfields Literacy Strategy will be launched in 2019.

*“Arts and literacy initiatives are a part of the innovative approach to addressing issues across each focus work area.”*

Sandra Hamilton, Manager Social Inclusion Go Goldfields



# FAMILY SAFETY

Everyone lives equally, and free from all forms of violence

## Knowledge is power Tipping the Scales

**A Community Justice Partnership, providing free legal services for women and children experiencing family violence.**

A specialist and free legal advice service, Tipping the Scales is funded by the Victorian Legal Services Board Grants Program. This is a tailored meaningful and practical collaboration between health, social and legal organisations; providing people with timely legal advice and connecting them with appropriate support.

People who have experienced Tipping the Scale's advice and support have expressed how valuable it was to have the legal process, and their options, explained with genuine concern for how they are progressing.

After operating for only 18 months, Tipping the Scales has impacted vulnerable people's lives in profoundly positive ways. Feedback shows that the most significant improvements for people are reduced stress and anxiety levels, improved mental health, more resilient family relationships and higher community connectedness. 83% of recipients remained engaged with local support services after their legal matter was finalised.

Tipping the Scales services continue to grow in 2019, with additional funding resources to increase the legal services available in our community.



Rob Southgate Community Lawyer, Loddon Campaspe Legal Centre, Tipping The Scales Project

## Unravelling complex issues – Family Violence forum

**Exposing the gender inequality, and endemic complexity, of family violence.**

100 employers, community members and service providers attended the Maryborough Family Violence Forum to learn more about the complexities of family violence in rural and regional Victoria. This event aimed to increase awareness of the gender-driver of family violence. It was a collaborative initiative between Maryborough Rotary and Loddon Campaspe Community Legal Centre, with funding support from Go Goldfields and the Centre for Non-Violence.

The keynote speaker was Mary Barry, the former chief executive officer of Our Watch, a national violence prevention

organisation. Barry addressed the drivers of family violence, and sited that the core of the issue is gender inequality.

This strong collaboration between community and services will continue to lead the Family Violence action plan in 2019.

*“Collaboration is the way all of us can understand and address family violence, but the core is for women to be treated equally and respectfully; and that their expertise is valued and sought.”*

Garry Higgins OAM, Maryborough Rotary

**88** Free legal service provided to 50 people in 2018  
100% of people said they had a good understanding of their legal issue.  
100% of people reported they felt confident to take the next steps, and found their voice in the legal process.



## 16 Days of Activism

**Amplifying our community's voices to motivate change and to contribute to a future free from violence.**

16 Days of Activism is a campaign to end violence against women and girls around the world. Led by the Go Goldfields Family Violence Action Group, it is part of an international campaign coordinated by the Centre for Women's Global Leadership. It takes place every year and is run by over 6,000 organisations in 187 countries.

Community events in Maryborough actively engaged the community in conversations about the role of gender equality in addressing violence against women.

Understanding the role of gender equality is an essential pillar of the Go Goldfields Family Violence Action Plan.

Community members showed their support by celebrating the Marigold Story Seat launch and 'walking-the-walk'- a community walk around Phillips Gardens to view the shire's Marigold and White Ribbon gardens, as well as the Marigold Seat, which Central Goldfields Shire chief administrator Noel Harvey said got people talking.



Hosted at the Maryborough Resource Centre, messages of support and hope for people dealing with family violence were displayed, as well as the 'Little People, Big Voices' project. Children decorated little bears to represent their rights and agency, and to highlight that children are often the silent victims of family violence.

Go Goldfields Family Violence Action Group will continue to bring together the community to deliver campaigns raising awareness of the role of gender equality in addressing violence against women.

*“Children’s experiences need to be seen, and their voices heard and listened to.”*

Robyn Trainor, Centre for Non-Violence

gg Approximately 30 people participated in the marigold walk, lunch and activities.

gg Over 1000 children participated in Little People, Big Voices.

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### 8.3 NORTHERN VICTORIAN CLUSTER – MUNICIPAL HEATWAVE PLAN

**Author:** Coordinator Emergency Management

**Responsible General Manager:** General Manager Community Wellbeing

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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#### SUMMARY/PURPOSE:

To seek Council's endorsement of the Northern Victorian Cluster – Municipal Heatwave Plan.

#### POLICY CONTEXT:

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Community

**Outcome:** A supported, cohesive community, living a full and health life.

**1.4 Objective:** Provide leadership in municipal emergency and fire prevention planning and strengthen public safety

#### BACKGROUND INFORMATION:

The duration, frequency and intensity of heatwaves in the future is projected to rise due to climate change. Indications are that we will be subject to longer, hotter periods of extended heatwave conditions which can have significant impacts on not only health but life. The Bureau of Meteorology's *Heatwave service for Australia* defines heatwave as three days or more of high maximum and minimum temperatures that are unusual for that location'.

In the 2009 heatwave an estimated 374 deaths occurred, much greater than the 173 deaths arising from the Black Saturday bushfires the following week. In the 2014 heatwave there were 167 excess deaths. Excess deaths are above what would otherwise be expected and may have been a result of extreme heat (DHHS 2015).

Planning for the impacts of extreme heat and heatwave has been underway in Victoria for at least ten years. Three key documents outline this process:

- The State Heat Plan outlines arrangements for an integrated and whole-of-government approach to the emergency management of extreme heat in Victoria.
- The Heat Health Plan for Victoria outlines a coordinated approach to the prevention, preparation and management of extreme heat in Victoria, with a focus on health and community service providers and local and state government.
- State Extreme Heat Sub-Plan (Edition 2) outlines the Victorian arrangements for the coordinated response to the impacts and consequences of extreme heat events (including heatwaves) on the community, infrastructure, and services.

Each of these plans recognise the role of local government in working with local communities to prepare and plan for, respond to and recover from emergencies.

Management of extreme heat and heatwave straddles a number of local government areas of responsibility including emergency management, home care services, social wellbeing,

infrastructure, economic development, sustainability and environment and town planning. A coordinated approach is required to deliver a high level of service to our community in times of heatwave to increase the benefits that the heatwave sub-plan can offer. The heatwave plan outlines what will be done to assist the community to become more resilient to the effects of heatwaves.

## **REPORT:**

### **Issues:**

This plan for heatwave will assist the community to prepare for, respond to and recover from heatwaves and extreme events. By not endorsing the plan the effects that heatwaves can have on community will increase over time (due to lack of community action) with indication of increased heatwave events occurring through climate change.

### **Risk:**

The risk of heatwave is identified in the Integrated Municipal Emergency Management Plan (IMEMP) through the Community Emergency Risk Assessment (CERA) process.

<b>Risk</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Rating</b>	<b>Mitigation action</b>
Heatwave	Almost Certain	Catastrophic	Extreme	Plan

There is an extreme risk associated with extended heat events and heatwaves impacting the health and wellbeing of vulnerable groups within the community.

By endorsing the Heatwave Plan it will not necessarily reduce the risk rating (due to one death = catastrophic consequence) however with increased awareness and community understanding and preparedness, it is hoped the impact on the wellbeing of the community will be reduced.

## **CONSULTATION/COMMUNICATION:**

The Heatwave sub plan has been developed by the Integrated Municipal Emergency Management Planning Committee with input from all agencies included on the committee. The sub-plan for Heatwave has been recommended to Central Goldfields Shire Council for endorsement from the Integrated Municipal Emergency Management Planning Committee.

## **FINANCIAL & RESOURCE IMPLICATIONS:**

Cost of implementation of the plan will be absorbed within existing resources.

## **CONCLUSION:**

Endorse the heatwave plan as presented and recommended by the Integrated Municipal Emergency Management Planning Committee.

## **ATTACHMENTS:**

1. Northern Victorian Cluster – Municipal Heatwave Plan

**RECOMMENDATION:**

*That Council endorse the updated Northern Victorian Emergency Management Cluster Heatwave Plan*



## Northern Victorian Emergency Management Cluster



# Northern Victorian Emergency Management Cluster Heatwave Plan Issue 4 - November 2018

Template Prepared by Central Victorian Greenhouse Alliance for Buloke, Central Goldfields, Gannawarra, Loddon, Macedon Ranges and Mount Alexander shire councils who participated in the Resilient Community Assets Heat Health project and City of Greater Bendigo who was involved in the early stages of the project.

The Resilient Community Assets Project — a partnership between the Victorian Government and six local councils.

## Version Control

Date	Version	Details	Officer
April 2016	2	New Municipal Heatwave Plan template developed	Central Victorian Greenhouse Alliance
July 2016	2.1	Draft Municipal Heatwave Plan developed for Heatwave Working Group	Mount Alexander Shire - Emergency Management Coordinator
October 2016	2.2	Further devp.	Mount Alexander Shire - Climate Change Coordinator
November 2016	2.3	Municipal Heatwave Workshop held – further development	Mount Alexander Shire - Climate Change Coordinator and Emergency Management Team
November 2016	3.0	Final Version	Mount Alexander Shire - Emergency Management Coordinator
May 2017	3.1	Additional developments and transition to Northern Victorian Cluster Sub Plan	Mount Alexander Shire - Emergency Management Coordinator
June 2017	3.2	Campaspe Shire information added	Mount Alexander Shire - Emergency Management Coordinator
February 2018	3.3	Document put to Northern Victorian Integrated MEMPC	Mount Alexander Shire - Emergency Management Coordinator
November 2018	4	Document updated and put to Northern Victorian Integrated MEMPC	Cluster Coordinator

## Abbreviations

ABS	Australian Bureau of Statistics
AV	Ambulance Victoria
BOM	Bureau of Meteorology
CDCH	Castlemaine District Community Health
CH	Castlemaine Health
CSU	Councils "Customer Service Unit"
DHHS	Department of Health and Human Services
DoJ	Department of Justice
EMCOP	Emergency Management Common Operating Picture
EMC	Emergency Management Commissioner
EMV	Emergency Management Victoria
HACC	Home and Community Care
MERC	Municipal Emergency Response Coordinator
MERO	Municipal Emergency Resource Officer
MRM	Municipal Recovery Manager
OH&S	Occupational Health and Safety
SC-H	State Commander - Heat
SCoT	State Coordination Team
SEIFA	Socio-Economic Indexes for Areas
VicPol	Victoria Police
VPR	Vulnerable Persons Register

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# 1. Introduction

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The impacts of extreme heat have been assessed as a significant risk facing the State of Victoria (DoJ 2014). In the last 200 years, extreme heat events have taken more lives than any other natural hazard in Australia (BoM 2015). In Victoria, the duration, frequency and intensity of heatwaves are expected to increase as a result of climate change. (Steffen et al 2014).

It is getting warmer and drier. Over the past 100 years, global surface air temperatures have risen by almost 1°C. Both the atmosphere and the oceans have warmed. Human activity is causing climate change, through our release of greenhouse gases from the burning of fossil fuels, land use change and agriculture. Atmospheric concentrations of carbon dioxide are now more than 40% higher than they were before industrialisation. In the Loddon Mallee region, the rate of warming has increased since the 1960s. On average, rainfall has declined since the 1960s, especially in autumn. The harsh Millennium Drought (1996 to 2009) ended with two of the wettest years on record in 2010–11. (This statement is from the following website: <https://www.climatechange.vic.gov.au/information-and-resources> ).

‘Three days or more of high maximum and minimum temperatures that are unusual for that location’ constitute a heatwave according to the Bureau of Meteorology in their *Heatwave service for Australia*. However the risks of high temperature extremes occur in any extreme heat event.

Heatwaves or extreme heat events can have significant impacts on human health and life. Two recent heat events in Victoria resulted in large numbers of deaths. In the 2009 heatwave an estimated 374 excess deaths occurred, much greater than the 173 deaths arising from the Black Saturday bushfires the following week. In the 2014 heatwave there were 167 excess deaths. Excess deaths are above what would otherwise be expected and may have been a result of extreme heat (DHHS 2015).

Extreme heat can affect anyone; however there are some sectors of the population that are more susceptible to its impacts. These include the elderly, the very young, those with some pre-existing medical conditions, those on particular medications and the socially isolated.

Heat events have the greatest impact on health when there are several consecutive days of extreme temperatures in association with high night time temperatures.

Extreme heat can also affect infrastructure by creating increased demand and/or failure of essential services such as power, transport and water. Failure of such infrastructure can further affect the functioning of government and community services, business and industry.

The aim of this Heat Health Plan is to support the community to prepare for, respond to and recover from heatwaves and extreme heat events.

Implementation of this Heat Plan (the Plan) will:

- ensure health information and support is available to our community
- increase the understanding and capacity of our community to respond during heat events
- manage a heat event emergency more effectively
- influence long term changes in behaviour to improve our health and wellbeing.

This will be achieved by:

- undertaking strategies and actions to increase the resilience of our community to extreme heat
- identifying and supporting vulnerable groups in the community and the risks they face during heat events
- developing partnerships with local organisations to better coordinate response to heat events
- promoting a community awareness and education component
- informing employees and community members on the dangers of heat events
- identifying, documenting and assigning tasks to be implemented during a heat event
- establishing governance arrangements to action the plan
- evaluating the ongoing effectiveness of the plan and its implementation.

## 2. Why have a plan?

---

### State context and guidelines

Planning for the impacts of extreme heat and heatwave has been underway in Victoria for at least ten years. Three key documents outline this process:

- The State Heat Plan (DoJ 2014) outlines arrangements for an integrated and whole-of-government approach to the emergency management of extreme heat in Victoria.
- The *Heat Health Plan for Victoria* (DHHS 2015) outlines a coordinated approach to the prevention, preparation and management of extreme heat in Victoria, with a focus on health and community service providers and local and state government.
- State Extreme Heat Sub-Plan (Edition 2) outlines the Victorian arrangements for the coordinated response to the impacts and consequences of extreme heat events (including heatwaves) on the community, infrastructure, and services.

Each of these plans recognise the role of local government in working with local communities to prepare and plan for, respond to and recover from emergencies. They also acknowledge that each council should develop a multi-agency heat health plan as a sub-plan of the Municipal Emergency Management Plan. To support this, the then Department of Health developed a *Heatwave Planning Guide* (DHS 2009) to assist local government to develop heat health management plans.

### Heatwave and heat health within local government planning framework

Management of extreme heat and heatwave straddles a number of local government areas of responsibility including emergency management, home care services, social wellbeing, infrastructure, economic development, sustainability and environment and town planning.

The Community Emergency Risk Assessment (CERA) process for the Northern Victorian IMEMPC has identified Extreme Temperature – Heatwave, as having a “high” residual risk rating. As a result of this rating, this Heatwave Plan was developed.

### **3. Heatwave terminology**

---

There have been recent changes in the terminology defining heat and heatwaves and the following terms are currently in general usage.

#### **Heatwave**

The Bureau of Meteorology's *Heatwave service for Australia* defines heatwave as 'three days or more of high maximum and minimum temperatures that are unusual for that location'. Heatwave as an emergency requiring a control agency is defined as three or more days in excess of the heat health threshold for a particular weather district.

#### **Heat Event**

The State Heat Plan uses the term heat event for periods of high temperatures regardless of duration as even one day of high temperature may result in impact and consequences on the community, Infrastructure and services, with these effects compounding over successive days of high temperature (DoJ 2014).

#### **Extreme heat**

The term extreme heat is used to describe:

- A sustained period of high temperatures (heatwave) and;
- A single day of higher than average temperature that for that time of year (a temperature that occurs infrequently or highest on record) as classified by the Bureau of Meteorology (BoM)

#### **Heat health temperature thresholds**

DHHS has identified heat health temperature thresholds for each weather forecast district in Victoria (which align with the Victorian Country Fire Authority districts). Above these thresholds heat-related illness and mortality increase substantially.

The heat health temperature threshold is based on the forecast average temperature for any given day; that is the average of the forecast daily maximum temperature and the forecast overnight temperature (the daily minimum for the following day (see Appendix 1).

#### **Heat health alerts**

Heat health alerts are issued by the Chief Health Officer for a particular district once the forecast average temperatures reach or exceed the heat health threshold for that district (see Section 5).



## 4. How heat affects our health and communities

---

### Health impacts of heatwaves

As temperatures rise, so does the risk of developing a heat related illness — a medical condition that results from the body's inability to cope with heat and cool itself. If left untreated, a heat illness can lead to serious complications, including death.

Heat related illness can make people feel uncomfortable, not so much because they feel hot, but rather because they sense how difficult it has become to lose body heat at the rate necessary to keep their inner body temperature close to 37°C. The body responds to heat stress progressively through three stages:

	Symptoms
Heat Cramps	Muscle pains Spasms in the abdomen, arms or legs
Heat Exhaustion	Pale complexion and sweating Rapid heart rate Muscle cramps, weakness Dizziness, headache Nausea, vomiting Fainting
Heatstroke (a life-threatening emergency)	Same symptoms as heat exhaustion except sweating stops Mental condition worsens, confusion Seizure Stroke-like symptoms or collapsing Unconsciousness

Source: *How to cope and stay safe in extreme heat* brochure (DHHS 2015)

### Impacts of heat wave

Heatwave place significant strain on medical services such as hospitals and ambulance services.

Statistics show that across Victoria in the January 2014 Heatwave there was 621 heat-related presentations to emergency departments. This represented a fivefold increase (105 expected) in heat related presentations for this period. Overall there was a 7% increase in (all cause) public hospital emergency departments presentations during the same period.

Ambulance Victoria also recorded a 25% increase in the case load in the metropolitan area during the January 2009 and 2014 Heatwave. However the 2014 heatwave represents a reduction of 47% case load that was experienced in the January 2009 Heatwave.

Heatwaves also place excessive strain on Victoria's power supplies. On 29 January 2014 (during the January 2014 heatwave) the then known Energy Retailers Association of Australia (ERAA) reported that in Victoria 10,576 megawatts (MW) of power was used this was an increase of just under 4,000MW from a typical January day - the number one cause for this increase was the use of air conditioners.

The ERAA advises that historically, the risk of interrupted electricity supply has increased for two main reasons:

- a shortage of supply of electricity (too much demand/not enough power stations) resulting in planned and managed load shedding to supply
- Spikes in demand in specific parts of the network tripping the equivalent of fuses resulting in localized outages until the fault or fuse can be repaired or re-set.

Heatwaves increase the risk of both events occurring. The Australian Energy Market Operator (AEMO) advises that when there is a shortfall in the electricity supply, there can be a need to reduce demand very quickly to an acceptable level, or risk the entire electricity network becoming unstable. Load shedding generally commences with industrial and commercial customers prior to any residential customers.

Additional impacts of extreme heat exist across the range of Local Government responsibilities and other systems affecting our communities:

Personnel and staffing	Fire Danger days often occur at the same time as heat waves – leading to lower staff levels Higher levels of stress Poor rest and sleeping patterns
Infrastructure	Buildings designed for lower heat stress levels Bitumen and road-seals may lose integrity at high temperature Railways shift and buckle at high temperature Higher levels of use of public places like pools and shopping centres
Utilities	Planned power outages Potential for disruption from other emergencies – e.g. fire
Economic development	Less active consumption patterns in extreme heat Less mobility in extreme heat Less interest in destination visitation in high fire-danger periods
Emergency Services	Multiple demands and stressors on these services in extreme heat periods

For emergency services the stresses on services are compounded in the context of heatwaves, particularly where they occur simultaneously with other emergencies. An example is the connection between local, neighbouring ambulance, nurse-on-call and patient transport services. Each of these services is set up to complement the other. However in extended extreme circumstances with direct health impacts the process of prioritisation and communication between patients and agencies can become fraught.

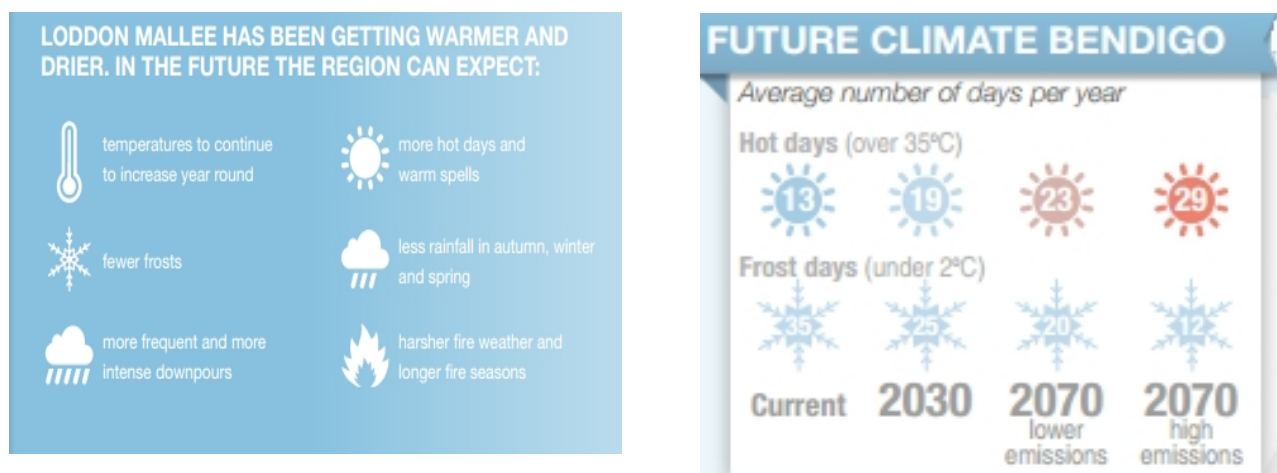


Figure 1 – Future Climate Projections. Under climate change projections, The Northern Victorian Cluster municipalities is expected to become hotter and drier

Images from Climate-Ready Victoria: Loddon Mallee

[http://www.climatechange.vic.gov.au/\\_data/assets/pdf\\_file/0003/320889/Loddon-Mallee.pdf](http://www.climatechange.vic.gov.au/_data/assets/pdf_file/0003/320889/Loddon-Mallee.pdf)

If carbon mitigation is not addressed as part of a response to climate change, and a 4-6°C increase in temperature is experienced, then Castlemaine is expected to have a climate more like Nyngan in New South Wales, Bendigo will have a climate more like Shepparton and Echuca will have a climate more like Swan Hill.

An example is: If Castlemaine's temperature was to increase 4-6°C, it would result in an average summer temperature of 33°C (compared with around 27°C now) and annual rainfall of 481mm (compared with 591mm now).

Under a climate change scenario of around 2°C temperature increases, Castlemaine is expected to have a climate more like Gawler in SA, with an average summer temperature of 29.9°C and annual rainfall of 451mm. (CSIRO, 2015)

## 5. Roles and Responsibilities

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The responsibility for preparing and protecting vulnerable population groups is shared across state and local governments, health and community service providers and emergency management agencies.

DHHS, along with other agencies, has responsibility for reducing the impact of extreme heat on public health by preparing for, and responding to, heat events. It does this by:

- developing the *Heat health plan for Victoria* to raise awareness of the impacts of extreme heat and actions to minimise the risks
- developing the *Heatwave Planning Guide*
- issuing heat health alerts
- maintaining the heat health information surveillance system
- developing a communication strategy with a range of resources
- providing support and guidance to other agencies.

Local government, as the closest tier of government to communities, has a central role in building community capacity and resilience to prepare, plan for, respond to and recover from extreme heat events (DoJ 2014).

### Heat health alerts

The Chief Health Officer issues heat health alerts for relevant weather districts when forecast average temperatures reach or exceed threshold levels. The purpose of heat health alerts is to notify relevant agencies of forecast extreme heat conditions in preparation for enacting heat health plans (DHHS 2015). While alerts are targeted at departmental areas, health services, local government, agency partners and service providers they are available to everyone and accessible at [www.health.vic.gov.au/environment/heatwaves-alert](http://www.health.vic.gov.au/environment/heatwaves-alert). (See Appendix 1.)

When a heat health alert is issued for the **North Central or Northern Country** weather district the relevant MRM (Municipal Recovery Manager) will make the decision to activate council's Heat Health Plan.

Subscription to the heat health alert service can be made at <https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heat-health-alerts-subscribe>

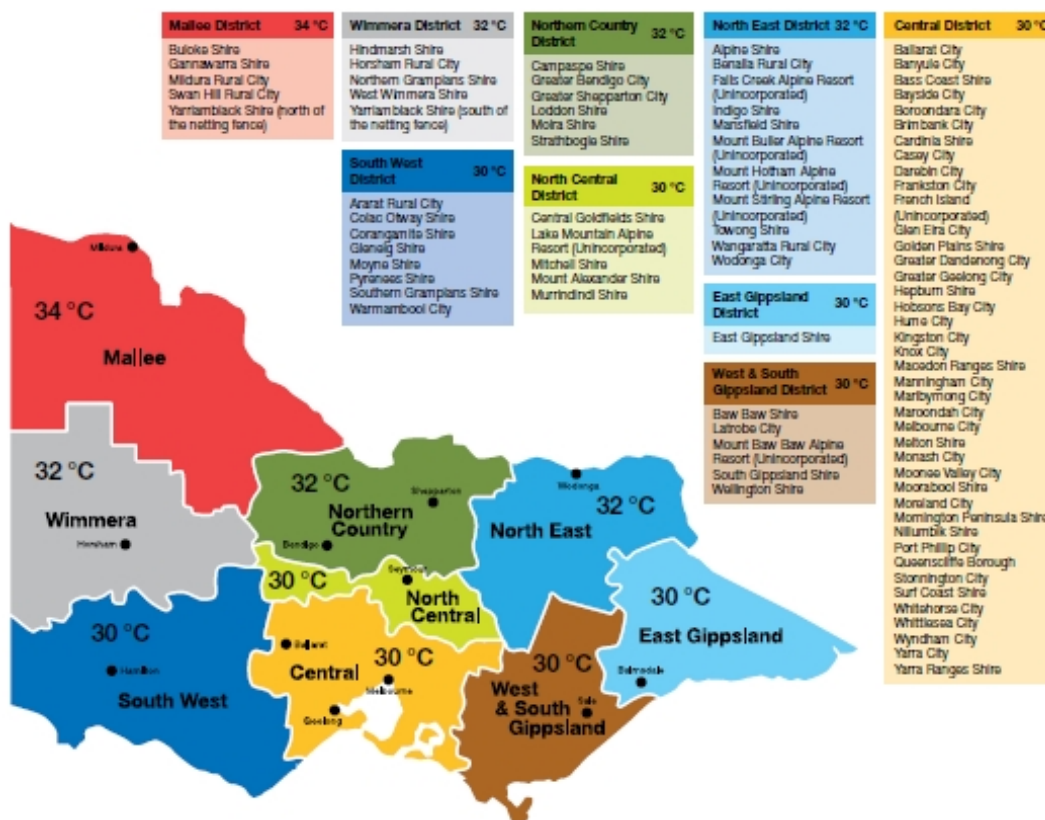


Figure 2 - Average Min + Max temperature heatwave thresholds across the state from Victorian Heat Health Plan

## Emergency management

The *State Emergency Response Plan - Extreme Heat Sub-Plan* (Edition 2) outlines the Victorian arrangements for the coordinated response to the impacts and consequences of extreme heat events (including heatwaves) on the community, infrastructure, and services.

In November 2016 the control agency for heatwaves transferred from Victoria Police to the EMC.

Heatwave is a Class 2 emergency under the *Emergency Management Act 2013* and during extreme heat events the main emergency management tasks are:

- ensuring the messages to the public are coordinated, consistent and complementary
- ensuring the impact and consequences of extreme heat on the community are identified and managed in an integrated and coordinated manner
- coordinating the whole-of-government response to the varied emergencies caused by the heat.

The EMC is the Control Agency for extreme heat events under the EMMV Part 7 – Emergency Management Roles and Responsibilities.

The response to the management of consequences of an extreme heat event will be led from State with the EMC as the Control Agency, in partnership with Chief Health Officer (CHO), Ambulance Victoria - Director Emergency Management, and key infrastructure leaders, as required.

The activation of the state tier arrangements will be at the discretion of the EMC, having considered the advice of the SCoT.

Based on processes outlined in the State Operational Arrangements – Extreme Heat, the EMC may appoint a SC-H, to lead the whole of government for the management.

The Emergency Management Commissioner has set in place a number of triggers to identify when the establishment of the State Control function and appointment of the SC-H is required. This is based on the potential or actual significant consequence and may include but is not limited to;

<b>Heat Health</b>	<ul style="list-style-type: none"> <li>• Three or more consecutive days of Heat Health Alerts issued in a weather district</li> <li>• Where Heat Health Alerts provide advice to the community of a single day of extreme heat that the general population may have difficulty coping with.</li> </ul>
<b>Warnings to the Community</b>	<ul style="list-style-type: none"> <li>• Warnings or Emergency Warnings are likely to be required, requiring SC-H approval for issue.</li> </ul>
<b>Weather Forecast</b>	<ul style="list-style-type: none"> <li>• One or more weather district forecast to experience more than 20% of the district in extreme intensity heatwave conditions</li> <li>• Majority of the State predicted or being impacted by severe intensity heatwave</li> <li>• Multiple Days of severe intensity heatwave forecast or occurring.</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>• Temperatures are greater than 38°C for one day</li> <li>• Train Infrastructure: Day/night temperatures average more than 30°C for more than two consecutive days</li> <li>• Tram infrastructure: Forecast maximum temperature of 40°C degrees or more, or three or more consecutive days of 36°C</li> </ul>
<b>Energy</b>	<ul style="list-style-type: none"> <li>• If temperature is anticipated to exceed 42°C for a period of more than 12 hours.</li> <li>• High potential for the requirement to load shed.</li> </ul>
<b>Animal Welfare</b>	<ul style="list-style-type: none"> <li>• Multiple days of extreme intensity heatwave forecast in one or more weather districts</li> </ul>

The *Heat Health Plan for Victoria* sets out the actions DHHS takes to prepare for and respond to heat events to reduce negative health impacts, including issuing heat health alerts and communicating how to survive in the heat.

Under the Local Government Act 1989 local government has a responsibility to protect public health in emergencies (DoJ 2014). The *Heat health plan for Victoria* encourages local government to address this responsibility by planning for heat events, enacting arrangements to support vulnerable members of the community, communicating heat health messages and coordinating ongoing support and local recovery activities as required (DHHS 2015).

Local Government has a range of statutory responsibilities that are impacted by heatwaves. Clear communications to staff and recipients of these services are essential in heat events. Messaging for these communications should be consistent and clear in addressing effects on services and the community.



## 6. Prevention, Preparedness, Response and Recovery

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Prevention, preparedness, response and recovery are commonly employed phases of emergency management and are promoted in the *Heatwave Planning Guide* (DHS 2009) as an option for planning for heat event management.

In this plan:

- Prevention refers to eliminating or minimising the impacts of extreme heat on communities and individuals.
- Preparedness refers to planning and raising community awareness in the lead up to summer and heat events.
- Response refers to implementation of pre-determined actions in the event of extreme heat and providing relief and recovery services
- Recovery refers to follow up actions to support persons affected by the event to achieve proper and effective levels of functioning.

This plan groups actions into the following themes:

- **Planning:** Longer term planning and environmental interventions will be relevant in reducing the ongoing effects of extreme heat.
- **Organisational capacity:** Training of council staff to deliver care and support to individuals during extreme heat events, assisting service providers and ensuring that crucial council services continue to be run during a heat event.
- **Stakeholder partnerships:** Actions to engage, support and work with partner agencies in preparing for and responding to heat events.
- **Community support:** A strategy and set of actions to identify, prepare and support vulnerable or isolated individuals and sectors of the community in preparation for, or in response to, an extreme heat events.
- **Communications:** Educational information that can be distributed to the community and service providers, describing the risks of extreme heat and personal steps to reduce the effects.

## 7. How this plan was developed

Building on a Heat Health Plan template, this plan was adapted for the needs of Council and referred to relevant personnel internally.

A draft plan was developed by the Emergency Management and Climate Change Coordinators. This was approved by managers and then circulated as a draft to key external and internal stakeholders.

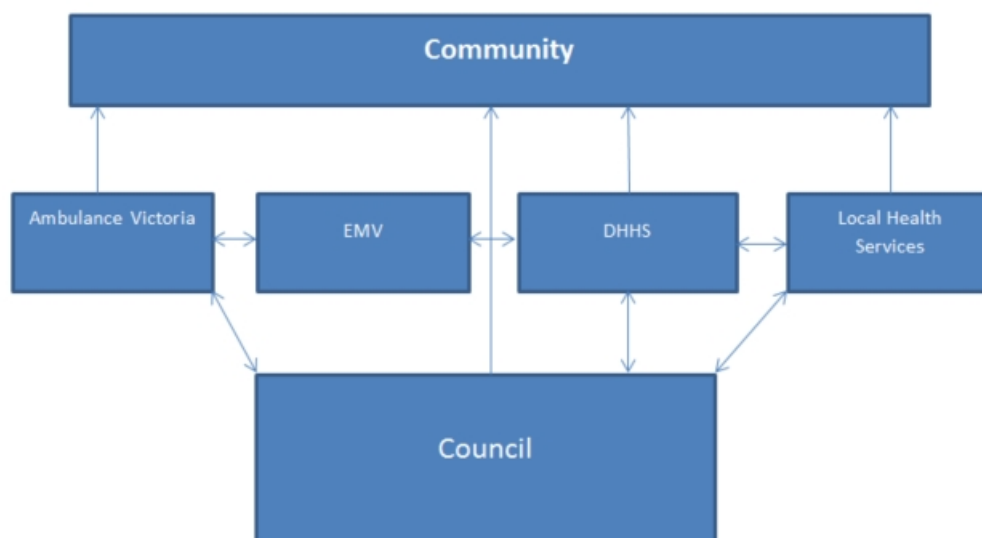
These key stakeholders met as a group to discuss and modify the plan. In conducting this process they shared current heatwave practices and experience and compared plans and levels of awareness around heatwave management.

The plan was reviewed in order to understand how best it could serve the needs of Council, but also complement other agencies and account for the interests of the community more broadly. This was vital to gaining clarity of definitions responsibilities in extreme heat events.

The stakeholders consisted of:

<u>Internal to Council</u>	<u>External agencies</u>
Municipal Emergency Management Coordinator (or similar)	Local hospital representative
Climate Change Coordinator (or similar)	Local hospital representative
Manager that covers HACC teams	Manager Public Health (DHHS)
	Group Manager Ambulance Victoria(AV)

While Council has a key coordination and facilitation role in extreme heat events, it is one of a number of agencies responsible for minimising the impact of heat on the community. Council can contribute to greater community capacity and resilience in addressing heat events by providing input into the heat health plans developed by other stakeholders and also by engaging stakeholders in the development and review of council's heat health plan.



## 8. Local weather / climate statistics

Table 1 below identifies the number of days over 32 degrees in Castlemaine, Maryborough and Echuca since 2006/2007FY (not representative of heat health alerts). Note that some data missing on BOM records and very limited data avail Q1/2012 for Echuca resulting in non-useable statistic for Echuca in 2011/12 FY

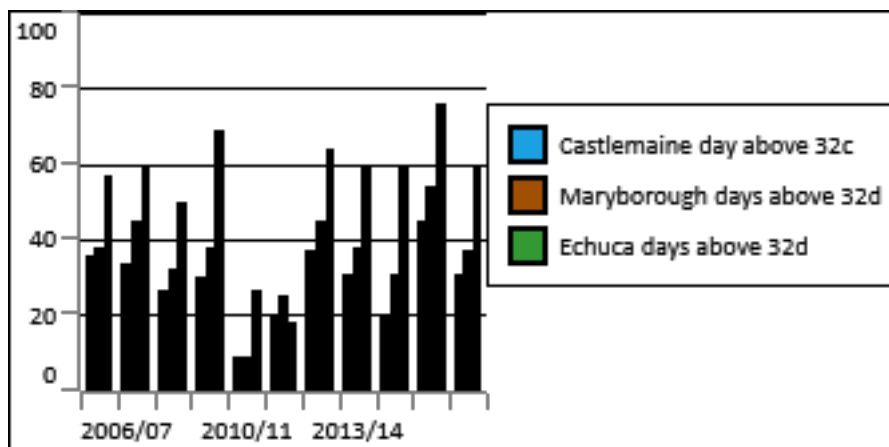


Table 2 below identifies historic and projected average heatwave days from 1974 – 2030.

Location	Average heatwave days / year			Average consecutive heatwave days / year		
	Historic (1974 - 2003)	Projected (2030)	% Change	Historic (1974 - 2003)	Projected (2030)	% Change
Greater Bendigo	2.60	5.23	100%	0.03	1.87	6,200%
Mildura	4.33	8.00	85%	1.80	3.20	78%
Whitehorse	2.20	3.36	63%	0.03	0.40	330%
Yarra Ranges	0.07	0.70	900%	0.03	0.10	230%

### North Central District

North Central has a typically Mediterranean climate, with cool damp winters and hot dry summers. Between Castlemaine and Maryborough the month with the highest average temperatures is February with a mean maximum of approximately 28.5°C and a mean minimum of 13.5°C. The other summer months also have average maximum temperatures over 25°C and mean minimums of over 10°C – indicating that these months are periods in which heatwaves are likely.

The average annual rainfall in Castlemaine is 591mm and Maryborough 528mm. (BOM, 2017)

Up-to-date and live weather reports and predictions can be found at the Bureau of Meteorology (BoM) website and app (web addresses in Part 20). It should be noted that local weather conditions may vary to reported statistics.

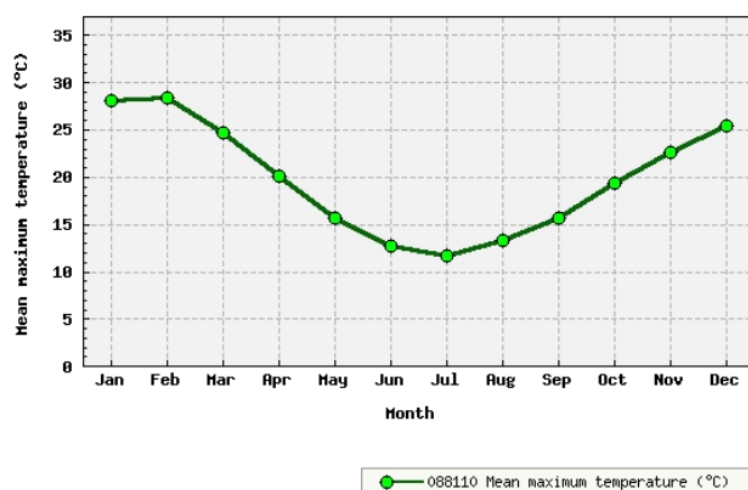


Figure 3 - Average daily maximum temperatures recorded at Castlemaine Prison (BOM, 2016)

Table 3 below identifies the number of days where a heat health alert was issued for North Central Weather District.

Year	Month	Number of heat health alerts issued	Comments
2012/13 – 8 Heat Health Alerts issued across Victoria with 6 issued in North Central District	November	1	
	December	1	
	January	4	
2013/14 – 11 Heat Health Alerts issued across Victoria with all 11 issued in North Central District	December	1	North Central District had 5 consecutive days over Jan/Feb of Heat Health Alerts
	January	7	
	February	3	
2014/15 – 3 Heat Health Alerts issued across Victoria with 2 issued in North Central District	January	2	
2015/16 – 9 Heat Health Alerts issued across Victoria with all 9 issued in North Central District	December	3	Three consecutive days of Heat Health Alert in March – Heatwave declared
	January	2	
	February	1	
	March	3	
2016/17	December	1	
	January	1	
	February	2	

## Northern Country District

The Northern Country district climate ranges from cold winters with occasional frosts through to arid summers that peak with an average high temperature of 35°Cs in the months of January, February and March, making these the most likely months for heatwaves to occur.

The average annual rainfall in Echuca is 400mm. (BOM, 2016)

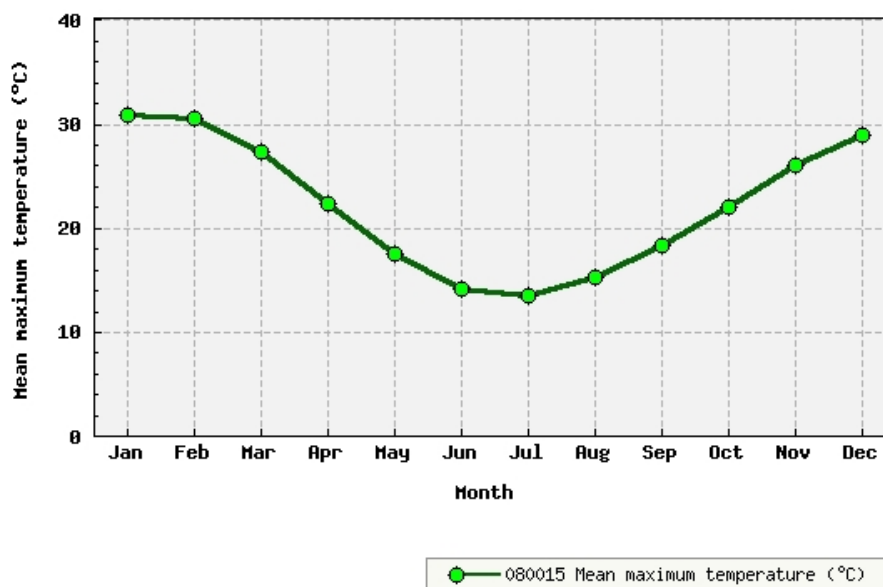


Figure 4 - Average daily maximum temperatures recorded at Echuca Aerodrome (BOM 2017)

Up-to-date and live weather reports and predictions can be found at the Bureau of Meteorology (BoM ) website and app (web addresses in Part 20). It should be noted that local weather conditions may vary to reported statistics.

Table 4 below identifies the number of days where a heat health alert was issued for Northern Country Weather District.

Year	Month	Number of heat health alerts issued	Comments
2012/13 – 8 Heat Health Alerts issued across Victoria	November	1	
	January	2	
2013/14 – 11 Heat Health Alerts issued across Victoria	January	3	
	February	2	
2014/15 – 3 Heat Health Alerts issued across Victoria	January	2	
2015/16 – 9 Heat Health Alerts issued across Victoria	December	2	
	January	1	
	February	1	
	March	1	
2016/17 - 9 Heat Health Alerts issued across Victoria	December	1	
	January	1	
	February	1	

## 9. What we are going to do

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To be better prepared for extreme heat each summer council will undertake a range of actions to:

- Include heatwave mitigation, preparation, response and recovery into existing municipal plans
- Work with our community, agencies and organisations to support vulnerable populations
- Develop a communication strategy using heat health alert messages consistent with DHHS materials.
- Continued promotion of the Heatwave Help website ([www.heatwavehelp.com.au](http://www.heatwavehelp.com.au)) and supporting publications.
- Respond to state activated heat health alert system in a planned and considered way.

Our action plan provides year round guidance to preventing, preparing, responding to and recovering from extreme heat events. The actions are divided into five stages of prevention, preparation, response and recovery.

Stage 1: Long term prevention actions

Stage 2: Pre summer preparation

Stage 3: Preparation immediately before forecast extreme heat events

Stage 4: Extreme heat event response

Stage 5: Post event recovery.

There are a range of corporate and stakeholder plans that should take into account the concerns raised in this document.

<b>Relevant Municipal Emergency Management Plan and Sub Plans</b>	<b>Relevant agency plans</b>
Northern Victorian Integrated Municipal Emergency Management Plan	State Health Emergency Response Plan
Municipal Relief and Recovery Plan (where applicable)	Regional Climate Adaptation Plan
Municipal Public Health Emergency Management Plan (where applicable)	Community Health Emergency Plans
	Hospital Emergency Plans



## 10. Stage 1: Longer term prevention and mitigation actions

The following actions are anticipated to be those relevant to minimising the impacts of heatwaves. They are **suggested rather than directed actions** and should be reviewed in the context of actual heatwaves in order to ensure they are as relevant as possible.

Actions recommended by the State Heat Health Plan are marked in orange

PLANNING	
Action	Suggested lead agency or personnel
Advocate for a review planning scheme and building codes to increase thermal efficiency of homes and buildings	Council and relevant agencies
Advocate for support to install climate mitigating measures in vulnerable people's homes e.g. Solar and AC	Council and relevant agencies
Undertake assessment of heat island effect of urban areas	Council
Increase shade in public spaces	Council
Ensure planting of suitable street trees	Council
Improve public access to drinking water	Council
Heat proofing of public buildings	Council

ORGANISATIONAL CAPACITY	
Action	Suggested lead agency or personnel
Ensure power supply back up for critical services	Health Services and relevant agencies
Advocate for better power disruption notifications and services	Council and Health Services
Undertake risk assessment and planning for Council's ability to maintain adequate staffing and delivery of services in extreme heat events	Council and Health Services

COMMUNITY SUPPORT	
Action	Suggested lead agency or personnel
Seek opportunities for funds to retrofit dwellings for thermal efficiency, particularly those of vulnerable and low income residents	Council and relevant agencies
Develop community social capital by fostering neighbourhood connections	Council and community agencies
Encourage incorporation of extreme heat issues and management in Community Planning Projects and community plans	Council
Develop or link into existing all hazards look after your neighbours campaign	Council and relevant agencies

## 11. Stage 2: Pre summer preparation actions

Actions recommended by the State Heat Health Plan are marked in orange

PLANNING	
Action	Suggested lead agency or personnel
Review and update the heat health plan and other relevant heat plans, including business continuity plans	All agencies
Develop and document a clear process for responding to heat health alerts including clearly identified responsible officers and contact details for all relevant staff and agencies (see Part 20)	All agencies
Develop extreme heat event checklists for council staff and facilities	Council
Review council Extreme Heat / Heatwave Policy for: <ul style="list-style-type: none"> <li>Community use of council facilities</li> <li>Rescheduling of Planned Activity Group activities</li> </ul>	Council and relevant agencies

ORGANISATIONAL CAPACITY	
Action	Suggested lead agency or personnel
Participate in exercises and forums to discuss and improve individual and collective responses to extreme heat events	All agencies
Train Council staff and service providers to support individuals during extreme heat events	Council
<ul style="list-style-type: none"> <li>Ensure service provider staff are appropriately trained to identify clients who may need assistance</li> </ul>	Council
<ul style="list-style-type: none"> <li>Provide heat health information to staff engaged in delivering client services so they can raise awareness</li> </ul>	Council and relevant agencies
<ul style="list-style-type: none"> <li>Encourage staff to download the Better Health Channel app from <a href="http://www.vic.gov.au/social-media/mobile-apps/betterhealth-channel-health-information-and-services.html">www.vic.gov.au/social-media/mobile-apps/betterhealth-channel-health-information-and-services.html</a></li> </ul>	All agencies
<ul style="list-style-type: none"> <li>Encourage staff to download the BOM app</li> </ul>	All agencies
<ul style="list-style-type: none"> <li>Encourage staff to subscribe to receive heat health alerts from <a href="http://www.health.vic.gov.au/environment/heatwaves-alert.htm">www.health.vic.gov.au/environment/heatwaves-alert.htm</a></li> </ul>	All agencies
<ul style="list-style-type: none"> <li>Establish a cancellation policy for outdoor sport and recreation events and other events with large gatherings of people during extreme heat events</li> </ul>	All agencies

STAKEHOLDER PARTNERSHIPS	
Action	Suggested lead agency or personnel
Engage with key stakeholders and community members to raise awareness about the risks of extreme heat	Council and appropriate agencies
Convene an annual heat event roundtable or exercise of relevant stakeholders	Council
Encourage and support other stakeholders (e.g. health services providers, medical clinics, aged care facilities) to develop heat health plans and ensure their plans are integrated with this plan	Council

<b>COMMUNITY SUPPORT</b>	
<b>Action</b>	<b>Suggested lead agency or personnel</b>
Determine the level of service that council will provide to vulnerable persons in extreme heat events e.g. check-up via phone calls, welfare visits	<b>Council</b>
Identify established and informal networks to connect and engage with Aboriginal and culturally and linguistically diverse communities	<b>Council and relevant agencies</b>
Identify and assess at risk populations and individuals	<b>Council and relevant agencies</b>
Determine the most appropriate list or register for vulnerable and at risk residents. It has been identified that the Vulnerable Persons Register doesn't necessarily capture those most at risk from extreme heat	<b>All agencies</b>
<b>Action</b>	<b>Suggested lead agency or personnel</b>
Use and update relevant lists of people who may be at risk of extreme heat that are current, including people who receive HACC services or Meals on Wheels, in heat health planning	<b>Council</b>
Review and update council residents listed on the Vulnerable Persons Register	<b>Council</b>
Develop and document a clear process for providing support and contact to vulnerable clients on days of extreme heat e.g. phone checks or welfare visits	<b>Council</b>
Community Care workers will: <ul style="list-style-type: none"> <li>○ Provide heat help action kits to vulnerable clients.</li> <li>○ Assess vulnerable client's homes for the ability to cope with extreme heat.</li> <li>○ Provide advice to vulnerable clients on how to manage their homes in extreme heat events</li> </ul>	<b>Council</b>
Update individual heat health plans for clients and vulnerable-client lists	<b>Council</b>
Talk with clients, family and carers about downloading the Better Health Channel app and subscribing to receive heat health alerts	<b>Council</b>
Encourage / support households and individuals to prepare all hazards plans e.g. Red Cross Rediplan	<b>All agencies</b>
Promote <a href="http://www.heatwavehelp.com.au">www.heatwavehelp.com.au</a> and heatwave guides (How to beat extreme heat – Your guide, Heatwave Action Plan and Heatwaves and Health – staff guides)	<b>Council</b>

COMMUNICATIONS	
Action	Responsible agency or personnel
<p>Develop and annually update a heat health communication plan. (see section 15)</p> <ul style="list-style-type: none"> <li>o The communication strategy will cover both internal and external audiences</li> <li>o Annually prepare communication resources, draft media releases, contact lists</li> <li>o Identify target groups for awareness campaigns (vulnerable, aged care facilities, sporting clubs, caravan parks, tourism operators)</li> <li>o Identify appropriate communications methods and materials for different target audiences, age groups and culturally and linguistically diverse communities as relevant</li> </ul>	<b>Council with support from Agencies</b>
Engage staff across Council to identify opportunities to promote heat health and enhance activities to respond to extreme heat	<b>Council</b>
Order and display the department's heat health brochure in the lobby and other council venues and distribute to clients	<b>Council</b>
Distribute the department's heat health brochures and other communication materials to other service providers e.g. senior citizens centres, medical clinics and pharmacies.	<b>All agencies</b>



## 12. Stage 3: Preparation immediately before forecast extreme heat events

Actions recommended by the State Heat Health Plan are marked in orange

### ORGANISATIONAL CAPACITY

Action	Responsible agency
Take action in accordance with heat health plans or other plans containing heat-related actions such as service continuity plans, emergency management plans and occupational health and safety plans	Relevant staff
Activate heat health alert process – internal and external (see Part 20)	Municipal Recovery Manager
Monitor local weather conditions on the Bureau of Meteorology's website	All agencies
Reschedule services to the cooler part of the day	All agencies
Ensure appropriate staffing levels and consider staff and client safety in hot weather	Managers
Coordinate staff to implement Council support process for identified vulnerable clients	Council
Ensure Council and other agency display stands etc. are stocked with extreme heat event information and brochures such as those produced by DHHS	Council
Review organisational service delivery changes for Extreme Heat &/or Total Fire Ban days	All agencies

### STAKEHOLDER PARTNERSHIPS

Action	Responsible agency or personnel
Work with partner agencies as identified in this plan and the MEMP to undertake preparation activities	MEMPC / Heatwave Committee

### COMMUNITY SUPPORT

Action	Responsible agency or personnel
Alert clients on vulnerable persons register or other council registers of upcoming extreme heat events	Council
Provide consistent heat health messages during client visits or telephone calls	Agencies
Ensure staff engaging with the public are aware of what the council is doing to support and protect those at risk such as where people can go to stay cool	Council

<b>Action</b>	<b>Responsible agency or personnel</b>
Advise organisers of outdoor and sporting events to consider postponing or cancelling events - this applies to events organised by council	<b>Council</b>
Encourage organisers of outdoor and sporting events to register for heat health alerts	<b>All agencies</b>
Provide information to the community regarding cool spaces (including pool and library opening and closing times)	<b>Council</b>
Consider providing free pool passes to disadvantaged or vulnerable persons	<b>Council</b>
Advise food premises re extra caution with food hygiene during heat event	<b>Council</b>
Contact clients in the event of known power failures to check for welfare of vulnerable clients.	<b>Council</b>

<b>COMMUNICATIONS</b>	
<b>Action</b>	<b>Responsible agency or personnel</b>
Utilise the media kit developed by DHHS as a basis for all media and communications with adaptations for local conditions	<b>All agencies</b>
Instigate consistent community messages through local media or other communication channels	<b>All agencies</b>
Update the Council website with consistent heat health information or message from the mayor or CEO	<b>Council</b>



### 13. Stage 4: Extreme heat event response actions

Actions recommended by the State Heat Health Plan are marked in orange

ORGANISATIONAL CAPACITY	
Action	Responsible agency or personnel
Undertake council activities in the Municipal Emergency Management Plan if required	Council
Reschedule any non-essential events, meetings and services to another day or in the cooler part of the day	All agencies

STAKEHOLDER PARTNERSHIPS	
Action	Responsible agency or personnel
Work with partner agencies as identified in this plan and the MEMP to activate designated roles and activities.	MEMPC and Heatwave Committee

COMMUNITY SUPPORT	
Action	Responsible agency or personnel
Instigate council support process for identified vulnerable clients e.g. phone checks or welfare visits	Council
Remind vulnerable clients of key actions to take in extreme heat events	All client service agencies
Monitor temperatures in client areas of agency buildings	All agencies
Ensure adequate drinking water is available for clients, visitors and staff	All agencies

COMMUNICATIONS	
Action	Responsible agency or personnel
Increase community messaging through local media and standard communication channels	All agencies

## 14. Stage 5: Post event recovery actions

Actions recommended by the State Heat Health Plan are marked in orange

ORGANISATIONAL CAPACITY	
Action	Responsible agency or personnel
Convene a post event debriefing session	<b>Council with support from Heatwave Committee</b>
<ul style="list-style-type: none"> <li>Review the impact of the event including information collated by DHHS, council and other agencies: the number of ambulance call outs, hospital admissions and fatalities, the number of vulnerable persons contacted by council staff, impacts of power blackouts (if any), use of cool spaces / refuges (official and unofficial)</li> </ul>	
<ul style="list-style-type: none"> <li>Consider what worked well and what could be improved in preparation for further heat</li> </ul>	
<ul style="list-style-type: none"> <li>Evaluate the effectiveness of internal communications and processes</li> <li>Evaluate the effectiveness of community education and awareness campaigns</li> </ul>	
Notify DHHS (as central agency) of any staffing changes due to heat or fire danger days	
Annually review and update this plan	<b>Council with support from Heatwave Committee</b>

COMMUNITY SUPPORT	
Action	Responsible agency
<ul style="list-style-type: none"> <li>Consider local recovery activities if required</li> </ul>	<b>Council</b>
<ul style="list-style-type: none"> <li>Contact and assess vulnerable persons in days immediately after the event</li> </ul>	<b>All client services agencies</b>
<ul style="list-style-type: none"> <li>Talk with clients about how they are recovering from the heat</li> </ul>	<b>All client services agencies</b>

## 15. Communications plan

Diagram 1 - Heat Health Alert notification for up to two consecutive days

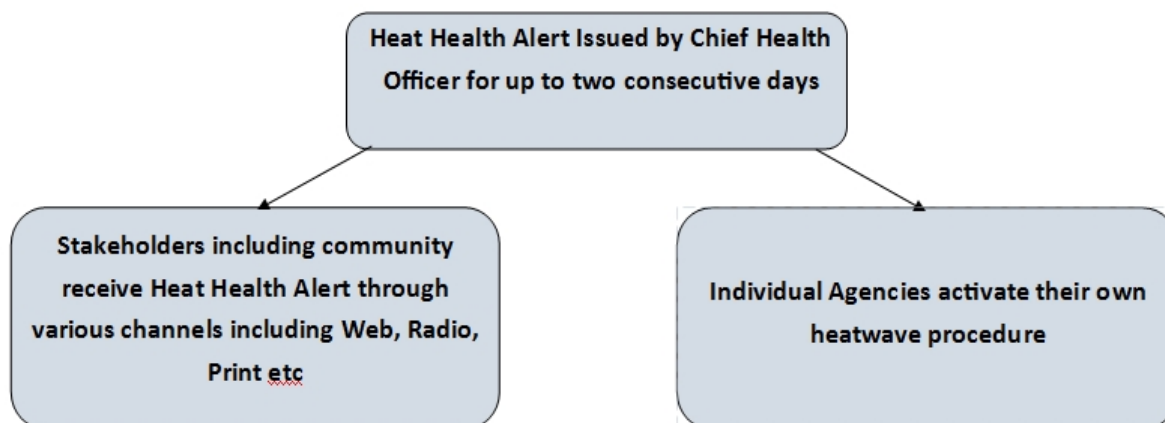
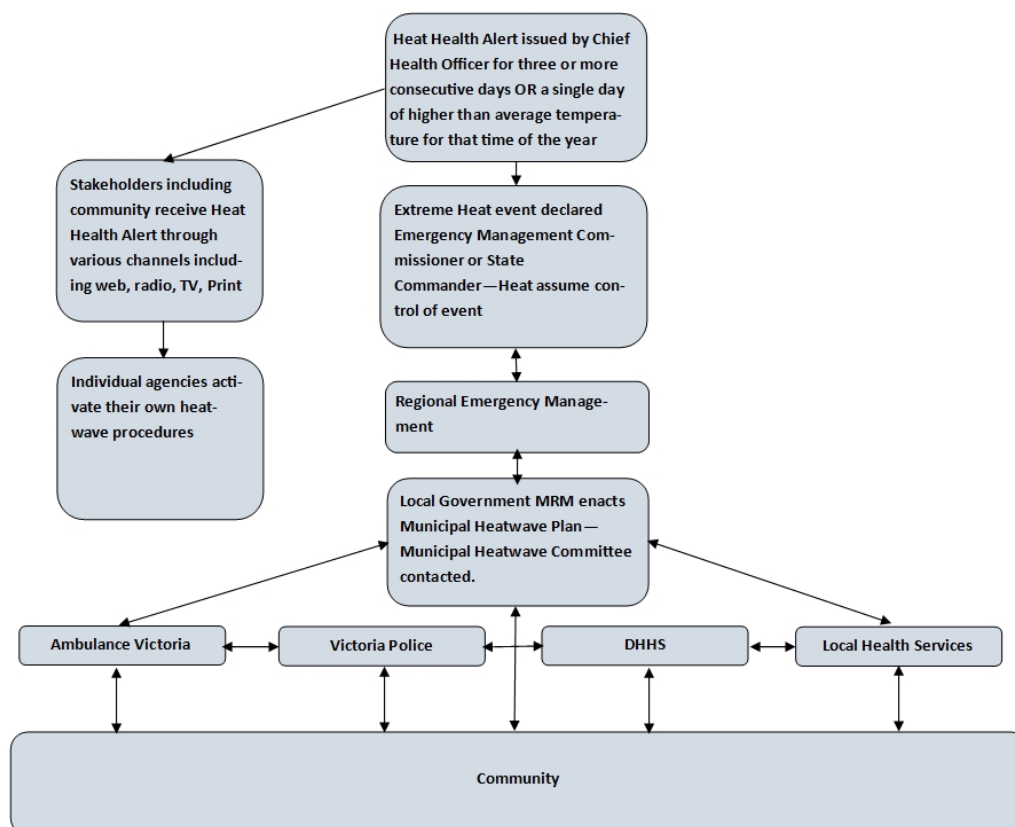


Diagram 2 - Heat Health Alert notification for three consecutive days or more OR single day with higher than average temperature for that time of year



## Heatwave Communications Package – Department of Health and Human Services

Each year in the lead up to the summer season, the Department of Health and Human Services will provide a Heatwave Communication Package to Local Government.

Typically this package will contain:

- Template media releases
- Key messages
- Social media messaging

These resources are available from:

- <https://www.betterhealth.vic.gov.au/council-media-kit-survive-the-heat>
- <https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-community-resources>

## Heatwave Help Project – Communication/education tools.

The Central Victorian Greenhouse Alliance in partnership with Mount Alexander, City of Greater Bendigo, Buloke, Loddon, Central Goldfields and Gannawarra Councils has developed a Heatwave Action Kit to assist with community education of the impacts of heatwave and to build community resilience in dealing with heatwave.

This Kit contains:

- How to beat extreme heat – your guide
- Magnetic Thermometer
- Fan
- Magnetic Heatwave Action Plan

Additional products have also been developed through this project including:

- Heatwave Health in Community Care – education video
- Heatwave Help: Local stories on dealing with heatwaves – educational video

Electronic copies of these resources are available from <https://heathealth.cvga.org.au/>



## 16. Evaluation process

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Undertake an annual evaluation of this plan at the end of each summer season. The evaluation will:

- Involve all relevant stakeholders
- Be evidence based and conducted against clear and measurable goals
- Review whether actions contained in the plan occurred in reasonable timelines with effective outcomes
- Inform revision and improvement of the plan.

Reviews can be carried out:

- early in the summer season, for example, after the first heat health alert is issued
- following a major heatwave event, such as a prolonged period of extreme heat or an emergency-level heatwave
- at the end of each summer.

The State Government's Heatwave Plan review tool suggests practical steps to manage reviews at all stages.

### Mini review

Trends show that heat health alerts are likely to be issued several times during summer. Currently, major heatwave events occur less frequently, perhaps every few years (though climate experts predict increasing frequency).

Regular mini-reviews of this plan will ensure that it is current and relevant. These should be held twice a year in November and April, before and after the main heatwave season.

This type of review targets specific aspects such as:

- whether you distributed the Department of Health's heat health alert to internal and external stakeholders successfully
- whether your services were appropriately adapted and delivered as planned.

A smaller review could be conducted:

- early in the summer season, for example, after the first heat health alert is issued
- following a major heatwave event, such as a prolonged period of extreme heat or an emergency level heatwave.

The information gathered from the mini review will typically provide direct benefit in supporting your planning and preparation processes, so you might consider updating the plan immediately rather than waiting until the end of summer.

### Full review

Following summer, the Heatwave stakeholder group should review this heatwave plan in its entirety. The review should look at how well local processes worked and explore ways of improving your plan.

The review will identify how well your heatwave plan:

- worked with other plans and strategies
- addressed the needs of clients and community members most at risk to extreme heat
- engaged internal and external stakeholders and community partners
- actioned heatwave-related activities before, during and after extreme heat
- adapted services in response to forecasted conditions

- provided key health messages to clients, staff and local community members
- distributed to internal and external stakeholders and community partners
- outlined its review strategy.

For a comprehensive investigation of best practice around reviewing heatwave plans you can access the Department of Health - Heatwave Review Tool (2011) at <https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-planning>

### **Relevant agencies**

The following agencies have been party to the formation of this document.

- Integrated Municipal Emergency Management Planning Committee members
- Local health providers.

## **17. Items for future reviews**

A number items have been identified through the heat wave planning process that warrant further consideration in later iterations of the plan:

- Further effects on community, infrastructure and environment
- Community support – internal and external responsibilities
- Outreach to CALD communities
- Sharing vulnerable persons register information across agencies
- Review sections 10-15 with relevant staff and unit buy-in, clarify and streamline these sections
- Email distribution list in Communications plan section (Part 15).



## 18. Appendices

### Heat health temperature thresholds.

# Heat Health Alert System

Information and guidance for councils and stakeholders

## Introduction

The Department of Health and Human Services Heat Health Alert System notifies councils, departmental program areas, hospitals, health and community service providers and the public of forecast extreme heat conditions which are likely to impact on human health.

**A heat health alert is issued when mean temperatures are predicted to reach and exceed heat health thresholds. It is recommended that recipients continue to monitor local conditions and take action in accordance with their own heat plans, service continuity plans and occupational health and safety (OH&S) plans.**

The Heat Health Alert System operates each year from December to the end of February of the following year.

**Figure 1: Weather forecast districts and corresponding heat health temperature thresholds**  
Image adapted from the Country Fire Authority's 'Know your total fire ban district'.

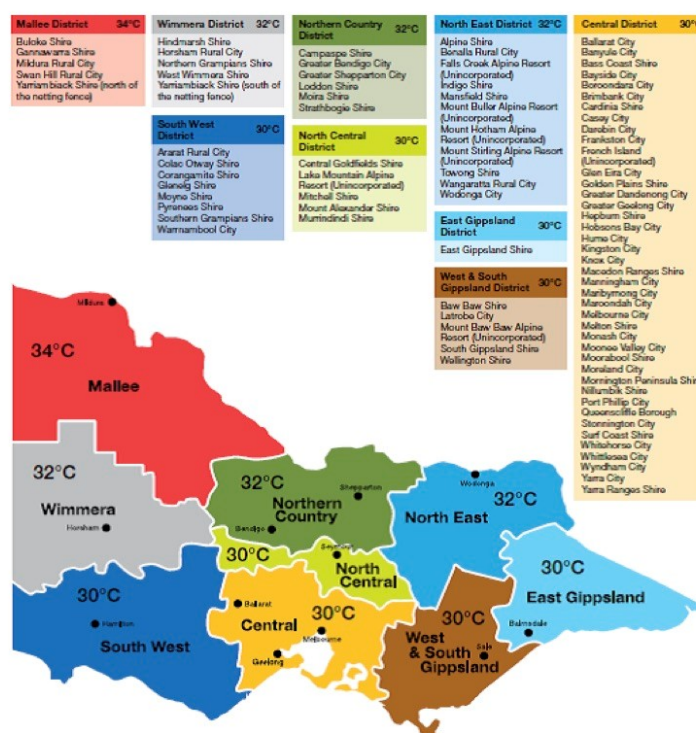
## Weather forecast districts

The Heat Health Alert System is based on the Bureau of Meteorology weather forecast districts and boundaries (Figure 1).

## Heat health temperature thresholds

The Department of Health and Human Services has identified heat health temperature thresholds for Victoria, above which heat-related illness and mortality increases substantially.

These thresholds differ across the state to recognise the higher temperatures experienced in northern parts of Victoria. A heat health temperature threshold has been established for each of the nine weather forecast districts as shown in Figure 1.



The department monitors the Bureau of Meteorology forecast daily minimum and maximum temperatures and calculates the daily average temperature for each weather forecast district (Figure 2).

Figure 2: Example calculation of the daily average temperature

**Calculating the average temperature**

The average temperature is calculated from the forecast **daily maximum** (in this case Tuesday) and the forecast overnight temperature, which is the **daily minimum for the following day** (in this case Wednesday).

An example of this calculation is demonstrated below:

<b>Melbourne</b>	
<b>Tuesday</b>	<b>Average calculation for Tuesday</b>
Min: 20 °C	$(38+25)/2 = 31.5^{\circ}\text{C}$
Max: 38 °C	
<b>Wednesday</b>	The threshold for Melbourne = average of 30°C.
Min: 25 °C	The temperature forecast indicates that the threshold will be exceeded.
Max: 31 °C	

This calculation will be repeated for each of the seven days included in the daily forecast.

The average temperature for any given day is the average of the forecast daily maximum temperature and the forecast overnight temperature (which is the daily minimum for the following day).

When forecast average temperatures are predicted to reach or exceed the heat health temperature threshold for a specific weather forecast district, the department will issue a heat health alert for that district.

## Heat health alerts

Heat health alerts are issued via the departments' subscription service. To subscribe to receive heat health alerts and other emergency advice from the department go to <http://www.health.vic.gov.au/subscribe/>.

The departments' subscription service is available to organisations and individuals. Generic email inboxes or individual email addresses should be used to subscribe. Please note that an email will be sent requesting confirmation of the subscription. **Please ensure the email requesting confirmation is actioned as the subscription will not be activated.**

**Once a heat health alert is issued, local councils, departmental program areas and health and community service providers should respond in accordance with their heat plans. Individuals should also take action to prepare for extreme heat to protect themselves and those in their care from the impact of extreme heat particularly those most at risk.**

The department may also be considering other factors that may influence vulnerability, such as very high maximum or minimum temperatures and high temperatures over a prolonged consecutive period. High temperature alerts may be issued in these circumstances even if the average temperature threshold is not exceeded. Prolonged high temperatures below threshold levels can still impact on health services.

Where possible, heat health alerts will be issued 3-4 days prior to forecast extreme heat conditions providing recipients with an early warning. Whilst the department will be monitoring forecast temperatures across the state, it is important for councils and other organisations to continue to monitor local conditions. **It may be necessary for councils to activate heat plans in the absence of a heat health alert being issued.** Council contacts are encouraged to monitor local conditions using the Bureau of Meteorology at <http://www.bom.gov.au/>

The heat health alerts are available from the Department of Health website at <http://www.health.vic.gov.au/heat-health-alert-system/index.htm>

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.  
© State of Victoria, Department of Health and Human Services, December 2015.  
Available at <https://www2.health.vic.gov.au/public-health/environmental-health>



Source: Department of Health and Human Services. <https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heat-health-alerts>

## Mount Alexander Municipal Profile

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Mount Alexander Shire covers 1529km<sup>2</sup> incorporating the townships of Nuggetty, Baringhup, Maldon, Walmer, Ravenswood South, Harcourt, Sutton Grange, Welshmans Reef, Newstead, Sandon, Yapeen, Guildford, Castlemaine, Chewton, Elphinstone, Metcalfe, Fryerstown and Taradale.

Mount Alexander Shire is a predominantly rural area with many townships and communities located amongst bush and grass landscapes. The municipality still has significant residential areas such as the township of Castlemaine. The Shire's topography varies with undulating country in the centre of the shire surrounded by grasslands in outer areas of the shire. The municipality also has elevated areas consisting of Mount Tarrengower and Mount Alexander.

Climate is mild with hot dry summer periods.

### Demographics

The population of the Shire is estimated at 18,761 (ABS Census 2016).

Estimated residential population<sup>1</sup>:

• Maldon – Tarrengower – Nuggerty	1734
• Rural West – Newstead	2885
• Rural East – Taradale	3710
• Campbells Creek	1692
• Castlemaine South – Chewton	2833
• Castlemaine East	2465
• Castlemaine West – McKenzie Hill	2768

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<sup>1</sup> <http://profile.id.com.au/mount-alexander/population-estimate?WebID=160&DataType=en>

## Vulnerable Groups (2016 Census data)

Some groups are more susceptible to the health effects of heatwave

Group	Local Context and heatwave effects
Babies and Pre-schoolers (0 – 4)	At the 2011 Census, there were 839 people (4.5% of the population) living within Mount Alexander.
Young People (5 – 14)	At the 2016 Census, there were 1,985 people (10.6% of the population) living within Mount Alexander.
People over 65	At the 2016 Census, there were 4,356 people (24% of the population) living within Mount Alexander.  There were 6,630 presentations of people over 65 at hospitals across Victoria during the 2014 heatwave. This was higher than the 5,627 presentations expected. This is a 33% increase when compared to non-heatwave events presentations
Overweight and obese, and those with poor cardio-vascular fitness	The Department of Human Services Burden of Disease report (2001) estimates that 2.9% of males and 2.4% of females in Mount Alexander suffer from cardiovascular disease. This is a higher proportion than the Victorian population more generally.
Pregnant and breastfeeding mothers	Maternal and Child Health (MCH) statistics show that there approximately 150 births annually in the municipality in recent years.
People with chronic medical illnesses or conditions	The Department of Human Services Burden of Disease report (2001) estimates that 15.8% of males and 13.9% of females in Mount Alexander suffer from some form of disease. This is a higher proportion than the Victorian population more generally.
People with a physical or cognitive disability	At the 2016 Census, 933 residents in Mount Alexander were described as requiring assistance. Of these residents 10 were 0-4 years of age and 514 were 65 years or older.
People who live alone or are socially isolated	At the 2016 Census, Mount Alexander had a high proportion of single person households 2,426 people
Low-socio economic groups, including homeless people	The ABS Index of Relative Socio-Economic Disadvantage (SEIFA) suggests the Mount Alexander community is more disadvantaged than the state more generally. There are particular pockets of disadvantage in Chewton, South Castlemaine and McKenzie Hill.  CDCH advises that they have an annual client intake of approximately 36 people who have been sleeping rough. They estimate that the real number may be in vicinity of 120 people however.
Those living or camping in caravans and tents	At the 2016 Census, 72 people were living within 43 other types of dwellings such as caravans, tents or similar type of accommodation.



## Loddon Municipal Profile

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The Shire of Loddon is located in North Central Victoria. It has a total area of almost 7000km<sup>2</sup> and is largely comprised of agricultural land, both irrigated and dry land, but also contains large areas of State Forest. The Shire is interspersed with approximately 27 small townships and hamlets, none of which having a population in excess of 1,000 people.

The Shire extends from Eddington in the south to Pyramid Hill in the north, from Wychitella in the west to Leichardt in the east. The northern section of the Shire is predominantly agricultural land. This area is largely flat cleared land, with few remaining forest areas.

The southern area of the Shire is hillier country which consists of a mix of dry land agricultural land, rural residential properties and large tracts of State Forest.

### Demographics

The population of the Shire is estimated at 7,516 (ABS ERP 2016).

Estimated residential population<sup>2</sup>:

• Boort	873
• Wedderburn	941
• Inglewood	855
• Pyramid Hill	558
• Bridgewater	142
• Tarnagulla	133
• Serpentine	192
• Korong Vale	168
• Newbridge	192
• Mitiamo	117
• Eddington	196

(Figures based on ABS 2016 data)

In addition to the above towns the following small Hamlets are located within the Shire; Kingower, Rheola, Wychitella, Logan, Arnold, Bears Lagoon, Jarklin, Durham Ox, Mincha, Calivil, Dingee, Mysia, Borung, Eastville and Fernihurst.

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<sup>2</sup> <http://profile.id.com.au/loddon/population-estimate?WebID=10>

## Vulnerable Groups (2016 Census data)

Some groups are more susceptible to the health effects of heatwave

Group	Local Context and heatwave effects
Babies and Pre-schoolers (0 – 4)	At the 2016 Census, there were 335 people (4.5% of the population) living within Loddon.
Young People (5 – 14)	At the 2016 Census, there were 856 people (11.4% of the population) living within Loddon.
People over 65	At the 2016 Census, there were 2,012 people (26.8% of the population) living within Loddon.  There were 6,630 presentations of people over 65 at hospitals across Victoria during the 2014 heatwave. This was higher than the 5,627 presentations expected. This is a 33% increase when compared to non-heatwave events presentations
Pregnant and breastfeeding mothers	Maternal and Child Health (MCH) statistics show that there approximately 62 births annually in the municipality in recent years.
People with a physical or cognitive disability	At the 2016 Census, 553 residents in Loddon were described as requiring assistance, equating to 7.3% of the population. Of these residents 3 were 0-4 years of age and 329 were 65 years or older.
People who live alone or are socially isolated	At the 2016 Census, Loddon had a high proportion of single person households (32%) this equates to 1,015 persons.
Low-socio economic groups, including homeless people	The ABS Index of Relative Socio-Economic Disadvantage (SEIFA) suggests the Loddon community is more disadvantaged than the state more generally.  Inglewood and Districts Health Service advises that they have no annual client intake of people who have been sleeping rough. In no way does this affirm no people are sleeping rough within the municipality however.
Those living or camping in caravans and tents	At the 2016 Census, 62 people were living within other types of dwellings such as caravans, tents or similar type of accommodation.



## Central Goldfields Municipal Profile

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The Central Goldfields Shire covers an area of 1534 square kilometres and is either forested or used for mixed farming purposes. There has been extensive rural residential development in the Shire and many of these rural residential areas abut State Forest.

The Shire is bounded by the Avoca River in the North West, the Bet Bet Creek in the South West, the Joyces Creek, Cairn Curran Reservoir and Deep Creek in the East. The Bet Bet Creek traverses the Shire in the central north of the shire. The Eastern and Western edges of the Shire are basalt plain, while the central portion of the Shire is undulating to hilly country.

### Demographics

In the 2016 census the Central Goldfields Shire had a total population of 12,995.

Population figures:

#### Township Population

• Maryborough	7921
• Dunolly	893
• Bealiba	206
• Moliagul	88
• Carisbrook	1115
• Bowenvale	181
• Majorca	211
• Talbot	442

## Vulnerable Groups (2016 Census data)

Some groups are more susceptible to the health effects of heatwave

Group	Local Context and heatwave effects
Babies and Pre-schoolers (0 – 4)	At the 2016 Census, there were 586 people living within Central Goldfields.
Young People (5 – 11)	At the 2016 Census, there were 924 people living within Central Goldfields.
People over 60	At the 2016 Census, there were 4,686 people living within Central Goldfields. This is an increase from 3,656 from the 2006 Census.  There were 6,630 presentations of people over 65 at hospitals across Victoria during the 2014 heatwave. This was higher than the 5,627 presentations expected. This is a 33% increase when compared to non-heatwave events presentations
Pregnant and breastfeeding mothers	Maternal and Child Health (MCH) statistics show that there are approximately 115 births annually in the municipality in recent years.
People with a physical or cognitive disability	At the 2016 Census, 1,161 residents in Central Goldfields were described as requiring assistance. Of these residents 7 were 0-4 years of age and 582 were 65 years or older.
People who live alone or are socially isolated	At the 2016 Census, Central Goldfields had a1,906 single person households.
Low-socio economic groups, including homeless people	The ABS Index of Relative Socio-Economic Disadvantage (SEIFA) suggests the Central Goldfields community is more disadvantaged than the state more generally.  Maryborough District Health Service advises they have no annual client intake for people who have been sleeping rough. In no way does this affirm no people are sleeping rough within the municipality however.
Those living or camping in caravans and tents	At the 2016 Census, 106 people were living within other types of dwellings such as caravans, tents or similar type of accommodation.

## City of Greater Bendigo Municipal Profile

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The City of Greater Bendigo is located in the geographic centre of Victoria. Greater Bendigo has a population of just over 111,000 and covers almost 3,000 square kilometres of the Central Victorian landscape of which a significant proportion is national park, regional park, reserve or bushland. Smaller townships are located at Axedale, Elmore, Goornong, Heathcote, Marong and Redesdale.

Today, Bendigo is the major regional centre for North Central Victoria and the fourth largest urban area in Victoria. Bendigo features a major public hospital (Bendigo Health) and several smaller health services (Anne Caudle Centre, Eaglehawk Day Hospital, Heathcote Hospital and private hospital St. John of God).

### Demographics

The City of Greater Bendigo had a population of 110,477 in the 2016 Census.

Population figures:

#### Township Population

• Bendigo	5,616
• Eaglehawk - Eaglehawk North - Sailors Gully	6,516
• East Bendigo	2,151
• Elmore - Rural North	3,481
• Epsom - Ascot	6,233
• Flora Hill - Quarry Hill - Spring Gully - Golden Gully	9,595
• Golden Square	8,996
• Heathcote and District	3,910
• Huntly	2,490
• Kangaroo Flat - Big Hill	10,799
• Kennington	5,728
• Long Gully - West Bendigo – Ironbark	4,905
• Maiden Gully	5,095
• Marong - Rural West	4,456
• North Bendigo - California Gully	8,531
• Axedale – Sedgwick - Longlea -Junortoun	7,705
• Strathdale	5,722
• Strathfieldsaye	5,490
• White Hills - Jackass Flat	4,369

## Vulnerable Groups (2016 Census data)

Some groups are more susceptible to the health effects of heatwave

Group	Local Context and heatwave effects
Babies and Pre-schoolers (0 – 4)	At the 2016 Census, there were 7,075 people (6.4% of the population) living within City of Greater Bendigo.
Young People (5 – 11)	At the 2016 Census, there were 10,041 people (9.1% of the population) living within City of Greater Bendigo.
People over 60	<p>At the 2016 Census, there were 26,410 (23.9% of the population) living within City of Greater Bendigo.</p> <p>There were 6,630 presentations of people over 65 at hospitals across Victoria during the 2014 heatwave. This was higher than the 5,627 presentations expected. This is a 33% increase when compared to non-heatwave events presentations</p>
Pregnant and breastfeeding mothers	Maternal and Child Health (MCH) statistics show that there has been an average of 1,369 births annually in the municipality in past 3 years.
People with a physical or cognitive disability	At the 2016 Census, 6,546 residents in City of Greater Bendigo were described as requiring assistance, equating to 5.9% of the population. Of these residents 109 were 0-4 years of age and 3,505 were 65 years or older.
People who live alone or are socially isolated	At the 2016 Census, City of Greater Bendigo had 11,567 people living alone.
Low-socio economic groups, including homeless people	<p>The ABS Index of Relative Socio-Economic Disadvantage (SEIFA) suggests the City of Greater Bendigo had a lower score (983.1) than the Victorian state average (1010) and higher than the Regional Victoria average (977.7).</p> <p>There are particular pockets of disadvantage in Long Gully, West Bendigo, Ironbark, North Bendigo and California Gully.</p> <p>Using Homelessness Australia data it states that 'on any given night 1 in 200 people are homeless'.</p> <p>In City of Greater Bendigo it is estimated at any one time over 500 people are homeless or living rough.</p> <p>Some significant reasons for homelessness/living rough include domestic violence and relationship issues, accommodation issues, financial difficulties and health reason.</p>
Those living or camping in caravans and tents	The 2016 Census shows, 233 people were living within other types of dwellings such as caravans, tents or similar type of accommodation.

## Campaspe Municipal Profile

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The Shire of Campaspe is a predominantly rural area, but has significant residential areas in the townships of Echuca and Kyabram. The largest town is Echuca, followed by Kyabram. Smaller townships include Gunbower, Lockington, Rochester, Rushworth, Stanhope and Tongala. The Shire encompasses a total land area of about 4,500 square kilometres. Land is used mainly for agriculture, particularly dairy farming, cereal and grain growing and sheep grazing. Tourism is also an important industry.

### Demographics

The Campaspe Shire a population of 37,061 in the 2016 Census.

Population figures:

#### Township Population

• Echuca (Central - East)	5,598
• Echuca (South - East)	2,823
• Echuca (West)	5,338
• Kyabram (East)	3,255
• Kyabram (West)	4,204
• Lockington - Gunbower and District	3,990
• Rochester	3,077
• Rushworth and District	2,438
• Stanhope and District	2,496
• Tongala and District	3,564

## Vulnerable Groups (2016 Census data)

Some groups are more susceptible to the health effects of heatwave

Group	Local Context and heatwave effects
Babies and Pre-schoolers (0 – 4)	At the 2016 Census, there were 2,075 people (5.6% of the population) living within Campaspe.
Young People (5 – 14)	At the 2016 Census, there were 4,561 people (12.3 of the population) living within Campaspe. This is a decrease from 3,775 (10.4%) from the 2006 Census.
People over 60	At the 2016 Census, there were 11,099 (30.1% of the population) living within Campaspe.  There were 6,630 presentations of people over 65 at hospitals across Victoria during the 2014 heatwave. This was higher than the 5,627 presentations expected. This is a 33% increase when compared to non-heatwave events presentations
Pregnant and breastfeeding mothers	Maternal and Child Health (MCH) statistics show that there approximately 422 births annually in the municipality in recent years.
People with a physical or cognitive disability	At the 2016 Census, 2,357 residents in Campaspe were described as requiring assistance, equating to 6.4% of the population. Of these residents 20 were 0-4 years of age and 1,482 were 65 years or older.
People who live alone or are socially isolated	At the 2016 Census, Campaspe had 3,908 people living alone.
Low-socio economic groups, including homeless people	The ABS Index of Relative Socio-Economic Disadvantage (SEIFA) suggests the Campaspe Shire community had a lower score (967) than the Victoria (1010) and regional Victoria (977) average scores, indicating a higher level of relative socio-economic disadvantage. Campaspe Shire was ranked 22nd lowest out of 79 Victorian LGAs
Those living or camping in caravans and tents	At the 2016 Census, 133 people were living within other types of dwellings such as caravans, tents or similar type of accommodation



## **19. Heatwave planning and response partner contact details**

Please refer to the Northern Victorian Emergency Management Cluster Contacts, Suppliers and Facilities Database at <http://contacts.regional.em.vic.gov.au/>

Emergency Management Agencies can request access to the database by contacting the relevant Council - Emergency Management Coordinator.

## 20. References and Resources

Bureau of Meteorology (BoM) 2015. *About the Heatwave Service for Australia*, <http://www.bom.gov.au/australia/heatwave/about.shtml>

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Emergency Management Victoria (EMV) 2017. *Interim State Extreme Heat Health Sub-Plan*, Emergency Management Victoria, Melbourne

## Resources

### Bureau of meteorology

Website - <http://www.bom.gov.au/>

App - <http://www.bom.gov.au/app/>

Regional Climate Change Explorer - <http://www.climatechangeinaustralia.gov.au/en/climate-projections/future-climate/regional-climate-change-explorer/super-clusters/>

### Climate Ready Victoria – Loddon Mallee Region

Website - [http://www.climatechange.vic.gov.au/\\_data/assets/pdf\\_file/0003/320889/Loddon-Mallee.pdf](http://www.climatechange.vic.gov.au/_data/assets/pdf_file/0003/320889/Loddon-Mallee.pdf)

### Heatwave Planning Resources – Department of Health and Human Services

Website - <https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-planning>

State Heat health plan - <https://www2.health.vic.gov.au/Api/downloadmedia/%7B5151AA4E-D2FD-4DD8-AA58-3F74A63F2066%7D>

### Central Victorian Greenhouse Alliance

Heatwave training video - <https://heathealth.cvga.org.au/heatwave-help-downloads/>

Central Victorian Greenhouse Alliance: Heatwave Help- <https://heathealth.cvga.org.au/>

### Emergency Management Victoria

Website - <https://www.emv.vic.gov.au/>

State Heat Plan - <http://files.em.vic.gov.au/EMV-web/State-Heat-Plan.pdf>

Interim State Emergency Response Plan Extreme Heat Sub-Plan - <http://files.portal.em.vic.gov.au/refdocs/EMK-01.19-HeatSubplan.pdf>

Emergency Management Common Operating Picture (EMCOP) - <http://app.prod.cop.em.vic.gov.au/sadisplay/nicslogin.seam>

Vic Emergency Website - Public emergency warning service - <http://emergency.vic.gov.au/respond/>

## **8.4 12 MONTH EVALUATION OF MARYBOROUGH TOURIST MARKET**

**Author:** Manager Tourism, Events and Culture

**Responsible General Manager:** General Manager Community Wellbeing

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

This report provides an evaluation of the 12 month trial of the Maryborough Tourist Market hosted by the Maryborough Lions Club along Alma and Nolan Streets, Maryborough. This is a follow up action from the agreed resolution from Council's February 2018 meeting.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Economy

Outcome: A vibrant local economy which contributes to the municipality's economic prosperity

2.7 Objective: Capitalise on tourism and the visitor economy through growth of events and promotion of unique local experiences

Initiative: Identify opportunities for new events in the Central Goldfields Shire

### **BACKGROUND INFORMATION:**

At Council's February 2018 meeting it was resolved that the Maryborough Lions Club could host a monthly market in Maryborough's CBD along Alma and Nolan Streets on the first Sunday of each month. It was agreed that this would be done as a 12 month trial with an evaluation to take place by both Maryborough Lions Club and Council officers at the completion of the 12 month timeframe. Maryborough Lions Club had previously hosted their monthly market at the Maryborough Harness Racing Club but due to the increased unsustainable costs associated with the hire of the venue and the decline in attendance figures, the Maryborough Lions Club sought an alternative location within the CBD of Maryborough to help revitalise the market.

### **REPORT:**

The Maryborough Lions Market has now been on trial in its new location for 12 months. In conjunction with the Maryborough Lions Club, council officers met to review and evaluate the 12 month trial and current operations of the market in January 2019.

The market has been evaluated monthly by the market committee taking into account, stallholder numbers, estimated visitor numbers, verbal feedback from local businesses trading during the market times and feedback from market volunteers.

38 stall holders participated in the first market and this has increased steadily over the past 12 months since the market was first held in its new location. Approximately 60-65 stallholders attended the market over the winter months and the December 2018 market had a high of 71 stallholders attend.

The aim of the Maryborough Lions Club is to increase stallholder numbers to approximately 100 stallholders in the future, which is the Maryborough Lions Club's key area for further improvement and growth.

The Maryborough Lions Club estimates on average approximately 1500-2000 visitors attend the market each month. With many who are visiting from outside the Maryborough community and some visitors from interstate who are visiting the region for holiday purposes, or just passing through and interested in having a look at what the market has to offer.

Feedback from stallholders and consumers has been positive with many commenting that the market is run professionally and that it is financially viable for stallholders. Volunteers and members of the Maryborough Lions Club are keen and happy to give their time at the market each month.

The market has created a strong rapport within the local community and the club itself. All members and volunteers have shown that they can work together for positive outcomes such as giving back to the community, which is one of the Lions International Ethics and Objectives.

Hazard checklists are carried out twice per market by the Market Manager and five club members have been trained in traffic management. A further two members are to be trained shortly due to two of the qualified members relocating.

Entertainment has been organized at four separate markets which has included the Maryborough Brass Band and Maryborough Big Band. This has helped further create a convivial atmosphere for attendees and stallholders at the market. Themes have also been tied in with other events happening over the same weekend. A good example of this is at the February 2019 market a Mad Max car was on display in the middle of the market to help promote the Mad Max 40th Anniversary event happening the same weekend in Maryborough.

Over the past 11 Maryborough Tourist Market's held, the Maryborough Lions Club has found it to be sustainable to the club and financially viable for the club to continue with into the future.

A letter to local retailers from the Maryborough Lions Club asking for feedback on the impact of the market was distributed on 28 December 2018. Until this point in time no responses had been received from any of the local businesses that open for trading during the market times.

Supporting photos:







To this point the new location of the Maryborough Lions Market has been a success for both the revitalisation of the market and for some local businesses who have benefitted by opening during market times. For the Maryborough Lions Club to continue to successfully host their market it is recommended the club continues to implement the following into the future:

1. The **Business Plan** for the Maryborough Lions Club Market.
2. The **Marketing Plan** to demonstrate how the revitalised market will continue to brand and promote itself and the CBD location.
3. Their **stallholder application process** with specific stall holder criteria which need to be met to be a stallholder at the market – for quality control.

#### **CONSULTATION/COMMUNICATION:**

As per previous reports, the Maryborough Lions Club has conducted and continued consultation with the following groups:

- Central Goldfields Business Group
- Businesses within the CBD
- Central Goldfields Shire Council
- Emergency Services
- Waste disposal services



**FINANCIAL & RESOURCE IMPLICATIONS:**

There are only minor resource implications for the Central Goldfields Shire Council. The Lions Club borrows traffic management signs and places these appropriately around the market site. The Lions Club obtains the relevant traffic management plan and has qualified personnel to apply the traffic management plan. There is an additional cost for the collection of an increased number of street rubbish bins after each market. This currently works out to a cost of around \$400 per year for Council.

**CONCLUSION:**

With a Maryborough CBD location agreed upon, the 12 month trial at the new location for the Maryborough Tourist Market has been successful for the revitalisation of the market, but also businesses in the Maryborough business district. Attendance numbers and stallholder number have grown exponentially, and relevant actions in the event's business and marketing plan have been achieved in the first 12 months. The proposed market will continue to be the full responsibility of the Maryborough Lions Club. They will be the event organiser and take full control of managing, promotion, set-up, and pack-up of the event into the future.

**ATTACHMENTS:**

Nil

**RECOMMENDATION:**

*That Council support the ongoing hosting on the Maryborough Tourist Market held once a month on a Sunday morning along the agreed sections of Alma and Nolan Streets, Maryborough, subject to the Maryborough Lions Club obtaining relevant Local Laws and Planning permissions, and continuing to implement the business and marketing plan for the Market.*

## **8.5 REPORT DETAILING THE EVALUATION OF CONTRACT G1263-18 PORTEOUS ROAD WAREEK BRIDGE REPLACEMENT**

**Author:** Manager Infrastructure

**Responsible General Manager:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

This report recommends that contract G1263-18 for Porteous Road Bridge Replacement be awarded to Murray Constructions Pty Ltd, following a public tender process.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh)

Outcome: Central Goldfields Shire celebrates the rich built and natural heritage and a sustainable environment.

Objective 3.1: Ensure investment in roads, footpaths and buildings meet community needs now and in the future.

Initiative: Review and update Asset Management Plans and prepare a 10 year capital works program.

Council's Road Management Plan 2017 details road hierarchy classification standards for both design and maintenance for categories of roads and bridges in the shire.

Council's Procurement Policy (adopted 11 April 2018), made under section 186A of the Local Government Act ("the Act") requires Council to prepare, approve and comply with a procurement policy encompassing the principles, processes and procedures applied to all purchases of goods, services and works by Council.

### **BACKGROUND INFORMATION:**

Council provides resealing services to the community in accordance with the Local Government Act 1989 and the Road Management Act 2004. The Local Government Act 1989 section 208 requires Council to consider "Best Value".

The Act provides relevant direction to local government in regards to procurement and contracts. Section 186 of the Act requires Councils to undertake competitive market testing processes before entering into contracts for purchase of goods or services or for the carrying out of works for the value of \$150,000 or above. The Act imposes specific restrictions on Council in regard to entering such contracts.

Important provisions within Section 186 include minimum standard processes for giving public notice of the purpose of contracts in excess of the value of \$150,000. Nothing in Section 186 of the Act requires Council to accept the lowest tender or to accept any tender.

The Porteous Road Bridge over the Bet Bet Creek at Wareek was constructed in 1960. Over the years the bridge has deteriorated to a point currently where the bridge has been assessed and load limited to 15 tonnes, the design load capacity was originally 30 tonnes.

Porteous Road meets all the Primary Functions of a Rural Access Road (RA1), minimum traffic count >30 vehicles per day (actual 87 vehicles per day) and minimum standard for a bus route. The Porteous Road bridge has been identified as below capacity for a Rural Access 1 (RA1) road (20 tonnes) for a number of years. The load limit has restricted the use of the bridge and Porteous Road for a number of local farmers and emergency vehicles.

The bridge experienced significant damage during the 2011 flood event, after which works were undertaken on the deck and structure of the bridge to maintain functionality of the bridge at the current service level. It was acknowledged at the time a complete bridge replacement would be required to increase the load capacity to at least reach the required 20 tonne load capacity.

The Porteous Road bridge was identified as a candidate for renewal under the Federal Government's Bridge Renewal Program (BRP) Round 3 and received a \$300,000 grant in October 2017 under 50% shared funding arrangement. The bridge project was tendered in early 2018 receiving tenders well in excess of the available budget and as a result the tender was abandoned.

Further application for funding from the BRP was successful in late 2018 and additional funds were sought and received through the State Government's Regional Roads Victoria - Fixing Country Roads Program for the road works associated with the bridge upgrade.

The bridge replacement project was re-tendered in December 2018 and closed in early February 2019, with tender evaluation undertaken in early February 2019.

There have been no previous Council reports on Porteous Road bridge project.

## **REPORT:**

In response to Council's request for tenders, four contractors submitted detailed tender submissions. These were: Murray Constructions Pty Ltd, North East Civil Construction Pty Ltd, North-Vic Constructions Pty Ltd and ACE Infrastructure Pty Ltd.

### **The assessment criteria used for this tender was:**

Risk Management (Pass/Fail)

Financial Viability (Pass/Fail)

Vic Roads Pre-qualification (Pass/Fail)

Financial Benefit to Council (50%)

Capability of delivering outcomes (20%)

Capacity to deliver extent of works (20%)

Financial Benefit to Community (5%)

Aboriginal Engagement (5%)

Priority/Importance:

The awarding of this contract is of considerable importance to allow time for the successful tenderer to mobilise the required resources to undertake the works over the next nine months to Mid-November 2019.

The project is required to be expedited to meet the Fixing Country Roads funding requirement to expend its share of the funds by the end of June 2019.

Options/Alternatives:

The panel has recommended the contract be awarded to Murray Constructions Pty Ltd based on the tender evaluation in accordance with Council's procurement policy.

Risk Analysis:

Council's financial exposure is limited as the successful contractor is not paid until works are completed. All works will be covered by defect liability provisions.

The contractor is required to have appropriate insurance.

A financial check of the preferred tenderer was undertaken as part of Council's tender evaluation process.

**CONSULTATION/COMMUNICATION:**

The request for tenders was advertised in The Age, Bendigo Advertiser, Ballarat Courier and Councils web page in compliance with section 186 of the Local Government Act.

An evaluation meeting was held and attended by all tender panel members. As part of the evaluation the preferred tenderer's referee was consulted, with positive feedback received.

**FINANCIAL & RESOURCE IMPLICATIONS**

Four tenders were received. The recommended tenderer is Murray Constructions Pty Ltd for the tendered amount of \$1,080,035.00 inc. GST (\$981,850.00 ex GST), which is within the budget amount as outlined below.

The revised budget for the Porteous Road bridge renewal is \$1,050,000.

This funding for the project is comprised of the following:

- |  |                    |
|--|--------------------|
| • Bridge Renewal Program Round 3       | \$ 500,000         |
| • Fixing Country Roads Program Round 1 | \$ 270,000         |
| • Council contribution                 | \$ 280,000         |
| • <b>Total</b>                         | <b>\$1,050,000</b> |

The original 2018-19 budget was \$600,000 comprising of \$300,000 council contribution. The revised budget above reduces Council's contribution to \$280,000 and meets all the grant funding guidelines for both the Federal and State Government grants.

**CONCLUSION:**

A full tender evaluation was conducted and Murray Constructions Pty Ltd received the highest evaluation score and are recommended for acceptance for a contract sum of \$1,080,035.00 (GST Inclusive).

**ATTACHMENTS:**

NIL

**RECOMMENDATION:**

*That Council:*

- 1. Award the Porteous Road Wareek Bridge Replacement contract G1263-18 to Murray Constructions Pty Ltd for \$1,080,035.00 (GST Inclusive).*
- 2. Authorise the Chief Executive Officer to sign and affix the Common Seal to the contract documentation for Contract G1263-18 for Porteous Road Bridge Replacement.*

## **8.6 DRAFT MARYBOROUGH INTEGRATED WATER MANAGEMENT PLAN FOR PUBLIC EXHIBITION TO ASSIST CENTRAL HIGHLANDS WATER**

**Author:** Acting Manager Infrastructure

**Responsible General Manager:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

The purpose of this report is for Council to endorse the Draft Maryborough Integrated Water Management Plan ('Draft Plan') for the purpose of displaying this Draft Plan on Council's website and promoting the Draft Plan through social media to assist Central Highlands Water to seek community feedback.

On 27 November 2018 Council endorsed the Central Highlands Integrated Water Management Strategic Directions Statement. The Strategic Directions Statement identified opportunities that will substantially transform and enhance the role that water plays as an essential part of our region's way of life.

One of the opportunities identified in the Central Highlands Integrated Water Management Strategic Directions Statement was the development of a Maryborough Integrated Water Management Plan. Council has participated the development of the Draft Plan and the Strategic Directions Statement.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Built and Natural Environment

**Outcome:** Central Goldfields Shire celebrates the rich built and natural heritage and a sustainable environment.

**3.3 Objective:** Protect and enhance the environment while planning for growth

**Initiative:** Implement the actions from Council's Sustainability Plan

The Integrated Water Management Framework for Victoria forms part of the State Governments state water plan "Water for Victoria" which aims to help government, the water sector and the community work together at the local level to better plan, manage and deliver water in Victoria's towns and cities.

### **BACKGROUND INFORMATION:**

The Integrated Water Management Framework for Victoria, developed in 2017, outlines how greater community value can be delivered through strategic collaboration between water corporations, local governments, catchment management authorities and the community.

Integrated water management (IWM) is a collaborative approach to planning that brings together organisations that influence all elements of the water cycle including waterways and

bays, waste water management, alternative and potable water supply, stormwater management and water treatment.

Thirteen projects areas were identified in the Central Highlands Strategic Directions Statement (SDS) to pursue the strategic objectives of the Statement. One of these is the Maryborough Integrated Water Management Plan which has now been presented in draft form for public display/feedback.

The Ordinary Council Meeting held on 27 November 2018 resolved the following:

- To endorse the Central Highlands Integrated Water Management Strategic Directions Statement
- To endorse the Coliban Integrated Water Management Strategic Directions Statement
- To continue to work with both water Forums and the regional statutory bodies to undertake the planning and works identified in the Strategic Directions Statements
- To advise the Coliban Water Forum that a future project should focus on the development of a small town Integrated Water Management Plans.

#### **REPORT:**

The Draft Plan examines the whole urban water cycle, including the management of stormwater, wastewater, water supplies and waterways. It also considers how water can be managed to deliver community benefits such as enhanced amenity, greener open spaces and street trees and enhanced recreational opportunities.

The Draft Plan identifies six focus areas for integrated water management in Maryborough

1. Creating governance and delivery structures to support IWM
2. Harnessing stormwater for healthier street trees
3. Greening station domain as a key community asset
4. Creating a resilient and local alternative water supply network
5. Improving Lake Victoria for recreation and amenity
6. Continual improvement of waterways and flood management

The Draft Plan then identifies a set of recommended actions for each focus area, including proposed timeframes and delivery responsibilities. The Draft Plan notes that the timelines are indicative and subject to resourcing and planning by the relevant authorities (refer to Attachment 1 for actions).

Some of the actions have both a high economic benefit as well as other benefits (such as shading the streets), others have a lesser economic impact and have high other benefits (such as wetland treatment at Lake Victoria, which could have a high environmental and social impact).

The Draft Plan recognises that there is benefit in pursuing all these outcomes, not only those with a high economic benefit.

The timeframes set out in the Draft Plan are ambitious, highlighting the importance of securing water resources to improve the amenity of the shire. A number of the actions also align with



other material that has been produced for Council – for example a number of the actions regarding street trees are consistent with the ‘Cool it’ study recommendations.

The Draft Plan recognizes that many of the actions will require additional and external resources and funding. The benefit of community input into the Draft Plan is to ensure that the proposed actions have a level of community understanding and support.

### **CONSULTATION/COMMUNICATION:**

Consultation for the Draft Plan has involved Project Steering Group meetings and meetings with a number of local stakeholders from the Maryborough and Carisbrook community. Staff from Council have been involved in the steering group and stakeholder meetings.

Further stakeholder involvement includes the public display of the Draft Plan for public comment. It is intended that the document remain on display until 31 March 2019. Public comment will be available in various formats and will be advertised via website, social media and newspaper.

### **FINANCIAL & RESOURCE IMPLICATIONS:**

Implementing the actions identified in the Draft Plan will require staff resources to manage and implement some actions and to source funding for actions.

### **CONCLUSION:**

The Draft Plan acknowledges that water can play a key role in improving liveability and community well-being in Maryborough. The actions identified in the plan will have a direct benefit to the Maryborough community and it is recommended that Council endorse the Draft Plan for the purpose of displaying this plan on council’s website and promoting the plan through social media to assist Central Highlands Water to gather community feedback.

During the formal feedback period Council may decide to make a submission to the Draft Plan.

There will be a Council Report presented to Council recommending the endorsement and advertisement of the Draft Plan at the February Council Meeting.

### **ATTACHMENTS:**

1. Draft Maryborough Integrated Water Management Plan
2. Maryborough IWM Economic Analysis
3. Maryborough Recycled Water Base Case

### **RECOMMENDATION:**

*That Council:*

1. *Endorse the Draft Maryborough Integrated Water Management Plan for the purpose of displaying this plan on Council’s website and promoting the plan through social media to assist Central Highlands Water to gather community feedback*
2. *Acknowledge it may wish to make a submission to the Draft Maryborough Integrated Water Management Plan through the feedback period.*





CENTRAL HIGHLANDS WATER, CENTRAL GOLDFIELDS  
SHIRE COUNCIL, NORTH CENTRAL CATCHMENT  
MANAGEMENT AUTHORITY

# MARYBOROUGH INTEGRATED WATER MANAGEMENT PLAN

November 2018



Developed by:



Prepared by:



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## TRADITIONAL OWNER ACKNOWLEDGEMENT

Central Highlands Water, Central Goldfields Shire Council and North Central Catchment Management Authority acknowledge the Traditional Owners of the region of Maryborough, the Dja Dja Wurrung. We pay our respect to the Elders of these communities past, present and emerging, acknowledging that they have been custodians of land and water for many centuries and that their continuing culture and contribution is important to the life of the region. We note in preparing and delivering on the outcomes of this plan the obligations to the Dja Dja Wurrung under the Traditional Owner Settlement Act, including Schedule 16 (NRM Participation Strategies) and Schedule 6 (Local Government Engagement).

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# Executive Summary

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## **Introduction**

The Maryborough Integrated Water Management Plan explores and sets out recommendations for future water management in the Maryborough area. The Plan examines the whole urban water cycle, including the management of stormwater, wastewater, water supplies and waterways. It also considers how water can be managed to deliver community benefits such as enhanced amenity, greener open spaces and street trees and enhanced recreational opportunities.

Water can play a key role in improving liveability and community well-being in Maryborough. The town already benefits from recycled water use for irrigation of the Golf Course and Princes Park precinct, and is harnessing stormwater runoff from part of the town to top-up Lake Victoria in the centre of the town. This Plan explores a variety of other initiatives that will further enhance the local economy, improve the environment and drive direct benefits to local communities. This Plan has been identified as a regional priority in the Central Highlands IWM Forum Strategic Directions Statement, which was endorsed by the Water Minister in October 2018.

## **A partnership approach to water management**

This Plan has been produced by Central Highlands Water in collaboration with Central Goldfields Shire Council and North Central Catchment Management Authority. It has also benefited greatly from the input and support of key local stakeholders including local businesses, community representatives and representatives of the traditional owners of land in the Maryborough area, Dja Dja Wurrung.

It is significant and integral that this Plan is developed through a partnership process, as this recognises that the urban water cycle is interconnected. Continuation of this partnership approach will be key to deliver the vision and the actions outlined in this Plan.



## Why integrated water management is important in Maryborough

There are several key drivers which mean that local and well-coordinated water management is important for Maryborough's future:

- **Future water supplies:** A combination of a changing climate and a growing population means that it is likely that additional water supplies for Maryborough will be needed in the future. Uncertainty regarding the scale of impact from future climates means that new supplies could be needed as soon as 2023 or not until 2049 to maintain a good level of water supply service for Maryborough.
- **Maryborough is growing:** New development in the area places additional pressure on water resources but also provides an opportunity to introduce new infrastructure and to influence how development is delivered.
- **Securing recycled water as a long-term resource:** The town's recycled water is currently harnessed for irrigation, but algal blooms and high salinity can restrict use. Finding solutions to these issues is important so that this alternative water resource is fully harnessed.
- **Recognising stormwater as a key water asset:** Increasingly, the impacts of urban runoff on the health of waterways are being realised. Following the impacts of the drought, urban stormwater has also been recognised as a valuable water source. There is further potential to harvest and treat stormwater to support local lakes and recreation areas while also improving water quality and environmental conditions.
- **Maryborough would benefit from more street trees and green areas:** Maryborough has relatively low tree canopy cover and integration of green space, meaning that on a hot day, the dominance of exposed paved surfaces further increases local temperatures, impacting the health and comfort of communities. Water can support the health and cooling effect of trees and green spaces, supporting community well-being.
- **The community appreciates local lakes and waterways, including Lake Victoria, Tullaroop Creek and Goldfields Reservoir:** Waterbodies and waterways are important to the character of the area, and provide a focus for recreational activities, walking and tourism. Securing a sustainable source of water and maintaining water quality is a key focus for community well-being.

## **Vision for IWM in Maryborough**

Water supports a resilient Maryborough with a thriving community, a prosperous economy, and a healthy environment.

## **Excellent opportunities to create a better Maryborough**

This plan identified numerous opportunities for integrated water management at all scales, ranging from on-lot initiatives in homes and street-scale greening, to town-scale water infrastructure. A shortlisting process was undertaken to identify initiatives that were likely to deliver the greatest benefits to the Maryborough community. Nine opportunities were examined in detail, and a costed concept design was developed for each. An economic evaluation and an appraisal of opportunities against key objectives for the area was conducted to inform the recommendations of this Plan. As a result, a suite of physical projects as well as a set of actions to support delivery integrated water management has been set out in an implementation plan.

## **Six focus areas for integrated water management in Maryborough**

1. Creating governance and delivery structures to support IWM
2. Harnessing stormwater for healthier street trees
3. Greening station domain as a key community asset
4. Creating a resilient and local alternative water supply network
5. Improving Lake Victoria for recreation and amenity
6. Continual improvement of waterways and flood management

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# 1. An integrated water management approach for Maryborough

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## 1.1 What is Integrated Water Management?

Integrated water management (IWM) recognises that interconnected nature of the water cycle, and seeks to manage water across the whole water cycle in a coordinated manner and improve its interactions with the built and natural environment in doing so. Traditionally, three ‘types’ of water have been managed separately; water supply, wastewater and stormwater. Roles and responsibilities have similarly focused on different types of water. An integrated water management recognises the interrelationships between different types of water, and also views water cycle management within a specific environmental, social, cultural and economic context – recognising the needs of local catchments and waterways, communities and industries.



Figure 1.1: Integrated water management diagram showing the interaction of the three ‘types’ of water within a context of urban form and landscapes.

In a built up environment, such as Maryborough, it is important to recognise how the water cycle is affected by urban areas. Urban development and formalised water supply and management systems have fundamentally altered the natural water cycle over time, creating an ‘urban water cycle’. The urban water cycle encompasses water supplies extracted from or imported to a local catchment, wastewater and stormwater generated locally, and the catchments and receiving environments affected by those water cycle interactions. As urban settlements change and grow, additional water demands and changes in generation of wastewater and stormwater will have knock-on effects on the urban water cycle, requiring forethought and understanding of environmental, economic and social influences and sensitivities in the system.

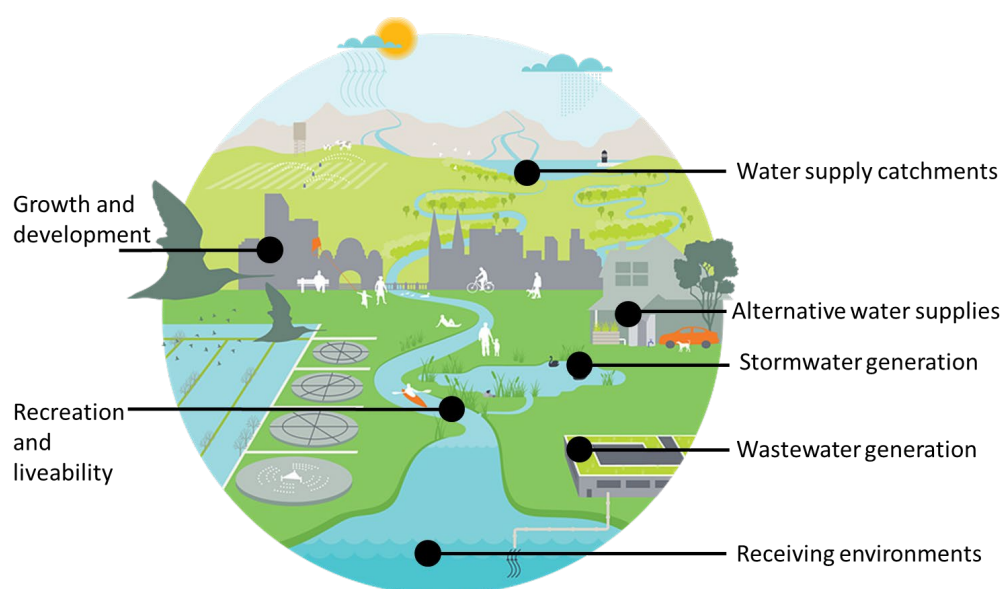


Figure 1.2: Key elements of the urban water cycle

## 1.2 State and Regional IWM Policy Frameworks

Water for Victoria (Victorian State Government, 2016) is “a framework to guide smarter water management, bolster the water grid and support more liveable Victorian communities”. Water for Victoria identified eight themes and associated actions to implement the policy. One of those themes is ‘resilient and liveable towns and cities’ and Government provided a commitment to:

“Adopt integrated water planning across Victoria, with place-based planning supporting community values and local opportunities”, and

“Put integrated water management into practice, working with water corporations to develop a common economic evaluation framework, promoting exemplar projects,

building the capacity of the water sector and local government to participate, and continuing research to improve urban water management”.

On 8 September 2017, the Department of Environment, Land, Water and Planning (DELWP) released a document titled ‘Integrated Water Management (IWM) Framework for Victoria’. The IWM Framework provides guidance aimed at helping government, the water sector and the community work together to better plan and deliver solutions for water management across Victoria’s towns and cities.

The IWM framework supports the establishment of IWM Forums in each region to drive and coordinated delivery of IWM. The Central Highlands Region IWM Forum was established in March 2018, and has identified the development of the Maryborough IWM Plan as a priority project in its Strategic Directions Statement<sup>1</sup> (2018).

### 1.3 A partnership approach to IWM in Maryborough

IWM not only involves a coordinated approach to water management, but also deep collaboration between a large number of stakeholders, extending to those who are able to affect and enable urban design, natural resource management, planning and economic development.

Recognising this, the IWM Plan for the Maryborough area has been jointly developed by Central Highlands Water, Central Goldfields Shire Council and North Central Catchment Management Authority in collaboration with key stakeholders and community representatives. Stakeholders engaged in the plan development are listed in Attachment 1.

We are thankful for the attendance and participation of representatives of Dja Dja Wurrung, the traditional owners of land in the Maryborough area, in the Plan workshops. It has been highlighted that several of the projects as listed in the plan provide an excellent opportunity in both the planning and delivery phases to further engage with the DDW to incorporate opportunities to exhibit and educate the community on some of the local indigenous cultural history of the area.

This IWM Plan focusses on the urban areas of Maryborough and neighbouring Carisbrook and Flagstaff, but recognises the interconnections with key water systems outside that area, including the water supply catchments, receiving environments, and nearby agricultural water users.

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<sup>1</sup> Central Highlands IWM Forum (2018) Strategic Directions Statement. Published by DELWP.

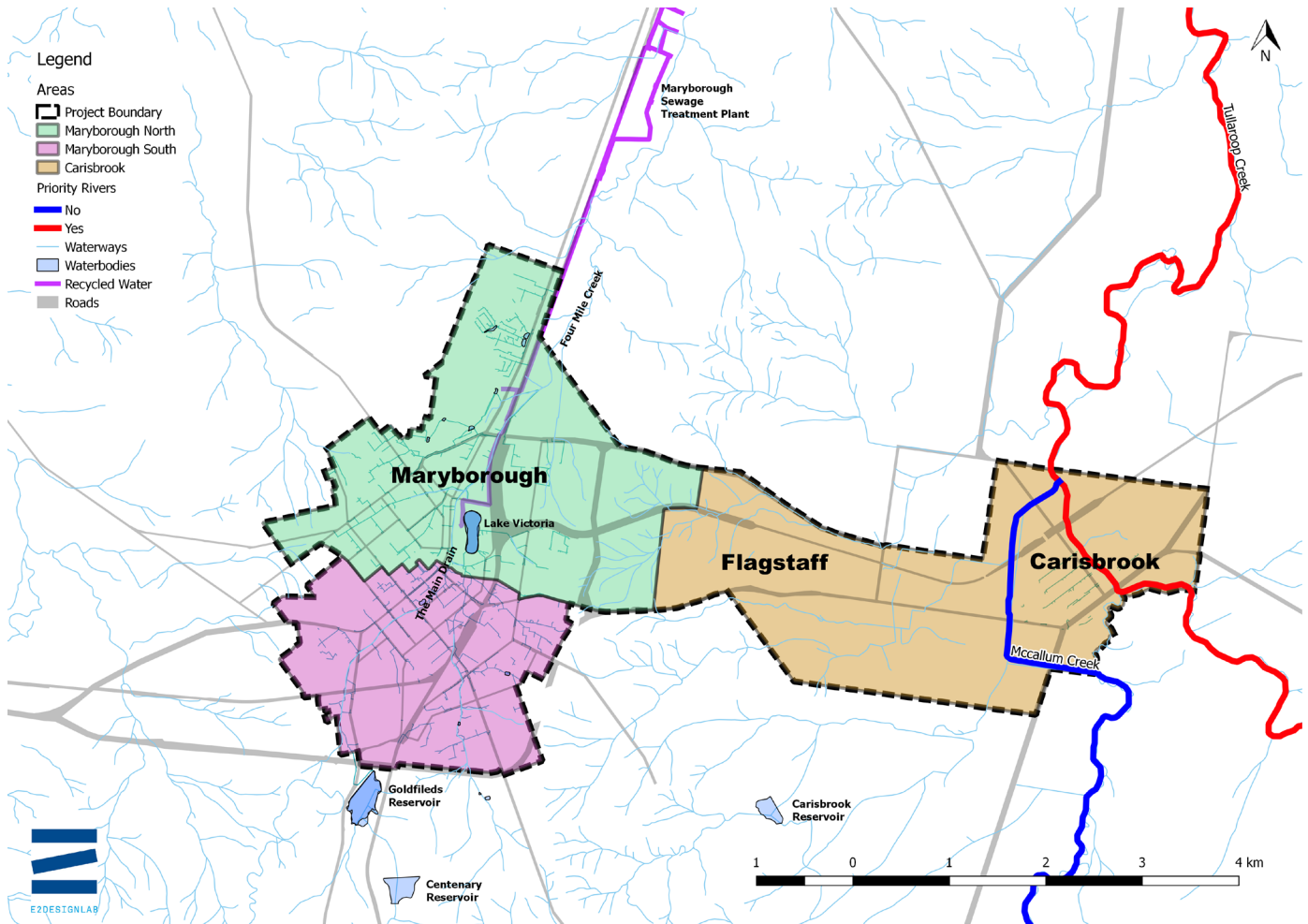


Figure 1.3: Focus area for the IWM Plan, encompassing the town of Maryborough and nearby Carisbrook

## 1.4 The IWM Plan structure

The Maryborough IWM plan was developed in the following four stages (Figure 1.4). The report is structured in the same manner and is supported by several appendices with further detail:



Figure 1.4: Four stages of the IWM Plan development



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## 2. The case for IWM: Drivers, Vision and Objectives

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### 2.1 Snapshot of the urban water cycle in the Maryborough Area and key drivers for change

#### 2.1.1 Urban development and growth

Maryborough and Carisbrook have an estimated combined current population of 9,123 people, with the majority of that population (~8,000 people) in Maryborough. A relatively moderate growth rate of 0.6% per year is predicted, bringing the total population in 50 years' time to 12,304 people. New population will be housed through a combination of infill development in existing areas and planned new communities on greenfield land. A total of around 1500 new homes is expected over the plan period. Central Goldfields Shire Council expect most new development to occur in residentially zoned land on the northern edge of Maryborough. Growth brings new water demands, as well as new wastewater and stormwater volumes, but development also brings opportunities to shape the urban landscape.



Figure 2.1 Recent residential development in North Maryborough



The main industry in Maryborough is manufacturing, with a dominance of food-related industries. A cluster of industrial businesses is located in the northern area of Maryborough, with further lower density industrial land use in the Flagstaff area between Maryborough and Carisbrook.

### 2.1.2 Potable water supplies

The Maryborough water supply system is managed by Central Highlands Water. Providing potable water supply to Maryborough and Carisbrook as well as a few other smaller settlements in the area, the water supply is currently predominantly drawn from surface water catchments with some groundwater supply when necessary. The majority of water supply is sourced from the Tullaroop Creek catchment, with the water treatment reservoir located to the south of the town of Maryborough, adjacent to Centenary Reservoir. Central Highlands Water have recently commissioned a Salt Reduction Plant (SRP) to reduce the salinity of drinking water in the system.

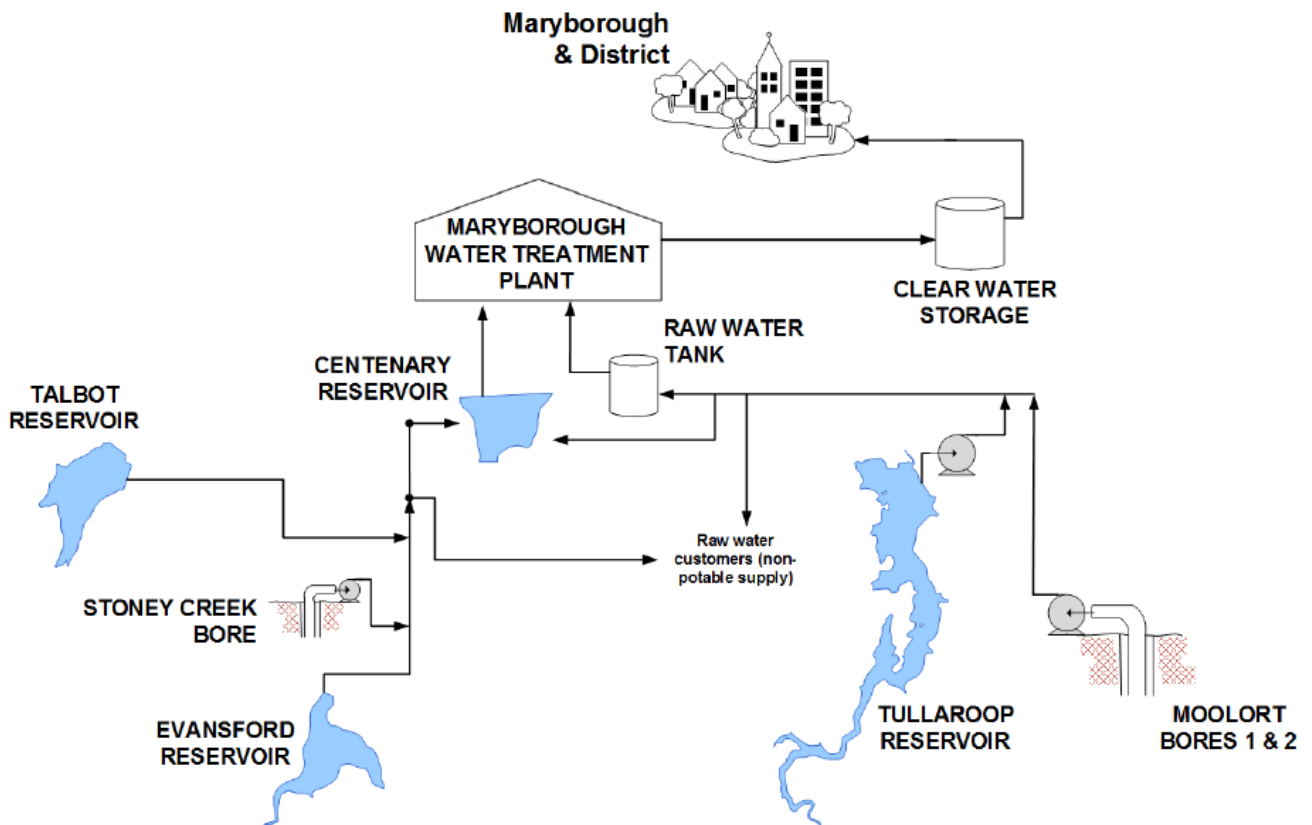


Figure 2.2: Maryborough and District Water Supply Network (Central Highlands Water Urban Water Strategy, 2017)

Central Highlands Water's Urban Water Strategy predicts the impacts of population growth and climate change on water supplies and demands for the Maryborough system. To maintain the target levels of service for the area, it is expected that supplementary water supplies will be required in the next 5 to 20 years (see Figure 2.3). Central Highlands Water are currently investigating options for additional supply, including connection to the Goldfields Superpipe or additional groundwater extractions.

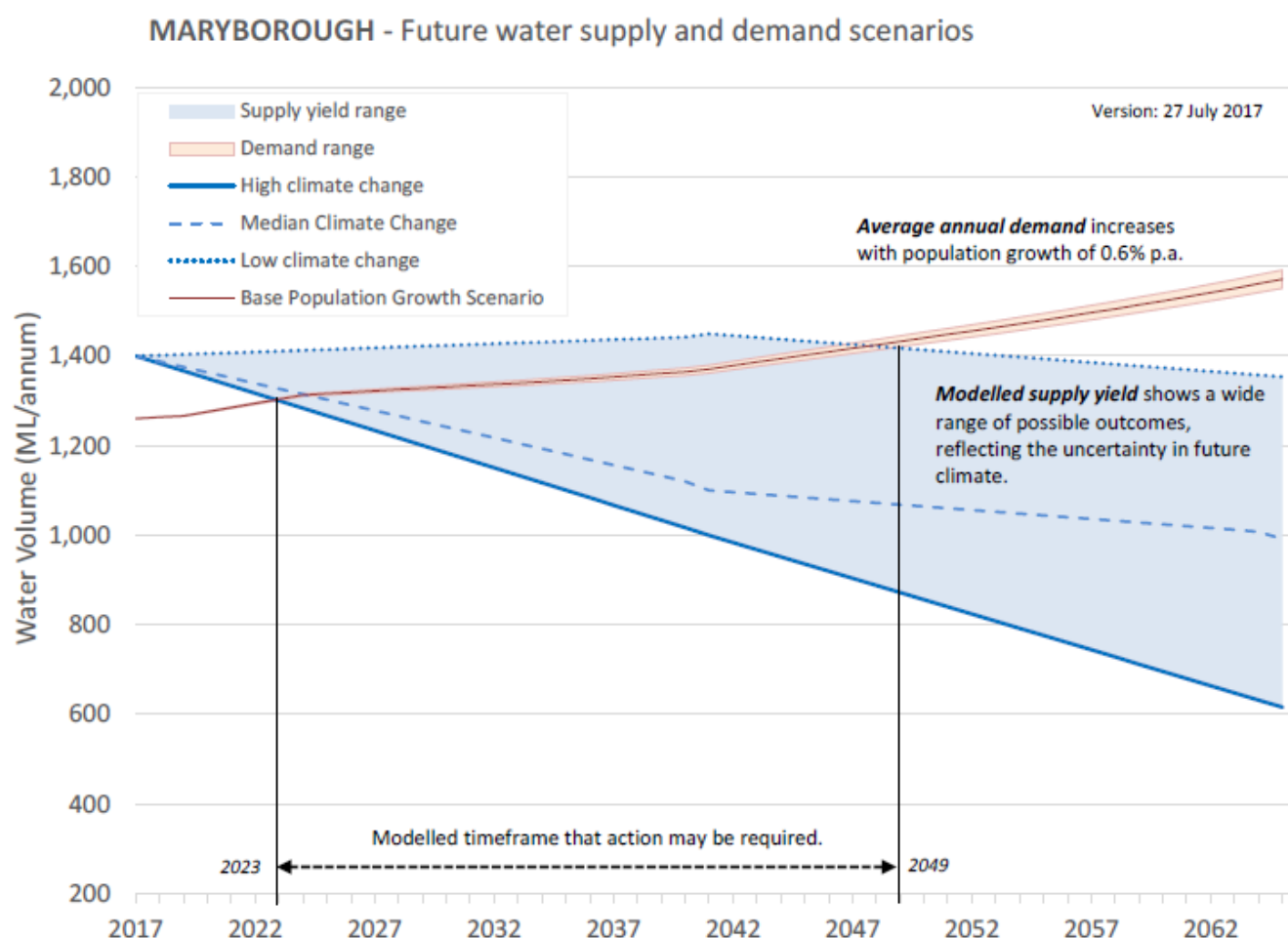


Figure 2.3: Future supply and demand scenarios for the Maryborough system (Central Highlands Water, 2017)

### 2.1.3 Wastewater management and recycled water

The Maryborough wastewater system is managed by Central Highlands Water. Wastewater from the Maryborough area is collected and treated at the Maryborough Wastewater Treatment Plant, located just to the north of Maryborough. Treated wastewater is reclaimed as recycled water (Class C) for local use, providing irrigation

water to the Maryborough Golf Club, Princes Park and local agricultural users via a recycled water distribution network. Due to the salinity of the water catchment, wastewater in the area has high salinity, and this is likely to increase in the future when the Salt Reduction Plant is in operation (and releasing brine to the wastewater system).

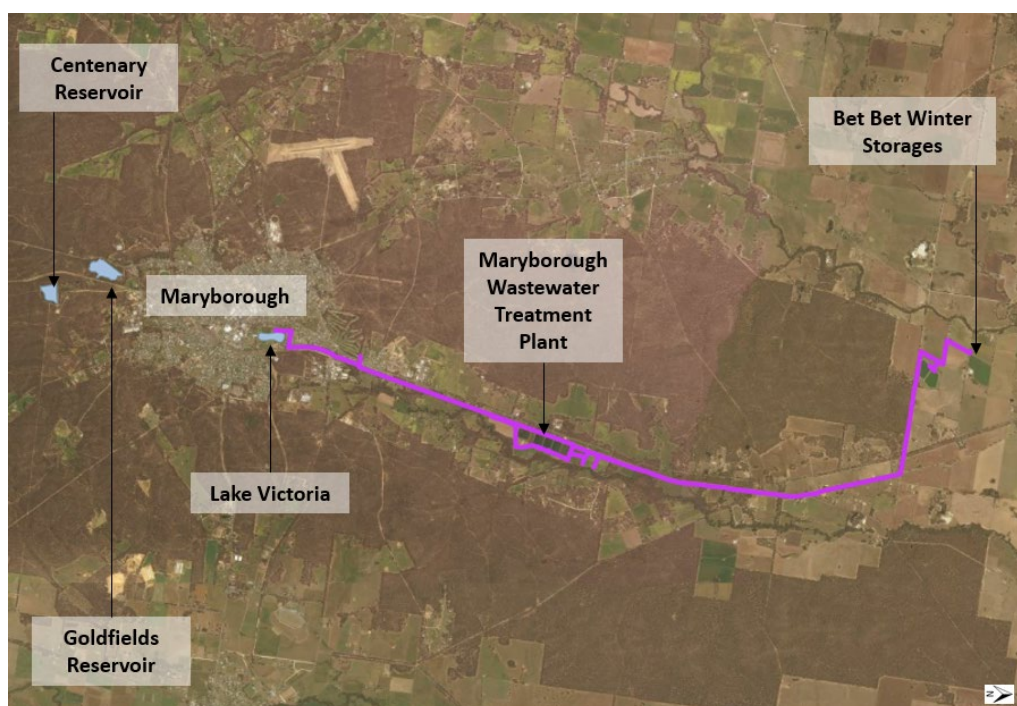


Figure 2.4: Maryborough recycled water network (purple)

#### 2.1.4 Stormwater management and stormwater reuse

Central Goldfields Shire Council is responsible for management of urban stormwater in the Maryborough Area. The built-up areas of Maryborough and Carisbrook have underground piped drainage systems, while the outskirts of Maryborough and parts of Carisbrook do not have a formalised drainage system. Maryborough drains to Four Mile Creek (commonly known as the ‘Main Drain’) which runs through the centre of the town and is open air in many sections. Its bluestone lining has historical value and it forms a well-known landscape feature in the town.

Central Goldfields Shire Council is guided by a Stormwater Management Plan (2002), and has implemented several improvements to stormwater management in recent years, including the installation of Gross Pollutant Traps in key sections of the Main Drain and raingardens in some carparks. During the Millennium Drought, stormwater from the main drain was diverted to top up Lake Victoria in Princes Park and this system currently remains in place. Other than litter removal, there is no treatment of urban stormwater entering the lake, resulting in algal blooms frequently affecting the Lake.

Other than the diversion to Lake Victoria, stormwater is a largely unharnessed water resource in the area which could be harnessed for a range of uses. Compared with pre-development conditions, the creation of the urban areas of Maryborough and Carisbrook has led to significant increases in stormwater runoff entering local waterways, fundamentally changing their flow regime and impacting water quality.

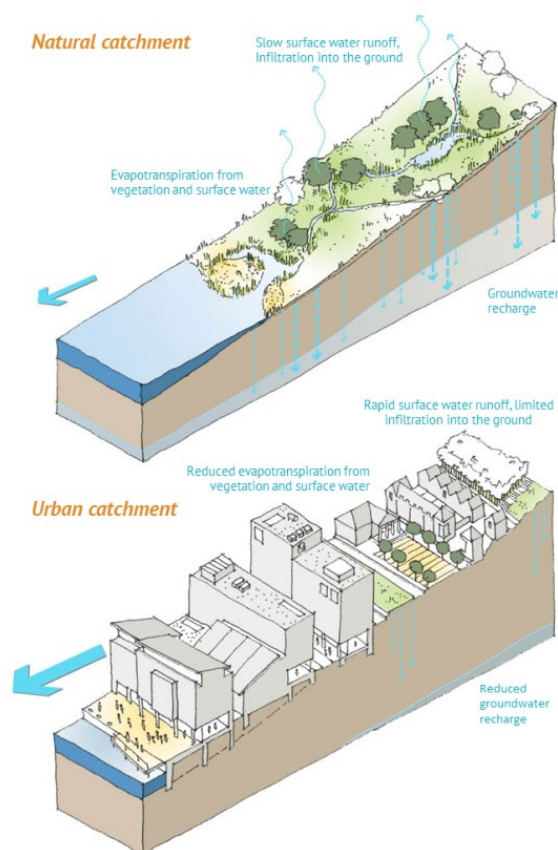


Figure 2.5: Comparison of stormwater runoff volumes from a natural catchment and an urbanised catchment

## 2.1.5 Local waterways and waterbodies

The urban water cycle for the Maryborough Area affects a number of waterways and waterbodies. As mentioned above, Four Mile Creek (the Main Drain) which runs south to north through Maryborough is directly impacted by stormwater from the urban area of Maryborough. The Creek is highly modified throughout the urban area, and due to its stone lining and the impact of stormwater flows, it does not have any significant ecological value. Further to the north, Four Mile Creek is unlined and in an agricultural land setting, however, the persistent stormwater flows from Maryborough are likely to have radically changed its flow regime and water quality. Four Mile Creek flows into



Bet Creek, which has been identified as a priority waterway by North Central Catchment Management Authority because of the values it provides.

To the east, the settlement of Carisbrook drains to Tullaroop Creek, which is also classified as a priority waterway. Tullaroop Creek has amenity and ecological value, and is well-loved by local residents. The urban water cycle for the Maryborough area also influences Tullaroop Creek upstream of Carisbrook, where potable water supply is sourced from Tullaroop Reservoir.

There are also significant urban water bodies in the area that offer amenity, ecological and amenity value to local community. The most significant of these are Lake Victoria in the centre of Maryborough and Goldfields Reservoir to the south of Maryborough. Both of these are well utilised by the community for walking and recreation. As mentioned above, Lake Victoria is now supplemented by urban stormwater to maintain lake levels, but it suffers from water quality issues. Goldfields Reservoir is a large water body which was historically a water supply dam. It is fed by a natural catchment, but it often suffers from low levels which restrict recreation activities including water sports.

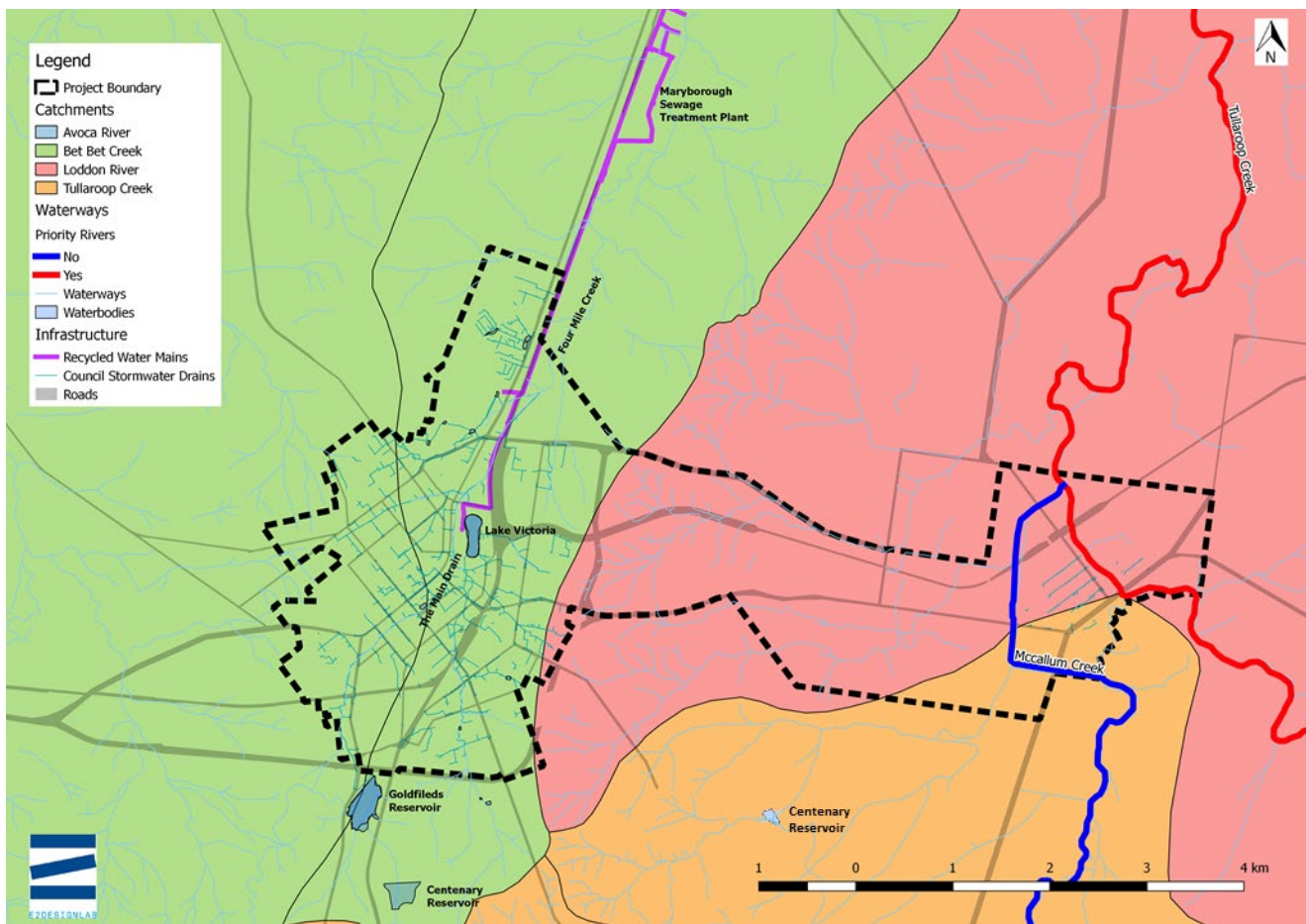


Figure 2.6: Catchments, key waterways and waterbodies





Figure 2.7: Images of local waterways and water bodies (Clockwise: Main drain, Tullaroop Creek, Goldfields Reservoir, Lake Victoria,)

### 2.1.6 Liveability and community well-being

Maryborough has a strong and passionate community, but the town also faces some socio-economic challenges. Identified statistically as the most disadvantaged community in Victoria in terms of average income, there is a focus on economic development and community support in the future. The Committee for Maryborough was established in 2018 with a vision “to lead Maryborough to be a centre of excellence for rural, economic and social transformation and renewal.” Initiatives such as Go Goldfields have also been created to deliver community driven approaches to improve social, education and health outcomes for children, youth and families. Maryborough also has an older community with a median age of 50 (compared with 37 in Victoria), and has lower than average levels of physical activity.

Water can support and enable the liveability and well-being of communities in a number of ways. The most tangible benefits that water could deliver for Maryborough have been identified as:

- supporting physical and mental health by enhancing community assets for recreation such as sports fields, lakes and green space;
- supporting wellbeing by stimulating local economies and industries;
- supporting physical activity, climate resilience and enhanced amenity through urban greening and support of street trees; and
- supporting high quality and affordable housing with effective water infrastructure.

The enhancement of green space and urban trees is a key opportunity for Maryborough as only a select number of green areas are irrigated, and council is planning a program of street tree planting to enhance the entrances to the town and the central commercial area.



Figure 2.8: Image of Princes Park oval in central Maryborough



## 2.2 Objectives for Integrated Water Management in Maryborough

Through the context review and feedback from a workshop with stakeholders and community representatives, the key objectives for IWM in Maryborough have been identified (see Figure 2.9) and fall into three themes:

1. A resilient water cycle
2. Healthy landscapes and environment
3. A prosperous community and economy

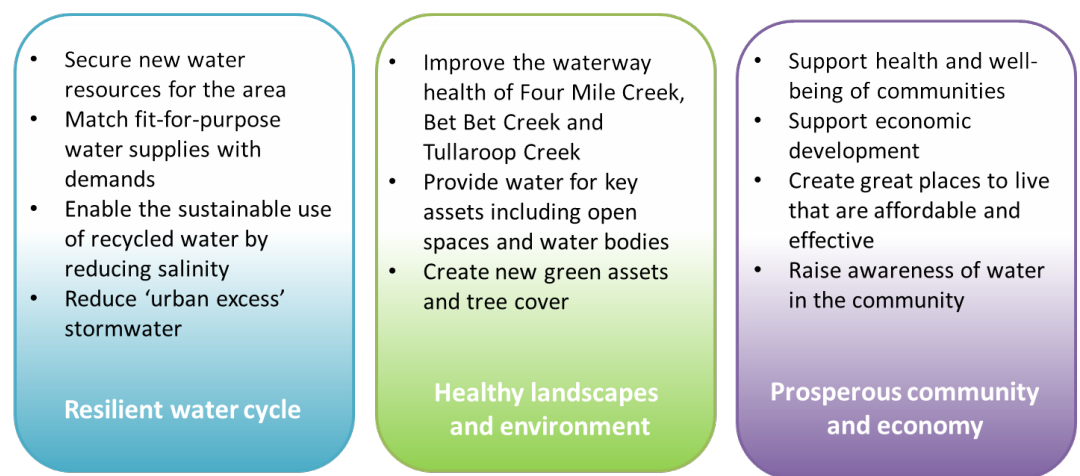


Figure 2.9: Key drivers for IWM in the Maryborough area in three themes

The drivers and the three themes identified for Maryborough map well to the seven priority IWM objectives identified by the Central Highlands Region by its IWM Forum (See Figure 2.10).

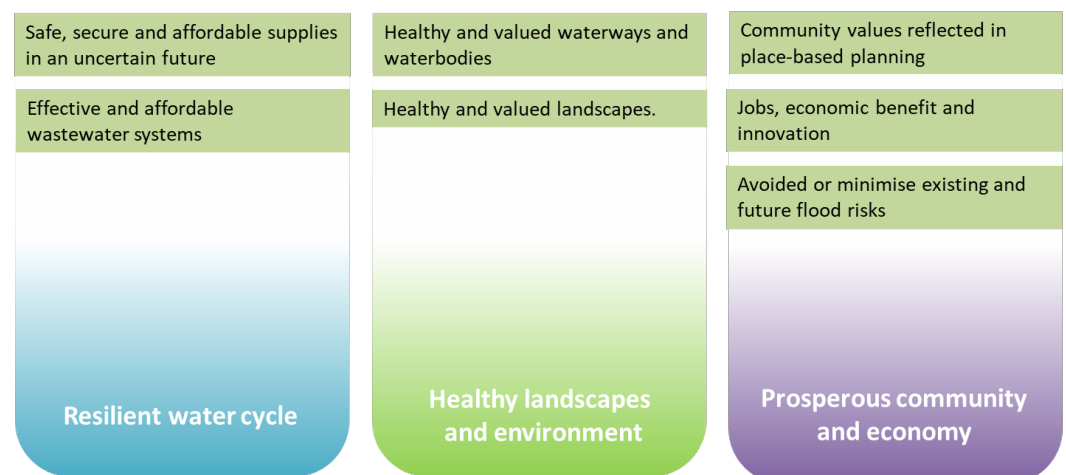


Figure 2.10: Central Highlands IWM Forum objectives in three themes

## 2.3 A vision for the future of IWM in Maryborough

This plan is underpinned by a long history of community and stakeholder input. A vision was originally formed for IWM in the region through the Ballarat and Region Ballarat and Region's Water Future (BRWF) (State Government of Victoria, 2014): "A greener, more liveable and prosperous water future for the city and towns of the Ballarat region".

Through examination of the local drivers and engagement with stakeholders, a vision has been developed for this IWM Plan:

Water supports a resilient Maryborough with a thriving community, a prosperous economy, and a healthy environment.

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## 3. Exploring Opportunities: Preliminary Option Assessment and Shortlisting

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### 3.1 Maryborough's water balance

An important first step is the development of a water balance for the Maryborough area as a whole. This describes the water demands, regional potable water supplies and the stormwater and wastewater generated by the area. Stormwater runoff from the area has been modelled using MUSIC v.6 and based on a 10 year rainfall sequence, and an estimation of imperviousness across the study area. The key MUSIC parameters used are show in Table 3.1. Water demands and wastewater generation is based on scaled figures for the Maryborough network presented in the Central Highlands Water Urban Water Strategy (2017).

Table 3.1: Rainfall parameters used in catchment runoff modelling using MUSIC v.6

<b>Mean Annual Rainfall</b>	476mm
<b>Rainfall Station<sup>2</sup></b>	81038 Natte Yallock
<b>Period</b>	1988-1997
<b>Interval</b>	6mins

The following figure presents this water balance for current conditions. Currently, the areas utilise around 980ML/year of potable water sourced from surface water and groundwater systems in the region. The total volume of treated wastewater from the areas is reclaimed as recycled water for irrigation of the golf club, Princes Park and other nearby agricultural areas. Aside from a top up to Lake Victoria, stormwater from the area is unharnessed as a supply, and it runs off into local waterways, carrying pollutants with it. The volume of stormwater running off the urban areas compared with pre-development conditions is approximately 800ML/year. This is referred to as the 'urban excess'.

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<sup>2</sup> The 6 minute rainfall gauge at Natte Yallock was selected as an appropriate reference station to model rainfall in Maryborough due to the quality and quantity of data available. See Attachment 3 for details.

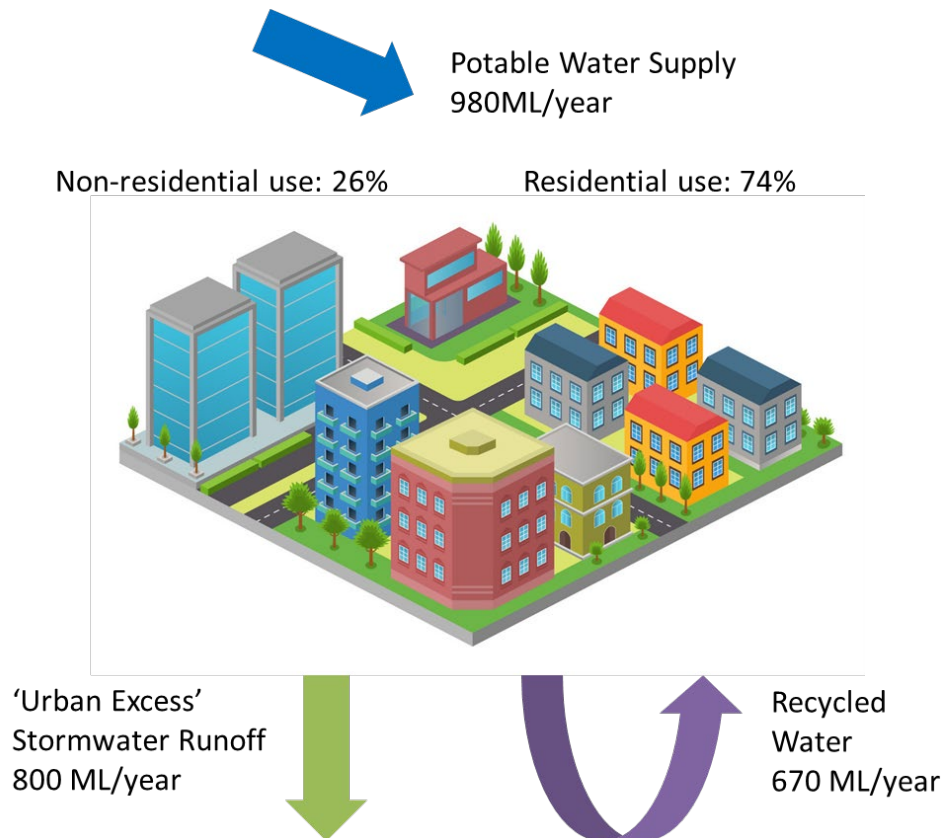


Figure 3.1: Urban water balance for the Maryborough area showing existing potable water demands, excess stormwater runoff and recycled water

Expected population growth in the Maryborough area will increase water demands. As shown by Figure 3.2, the additional demand expected by the end of the plan period (50 years) is 300ML/year. It should be noted that the total water demand for Maryborough and Carisbrook shown in Figure 3.2 is less than that shown in Figure 2.3 which shows the total demand for the Maryborough area serviced by Central Highlands Water which includes surrounding areas such as Talbot.

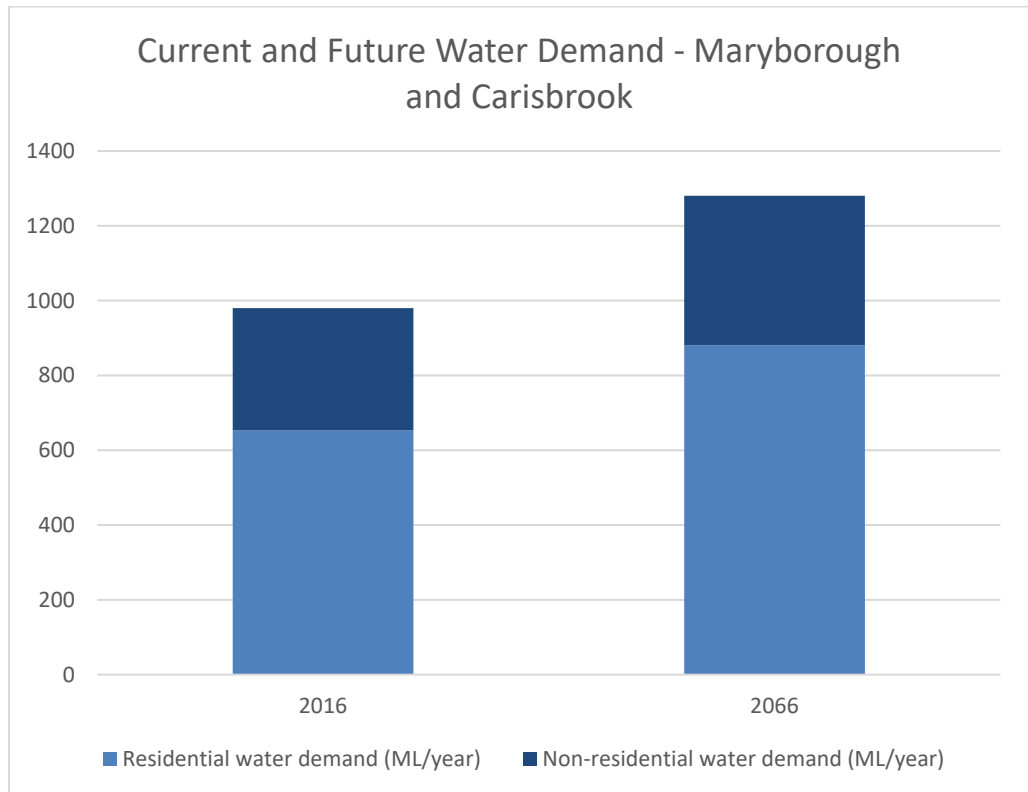


Figure 3.2: Expected increases in water demand in the Maryborough area over the plan period

As discussed in section 2.1.2, the potable water supply-demand analysis for the region has shown that additional water supply resources will be required for the Maryborough area to maintain target levels of service in the next 5-20 years. The supply-demand balance is not only affected by increasing demand, but by decreasing supply due to the predicted impacts of climate change.

In terms of local resources, stormwater is a major water resource that is currently underutilised in the area. Also, importantly, while recycled water is currently 100% utilised locally, an already high salinity profile is likely to be exacerbated by waste streams entering the wastewater system from the recently commissioned Salt Reduction Plant.

### 3.1.1 Spatial profile of major water users

Within the urban area, it is also useful to understand the location and spread of major water users. Figure 3.3 shows the major potable water users in the Maryborough area, shown as either irrigation demands (open space and recreational areas) or other demands (industry, processing, agricultural use, major service buildings). In some cases, these major users of potable water could use an alternative water source as the quality of water required isn't as high as potable standard. Green space and

sportsground irrigation are well matched to the use of alternative sources. Other users have been assessed on a case by case basis through the preliminary assessment to determine if they are likely to have a non-potable water demand which could be met by rainwater, stormwater or recycled water supply.



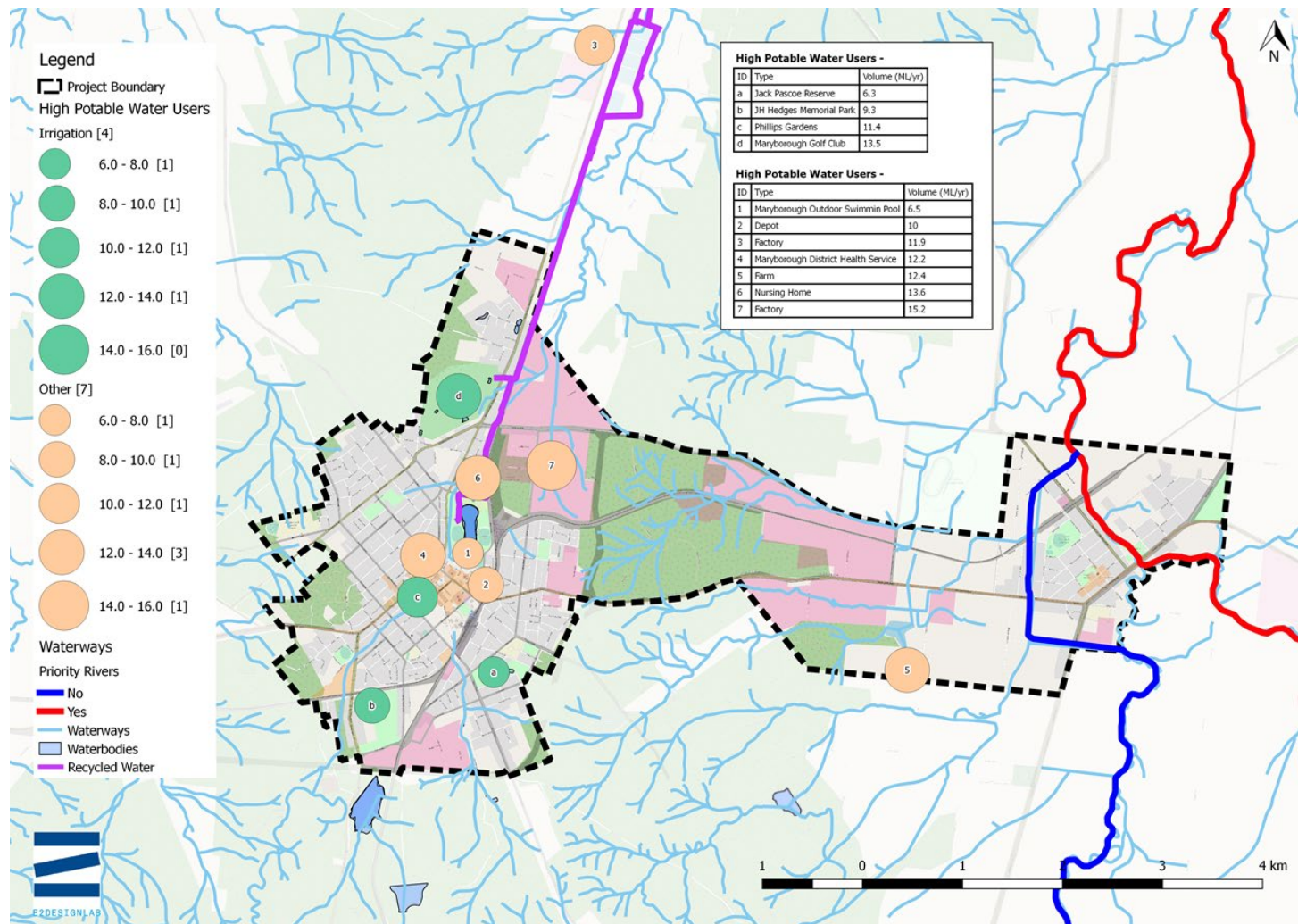


Figure 3.3: Location and scale of major irrigation and non-residential demands utilising potable water

## 3.2 Base case assumptions

In assessing IWM options, it is important to compare them to an expected 'business as usual' scenario, called a base case. This allows us to understand changes in costs and benefits compared with the status quo. A base case is different from current infrastructure, as the context will change over time. The base case is instead a best prediction of the strategies and infrastructure that will be delivered to meet future challenges.

Table 3.1: Base case assumptions

No.	New Development								
1	There are currently no specific requirements for water management in new development areas in the Maryborough area. It is assumed this will remain the same in the base case.								
2	<p>All major developments will trigger Clause 56.07-4 of the Victoria Planning Provisions. Clause 56:07 references the Best Practice Environmental Guidelines for Urban Stormwater. The best practice environmental management objectives for stormwater quality (post-construction) are shown below.</p> <table border="1"> <tr> <td>Suspended solids (TSS):</td><td>80 per cent retention of the typical urban annual load</td></tr> <tr> <td>Total phosphorus (TP):</td><td>45 per cent retention of the typical urban annual load</td></tr> <tr> <td>Total nitrogen (TN):</td><td>45 per cent retention of the typical urban annual load</td></tr> <tr> <td>Litter:</td><td>70 per cent reduction of typical urban annual load</td></tr> </table> <p>For the purposes of this study, it is assumed that all new greenfield developments in greenfield areas achieve this target through the use of precinct scale end-of-catchment wetlands (in the base of retarding basins).</p>	Suspended solids (TSS):	80 per cent retention of the typical urban annual load	Total phosphorus (TP):	45 per cent retention of the typical urban annual load	Total nitrogen (TN):	45 per cent retention of the typical urban annual load	Litter:	70 per cent reduction of typical urban annual load
Suspended solids (TSS):	80 per cent retention of the typical urban annual load								
Total phosphorus (TP):	45 per cent retention of the typical urban annual load								
Total nitrogen (TN):	45 per cent retention of the typical urban annual load								
Litter:	70 per cent reduction of typical urban annual load								
3	All major developments in greenfield areas construct retarding basins to retard flows from the 1 in 1.5 year ARI flow (BPEMG requirement) to the 1 in 100 year ARI flow event back to pre-developed conditions. New developments in infill areas (residential and non-residential) must provide on-site detention (via on-site detention tanks or enlarged pipes)								
4	No recycled water is used as an alternative water supply across the new growth areas.								
	<b>Water Supply and demand</b>								
5	Community and business education around water use will continue to ensure water demands do not increase.								

6	To meet level of service targets, it is assumed that a supplementary water supply resource will need to be linked to the Maryborough supply system in 2025, when the expected supply equals demand in a median climate change scenario. The base case assumed this supplementary water supply will come from the Goldfields Superpipe via a piped transfer. Central Highlands Water have estimated the cost of the connection and transfer.
7	The Salt Reduction Plant will be utilised when salinity in the water supply exceeds acceptable levels. Waste brine will be discharged to the wastewater system.
8	It is assumed that no major upgrades are required to treated water supply infrastructure, other than extensions to new areas.
<b>Wastewater and recycled water</b>	
9	The Maryborough Wastewater Treatment Plant process will be improved to prevent frequent algal blooms occurring, and thereby enabling the use of recycled water for irrigation.
10	The waste brine from the Salt Reduction Plant will elevate salinity levels in recycled water and will require shandying (diluting) with potable water to ensure sustainable irrigation use. A shandy ratio of 2:1 (potable water: recycled water) is assumed to be required.
<b>Stormwater</b>	
11	The main drain diversion to Lake Victoria will remain in place.
12	No WSUD assets will be built in existing areas (other than those required through new development planning policies).
<b>Urban greening and amenity</b>	
13	Tree planting will be undertaken by Council in Maryborough central commercial area and at the entrances to the town.
14	New development areas will include verges and street trees (with no irrigation).
15	Green spaces that are currently irrigated with potable or recycled water will remain irrigated, with no additional irrigated areas expected.
16	Goldfields reservoir will not receive flows from Centenary Reservoir and will remain reliant on water flowing from its natural catchment.

### 3.3 Option Identification

A workshop was held with key stakeholders and community representatives to identify IWM options for the Maryborough area. Integrated Water Management naturally covers a wide variety of initiatives. Figure 3.3 summaries some of the key types of IWM projects that were discussed with workshop participants.



Figure 3.4 Possible types of IWM projects and initiatives

The ideas and possible projects that emerged from the stakeholder workshop were diverse and met with enthusiasm. These ranged from enhancements to local waterways to large scale alternative water resources for the area.





Figure 3.5 Workshop posts showing locations of projects prioritised by stakeholders

To explore all possibilities, water sources across the following categories were considered: regional potable supply (PO), rainwater (RW), stormwater (SW), wastewater (WW), groundwater (GW), and creeks (CREEK). The results of this process are documented in Attachment 2 as a long list. A long list of 100 opportunities was identified for the Maryborough area.

### 3.4 Option shortlisting

The Preliminary Assessment Method for IWM options (DELWP, 2015) was utilised to assess and shortlist the longlist of IWM options. The key steps in the PAM are an assessment of the likely scale of benefits of each project, based on the water balance and a rapid modelled assessment of performance, a high-level assessment of key cost and deliverability factors. Key performance factors were selected for the analysis relating to the three primary objective themes as show in Figure 3.5.

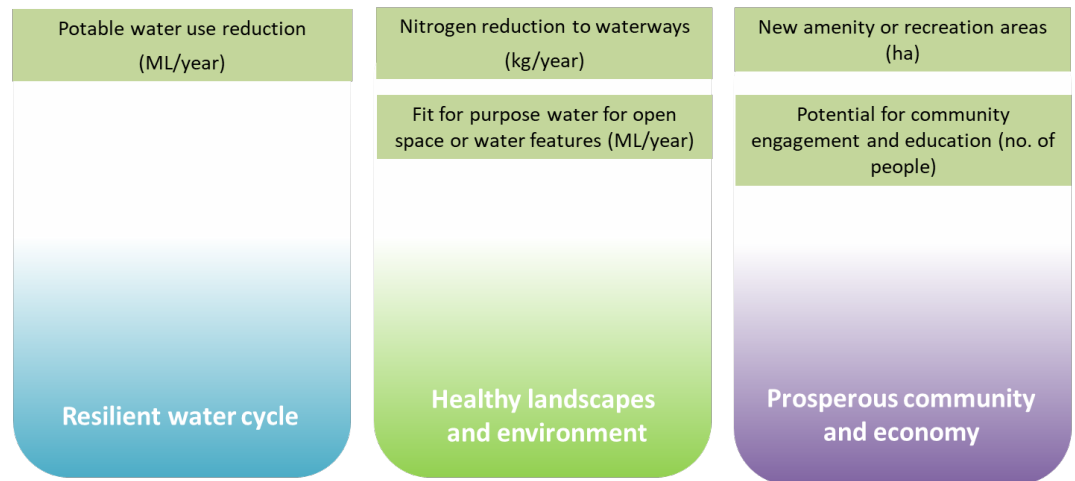


Figure 3.6: Key performance indicators from the three objective themes used in the preliminary analysis of the long list of options

The preliminary assessment is presented in Attachment 2. If a project clearly had a superior alternative which meets the same objectives in all circumstances it was considered a low-performance option. Projects which scored highly in one or more indicator were highlighted for potential selection, and those which had the greatest overall performance, or which performed very well in two or more areas were selected for further consideration.

*Key insights emerging from the preliminary assessment of IWM projects for the Maryborough area*

- The scale of new development is unlikely to support delivery of alternative water supply networks for non-potable water supply to buildings. Rainwater tanks could be delivered in new development areas as a policy option to deliver a local alternative water supply.
- There are currently limited irrigated open spaces in the Maryborough and Carisbrook area, and those that are irrigated are either already serviced by recycled water or are spatially wide spread, making it difficult to make alternative water supply networks cost-effective.
- There are a number of discreet stormwater harvesting schemes which may be feasible, whereby a stormwater could be harvested and treated to supply 1-2 ovals. Of those identified, Station Domain was selected as having the most potential to add community value by securing an alternative water supply for irrigation.
- The most promising options for recycled water management emerged as the creation of a shandy with recycled water to improve salinity. The desalination of recycled water was cost-prohibitive and brine disposal would be a challenge. Raw water and stormwater were highlighted as potential shandy sources.



- The scale and nature of the operations of the major non-residential water users in the area, such as local industry, food processing operations and community centres meant that non-potable water demand was likely to be a relatively small volume. The most suitable alternative water supply for these users is rainwater from an onsite collection system and tank. It was found that most major users already had rainwater tanks on site.
- Options in the settlement of Carisbrook were limited due to the low density nature of the developed area and limited water demands. The re-invigoration of the Tullaroop Creek public waterway reserve and the Carisbrook Reservoir were identified as a project that may provide recreation and amenity value.
- The key water bodies in Maryborough with community value, Lake Victoria and Goldfields Reservoir, had different water issues. Stormwater treatment could improve water quality in Lake Victoria, and this could also provide an opportunity to source water for nearby irrigation. Water supply is the main issue for Goldfields Reservoir, where raw water and stormwater were identified as possible contributors. Recycled water was not considered to be a feasible option for contribution to lakes due to salinity and water quality issues.
- Carisbrook Reservoir was identified for potential either as a flood storage or for amenity value. Investigation of the reservoir confirmed that a dam safety incident occurred in 1999, and as a result of piping failure, breaching of the dam and breaching of the race line, the dam is now considered to be decommissioned and redundant. Rehabilitation of the dam has been found not to be economically viable and it has been shown not to provide flood retardation value.
- Options that used stormwater to enhance urban greening performed well against the IWM objectives for the area.
- A north-south transfer spine was identified as being a potential option to connect key demands, storages and water sources, with;
  - major demands in the north (golf course, Princes Park) and south (Goldfields Reservoir and some ovals),
  - key sources in the north, including the bottom of the urban catchment and end of the main drain where stormwater could be harvested and the existing recycled water network, and key sources in the north with the raw water holdings at Centenary Reservoir
  - a chain of storages also run north to south: Goldfields reservoir, Phillips Gardens and Lake Victoria, and the golf course water storages.
- Flood management projects have been identified and taken forward for Carisbrook and will shortly be identified for Maryborough through the development of flood management strategies for each town. Accordingly, projects focused on flood management have not been specifically assessed by this plan.

### 3.5 Shortlisted options

Using the PAM assessment, nine options were shortlisted for further analysis, which are summarised in the table below.

Table 3.2: Shortlisted options for analysis

No.	Scale	Description
1	Lot	<b>Rainwater tanks supplying rainwater for non-potable use in new homes</b> – Introduction of a local policy requirement
2	Street	<b>Stormwater-fed street trees in new development</b> - Amendment of council landscape requirements for developers to require passive irrigation of street trees for increased canopy and tree health
3	Street	<b>Stormwater-fed street trees in central commercial area of Maryborough</b> - Creation of new tree pit designs to provide passive irrigation for greening of the CBD
4	Local	<b>Wetland treatment integrated into Lake Victoria</b> - Part conversion of Lake for stormwater treatment, improving water quality and amenity.
5	Local	<b>Stormwater harvesting from local drain for Station Domain and Council Depot</b> - Harvesting of stormwater from the drain beneath station domain, and natural treatment feature within the domain for amenity. Storage also can be used as a non-potable water pick up point for street tree watering and other council activities.
6	Town	<b>Stormwater harvesting from Lake Victoria for Phillips Gardens, Station Domain and Council Depot</b> - Harvesting of stormwater via wetland in Lake Victoria to provide irrigation water for Station Domain and Phillips Gardens. Also provides council depot demands for tree irrigation and other council activities.
7	Local	<b>Stormwater harvesting from a new Northern wetland to shandy recycled water supply</b> - Harvesting of stormwater from via new wetland in north of Maryborough to shandy recycled water to supply princes park and golf course.
8	Town	<b>Stormwater harvesting from a new Northern wetland to supplement potable supply</b> - Harvesting of stormwater on large scale from new northern wetland, and pumping to Goldfields via pipe along Main Drain corridor. Transfer to raw water storage in Centenary Reservoir.
9	Region	<b>Raw water transfer to shandy recycled water supply</b> - Release of raw water from Centenary Reservoir to a piped connection along the main drain to connect to the existing recycled water network to shandy recycled water for Princes Park and Golf Club. Assuming recycled water transfers can be run in reverse.

A selection of other options were also highlighted for their merit, which can be further considered through ongoing processes:

- **Revitalisation of the main drain corridor:** The main drain (or four mile creek) is a stone sealed drainage corridor through the centre of Maryborough. Many parts of the drain have been daylighted (open-air) and the stone lining provides some amenity and historical value. As its historical status means it is unlikely that it can be naturalised and enhanced for ecological value, there was found to be limited potential for the main drain to be improved to delivery integrated water management outcomes. The main potential exists in the corridor on the edges of the drain where additional greening and walking and cycling access could be created. Further consideration should be given to improving the corridor as a green link and active transport corridor. This is best achieved by Central Goldfields Shire Council as a city planning exercise.
- **Waterway management strategy for Tullaroop Creek:** The settlement of Carisbrook adjoins Tullaroop Creek, and there are opportunities to enhance the recreational and amenity value of the foreshore while also improving the flow and water quality of the creek itself. A waterway management strategy is recommended that takes a whole-of-catchment approach and considers the surrounding rural area, flood risk and the Tullaroop reservoir upstream to determine appropriate improvements. This strategy has been identified as a priority by the Central Highlands IWM Forum.

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## 4. Evaluating Opportunities: Option Analysis and Evaluation

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### 4.1 Methodology and Assumptions

Each of the shortlisted options was taken forward to conceptual design to better understand the costs and benefits which could be delivered by each option. The built components and infrastructure required for each option were estimated and sized accordingly. For those options that include rainwater and stormwater management, models were created using MUSIC v.6 to predict runoff, reuse and treatment performance. Cost rates were based on industry standards available from Central Highlands Water (pipework and storage) and Melbourne Water (stormwater treatment).

A full lifecycle costing of the options was developed for each option, including capital, operating and renewal costs to produce a net present value for each proposal. Performance indicators were also quantified wherever possible. These results were then fed into two evaluation process:

1. **An economic evaluation:** A benefit-cost analysis, where benefits have been monetised and compared with cost as possible.
2. **A scored evaluation:** An evaluation against the IWM objectives for Maryborough where scores are allocated to each project based on performance against quantifiable criteria where possible, and qualitative judgement otherwise. The methodology and results of this analysis are included in Attachment 4.

## 4.2 Option 1: Rainwater tanks supplying rainwater for non-potable use in new homes

### Description

This option considers the application of a mandatory requirement for rainwater tanks for toilet flushing, garden irrigation and cold water laundry in new homes. Such a requirement could be applied through the planning system, with a policy requirement from Council or a water services requirement from Central Highlands Water. Maintenance would be undertaken by the householder.

Proportion of household water demands which would be connected to on-lot rainwater tank

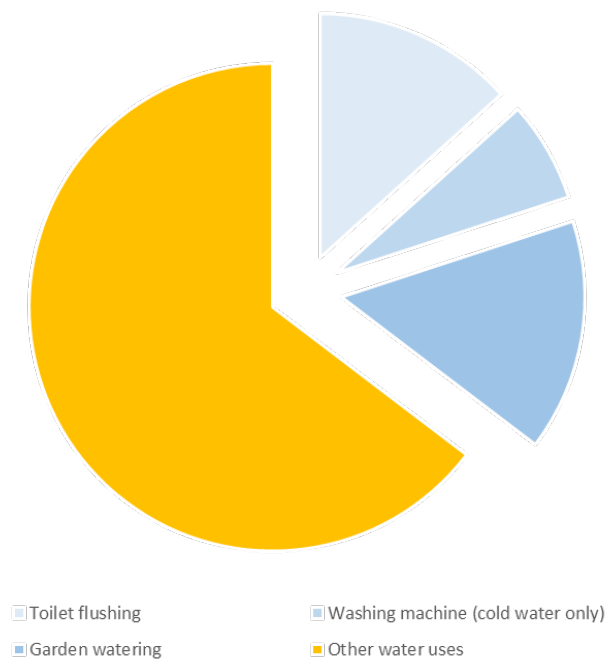


Figure 4.1: Proportion of household water demands which would be connected to an on-lot rainwater tank

The connected non-potable demands shown in Figure 4.1 make up 35% of a typical new home's water demand.

### Key analysis assumptions and infrastructure requirements

Rainwater tank effectiveness in providing these non-potable demands was modelled using MUSIC v.6. It was assumed that 80% of an average 220m<sup>2</sup> roof could be connected to the tank. A 4.5kL tank was needed for each home to provide 70% reliability of supply (i.e. 70% of the annual non-potable demand would be met, with the remainder met by potable supply).

Cost summary		
Item	Capital Cost (\$/house)	Operating Cost (\$/house/yr)
Tank and pump	\$2,100	\$104
Installation and plumbing	\$1,700	-
Total	\$3,800	\$104
Key Benefits		
A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Mains potable water supply substitution:</b> Rainwater tanks could provide 55ML/year of fit-for-purpose water for non-potable water in new homes by the end of the plan period.</li><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 55ML/year by the end of the plan period as it is taken up by the tree, or lost to infiltration.</li></ul>	<ul style="list-style-type: none"><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 137kg/year of nitrogen by the end of the plan period.</li></ul>	<ul style="list-style-type: none"><li>• <b>Dual-purpose investment:</b> Rainwater tanks will also satisfy the Building Regulation six star sustainability requirements for new homes (where either a solar hot water or rainwater tanks are required).</li><li>• <b>Education:</b> The inclusion of community managed rainwater tanks heightens awareness around water use and places communities at the heart of water management.</li></ul>
Evaluation		
Economic Evaluation		Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$2,537,710		19
Benefit Cost Ratio: 0.19		



### 4.3 Option 2: Stormwater-fed street trees in new development areas

#### Description

Typically, new developments in Maryborough are relatively low density and include a landscaped verge (grass or pebbled) with street trees included. Research has shown that access to water is important for the growth and health of street trees. Provision of water will be important to their establishment and to the greening and amenity of new developments, in turn enhancing health and well-being of communities. Given the typical verge width there is an opportunity to include a fairly simple mechanism for allowing stormwater that runs off the road surface to be directed into a sunken tree planting area in the verge via a gap in the kerb. This type of solution is low-cost, and it has the dual benefit of providing irrigation water to the tree, while also capturing and treating stormwater runoff.



Figure 4.2: Examples of verge conditions in the new development area Whirrakee Rise (top row) and examples of dropped kerb verges to facilitate passive irrigation (proposal in Ballarat and built example in Melbourne) (bottom row).

## Key analysis assumptions and infrastructure requirements

The proposed design for the stormwater-fed trees is shown in the drawing below. The key component parts include a sunken grassed area and a dropped kerb inlet. The gradual slope of the sunken area will allow maintenance and mowing. As standard, a back of kerb perforated drainage pipe is usually included in new roads, and this inclusion will be important for the system to prevent waterlogging. It is assumed that one tree would be included outside each new home. Based on canopy growth data, a canopy diameter increase of 2.5m<sup>2</sup> to 5m<sup>2</sup> is expected due to the addition of passive irrigation. Based on one tree per home, 100 trees are estimated per km of road.

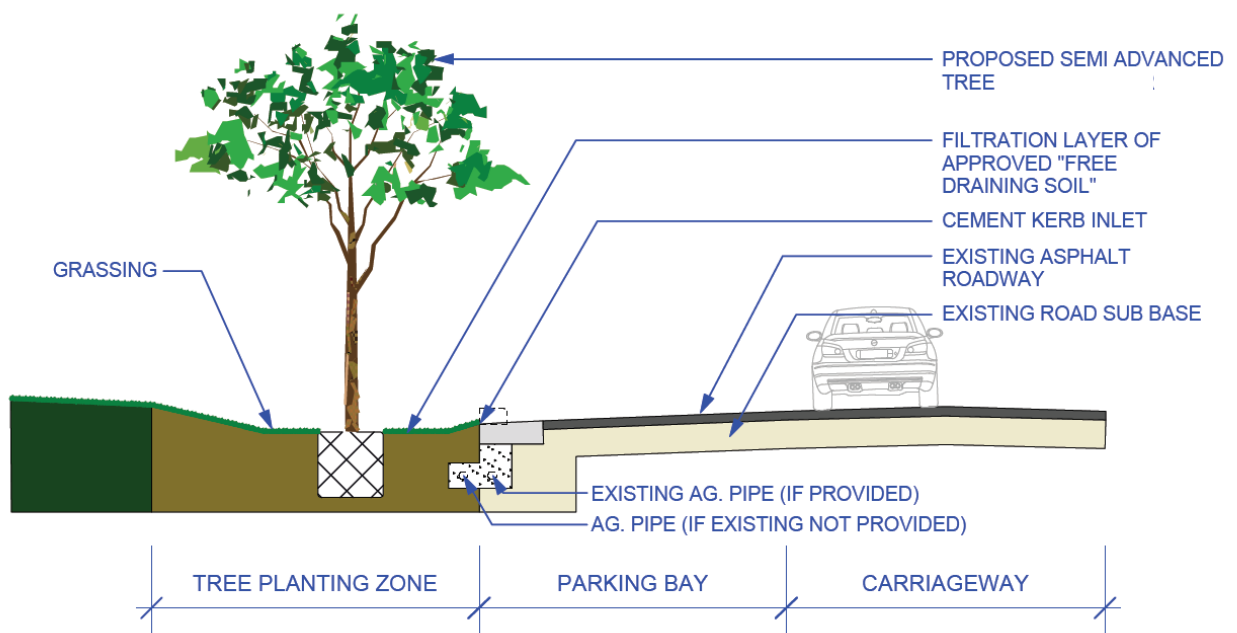


Figure 4.3: Example cross-section (not to scale) based on 'Greening Ballarat: Blue Green Infrastructure Action Plan (City of Ballarat, 2016)

## Cost summary

Item	Capital Cost (\$/km)	Operating Cost (\$/km/yr)
Creation of sunken area with kerb inlet	\$ 98,000	\$ 470

Key Benefits		
A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 9ML/year by the end of the plan period as it is taken up by the tree, or lost to infiltration.</li></ul>	<ul style="list-style-type: none"><li>• <b>Street tree health:</b> Passive irrigation will support street tree health and enhance canopy diameter from 2.5m to 5m in each tree. Adding a total additional canopy area of nearly 21,000m<sup>2</sup> over the plan period.</li><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 106kg/year of nitrogen by the end of the plan period.</li></ul>	<ul style="list-style-type: none"><li>• <b>Increased amenity and property prices:</b> The predicted increase in tree canopy cover in streets could induce a 1.8% increase in property prices.</li><li>• <b>Improved health and wellbeing:</b> Trees provide shade to encourage walking, and also provide a connection to nature to improve mental health.</li></ul>
Evaluation		
Economic Evaluation		Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$586,132		31
Benefit Cost Ratio: 2.71		



## 4.4 Option 3: Stormwater-fed street trees in central commercial area of Maryborough

### Description

In the existing commercial centre of Maryborough there are currently very few street trees. Street trees are important for providing shade, amenity and ecological value in an urban area. Central Goldfields Shire Council have begun a program of tree planting in the commercial area and in key entrances to the town. This option proposes to include passive irrigation of street trees by modifying the standard design for tree pits. Based on yet to be completed tree planting in the CBD, it is assumed that 134 trees would be planted over a 1.14km street length.



Figure 4.4: Aerial view of the centre of Maryborough showing low canopy cover in the central commercial area

### Key analysis assumptions and infrastructure requirements

To capture stormwater for street trees in a built up area where there is no grassed verge (as per option 2), the following elements are needed:

A grated inlet from in the kerb which will allow stormwater flowing along the kerb into the tree while excluding litter;

A sunken soil area for the tree, to allow water to flow in from the street level. This can be covered at footpath level by a decorative grate (with a central hole for the tree trunk);

Airspace between the soil surface and the inlet to provide 'extended detention' of stormwater, which allows a greater volume of water to be stored and gradually soak in, assisting with irrigation and stormwater treatment;

Back of kerb drainage linked to the stormwater system to prevent waterlogging. Depending on road design this may already exist, otherwise it can be introduced along the street when retrofitting a line of tree pits;

An optional component that will further enhance the health of the tree is the inclusion of an extended soil growing area, using structural soil grates or structural soil mix to extend growing media under the footpath (this has not been costed in this analysis).

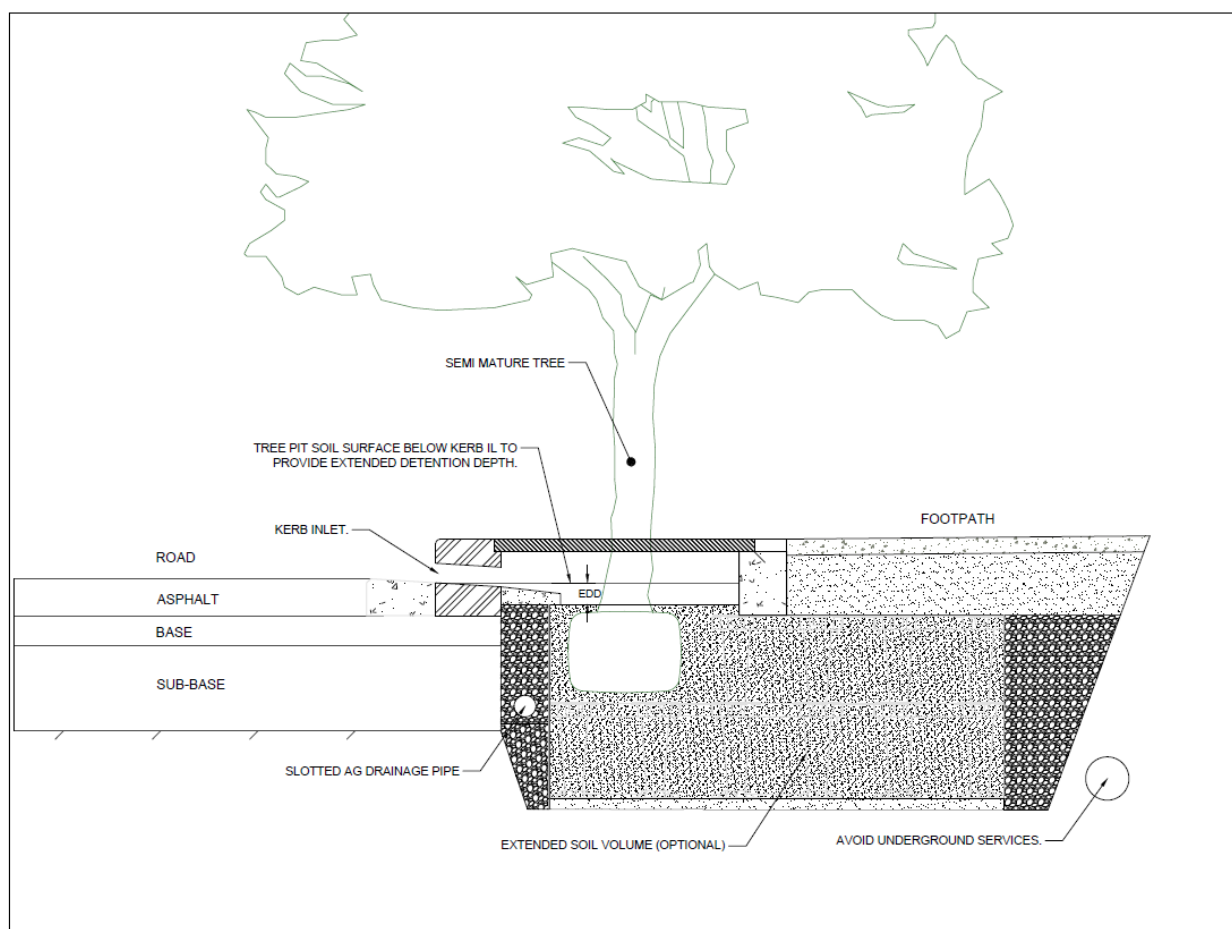


Figure 4.5: Example cross-section of a passively irrigated tree pit appropriate for integration into a commercial area (not to scale)

Cost summary		
Item	Capital Cost (\$/km)	Operating Cost (\$/km/yr)
Excavation, labour, filter media	\$ 35,782	\$500
Drainage connection	\$ 117,647	-
Grate structure	\$ 58,824	-
Total cost	\$ 212,252	\$500
Key Benefits		
A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 0.4ML/year by the end of the plan period as it is taken up by the tree, or lost to infiltration.</li></ul>	<ul style="list-style-type: none"><li>• <b>Street tree health:</b> Passive irrigation will support street tree health and enhance canopy diameter from 1.5m to 3m in each tree. Adding a total additional canopy area of nearly 708m<sup>2</sup> over the plan period.</li><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 6kg/year of nitrogen by the end of the plan period.</li></ul>	<ul style="list-style-type: none"><li>• <b>Increased amenity and property prices:</b> The predicted increase in tree canopy cover in streets could induce a 1.8% increase in property prices. This value was sourced from a study that considered residential property but has been transferred for use for commercial areas in this context.</li><li>• <b>Improved health and wellbeing:</b> Trees provide shade to encourage walking, and also provide a connection to nature to improve mental health.</li></ul>
Evaluation		
Economic Evaluation		Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$212,208		30
Benefit Cost Ratio: 1.5		



## 4.5 Option 4: Wetland treatment integrated into Lake Victoria

### Description

Lake Victoria is a picturesque and highly valued lake in Maryborough. It includes a shared walking and cycling track around the lake. Features of the lake and its surrounds also include: three islands within the lake, fishing, birdwatching, sporting fields and the nearby Princes Park Playground. The lake is fed by stormwater from the Main Drain. During the Millennium Drought the lake was impacted by low water levels. In response a low flow diversion was constructed to increase the volume of water in the Lake.

The stormwater entering the lake is largely untreated. There are several gross pollutant traps installed, however, nutrients, sediment and other pollutants are not managed. Vegetation and habitat with the lake is very limited.

Option 4 explores the opportunity of converting ~50% of the surface area of the lake into a wetland in order to address water quality issues in the lake. Wetlands are heavily vegetated water bodies. These systems can either be natural features in the landscape or can be constructed to treat stormwater. They can appear as natural systems or integrated as hard edged features in urban areas. Many constructed wetlands attract birds, frogs and mammals, and are valued by their local community for their amenity.

The wetland proposed for Lake Victoria would improve water quality, increase native vegetation cover and provided habitat for birds, frogs and mammals. The new wetland/lake complex could also include upgrades to improve amenity across this site such as boardwalks, interpretive signage and seating. The improvements to the lake would need to be planned as part of a wider masterplanning exercise for the Lake and Princes Park.



Figure 4.6: Lake Victoria (left) and wetland examples in Melbourne (right)

### Key analysis assumptions and infrastructure requirements

Approximately 50% of Lake Victoria is converted into a vegetated stormwater treatment asset (equivalent to 25,500m<sup>2</sup>). This requires:

- A 150 L/s diversion from the Main Drain (i.e. the assumed existing diversion from the Main Drain is the primary source of stormwater feeding the wetland, catchment = 480 ha (25% impervious catchment))
- 2,550 m<sup>2</sup> sediment pond
- 22,950m<sup>2</sup> wetland (100mm extended detention depth, 350mm permanent pool)
- A recirculation pump to transfer water from the lake through the wetland during periods of low rainfall/inflow.

The wetland/lake complex should be also designed and managed to reduce the risk of algal blooms during extended dry periods. The additional amenity enhancements proposed in Option 4 have not been designed and would require input from the council and community. As such, the cost of any landscape or other works not required to construct the wetland have been excluded from the analysis.

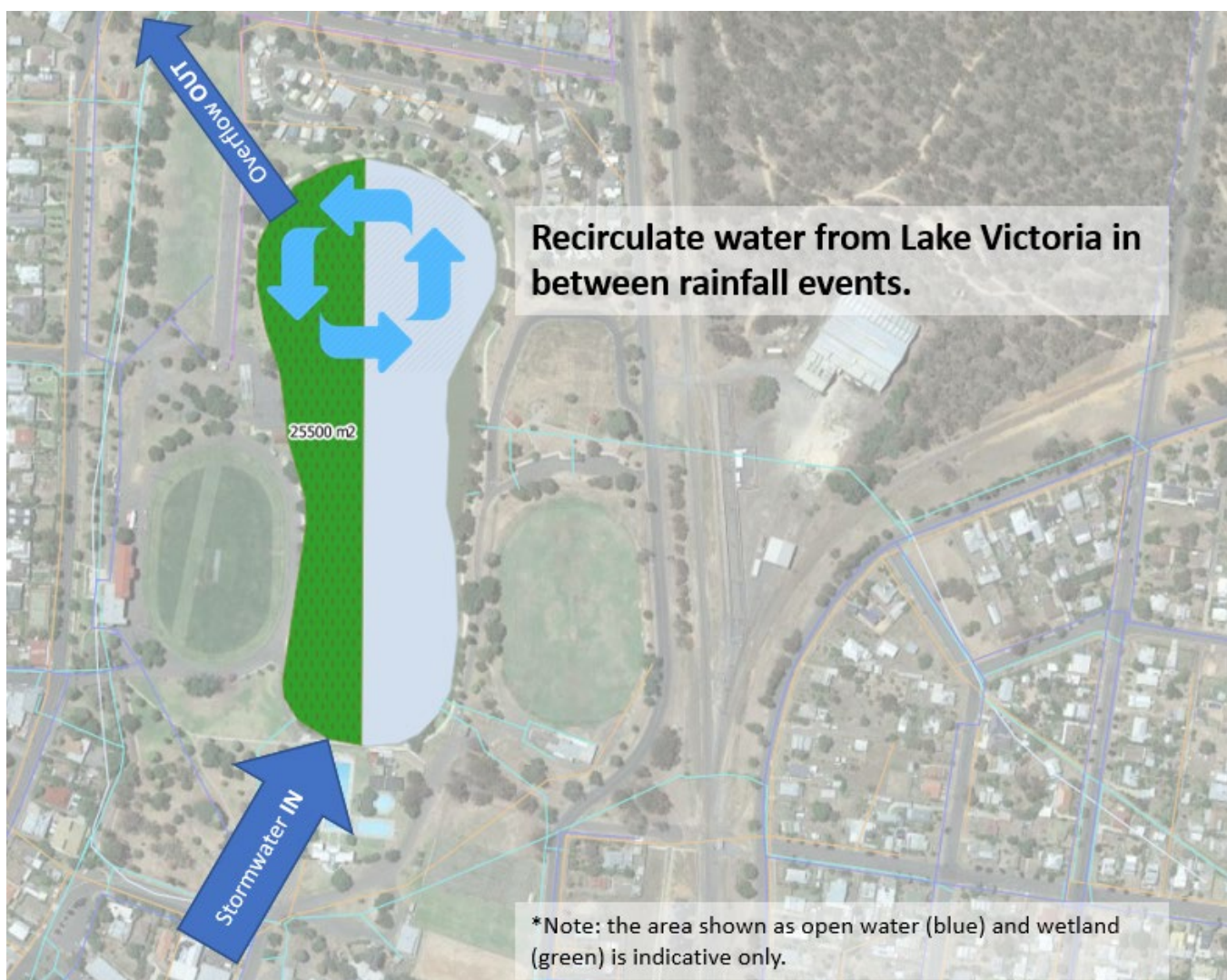


Figure 4.7: Proposed conversion of Lake Victoria

Cost summary			
Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$99,628	\$1,299
WSUD	Treatment	\$3,085,521	\$21,831
	Establishment	\$87,871	\$0
Total		\$3,273,020	\$23,131
Key Benefits			
A resilient water cycle		Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Reduced 'urban excess' stormwater flows:</b> Stormwater flowing from urban areas will reduce by 29ML/year.</li></ul>		<ul style="list-style-type: none"><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 333kg/year of nitrogen by the end of the plan period.</li></ul>	<ul style="list-style-type: none"><li>• <b>Amenity:</b> The community will benefit from a 5.1 ha area of well serviced and attractive lake and wetlands area.</li><li>• <b>Health and well-being:</b> The improvement to water quality and access to the lake will improve recreation opportunities for the community.</li><li>• <b>Education:</b> The introduction of a wetland to the lake and wider improvements is an opportunity for community co-design and engagement.</li></ul>
Evaluation			
Economic Evaluation		Scored Evaluation (Total score, range 13-60)	
Present Value of Costs: \$4,704,447		41	
Benefit Cost Ratio: 0.65			



## 4.6 Option 5: Stormwater harvesting from local drain for Station Domain & Council Depot

### Description

There is an opportunity to harvest stormwater for non-potable reuse at the Station Domain Precinct. This area is a key location in Maryborough that has no irrigation. Harvesting stormwater for irrigation would help to increase vegetation (through the introduction as a raingarden for treatment) and increased quality of the grassed area and cooling via irrigation. The storage tank would be constructed underground to maintain the green open space area.

The Council Depot is also a short distance from Station Domain and is a high potable water user (10ML/yr). There is also potential to supply the depot with treated stormwater to (a) reduce its current potable water use and (b) service new non-potable demands (e.g. tank watering for road works or irrigation).

The proposed stormwater treatment and harvesting system would also reduce the sediment, nutrients and other pollutants that flow downstream into Lake Victoria and Four Mile Creek. Stormwater can be harvested from a drain that runs directly beneath Station Domain, which drains a relatively large area.

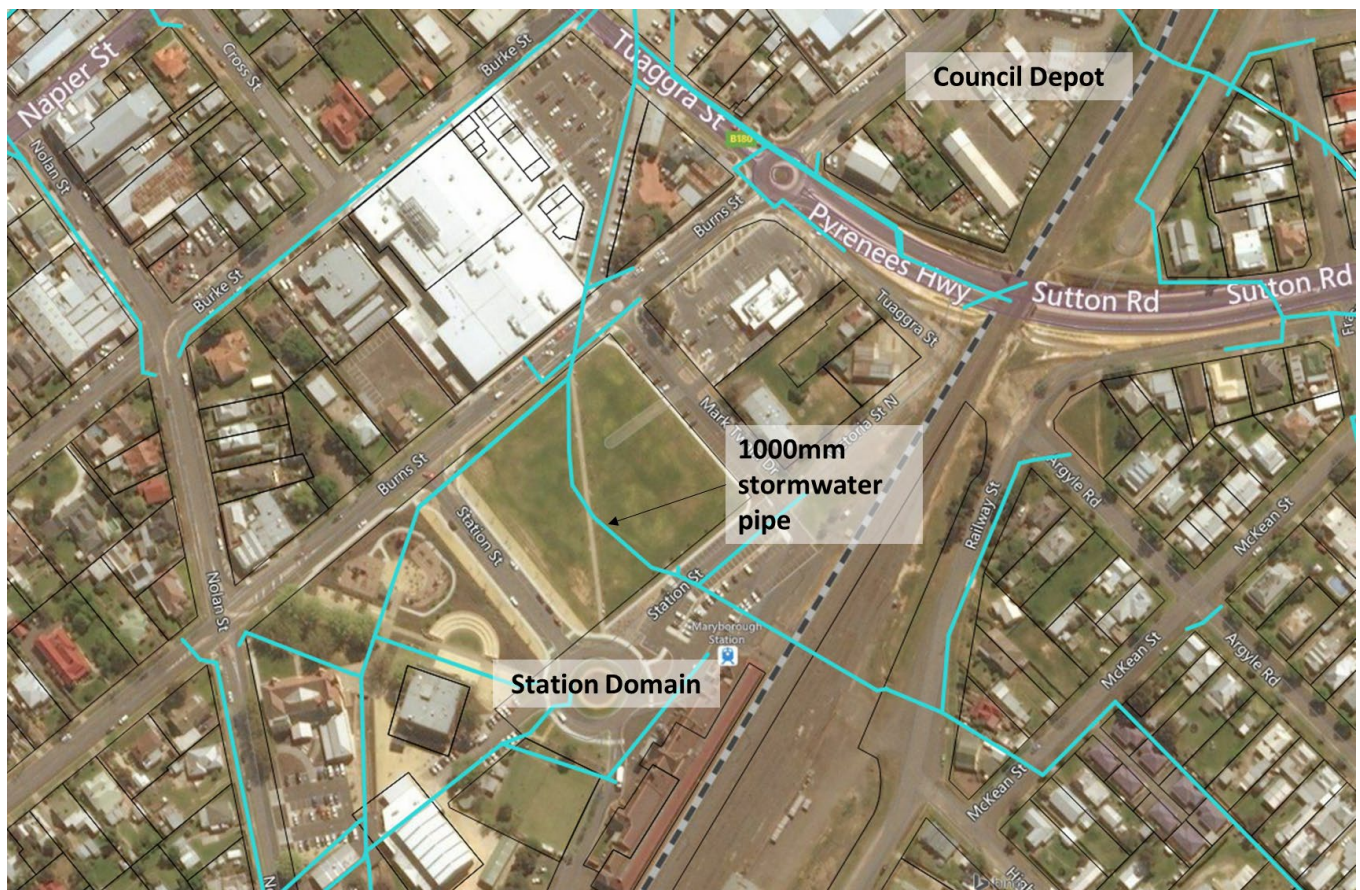


Figure 4.9: Council drainage (blue lines) running below open space in Station Domain



## Key analysis assumptions and infrastructure requirements

The catchment draining to Station Domain is estimated at 377 ha (21% impervious). The design includes:

- 100 L/s pumped diversion from the Shire's drainage network (assuming a 10 L/s low flow bypass)
- 600m<sup>2</sup> raingarden
- UV treatment
- 1 ML underground storage tank
- 300m of pipe of 150mm pressurized pipework to transfer treated stormwater from Station Domain to the Council Depot.

The scheme is designed to supply non-potable demands at Station Domain (5ML/yr) and the Council Depot (5ML/yr). The estimated average annual yield of the harvesting scheme is 7.6 ML/yr (76% reliability).

Rainwater harvesting from the rooftops of surrounding public buildings was considered as an alternative to stormwater harvesting from the underground drainage system. However, at station domain, the area of roof that could realistically be connected to a rainwater tank from surrounding buildings is ~2,000 to 4,500 m<sup>2</sup>. This impervious area is very small (i.e. less than 0.7%) of the impervious area (~78ha) in the catchment that is connected to the stormwater drain which runs beneath the domain. Accordingly, roof water harvesting would not provide sufficient yield to irrigate the domain.

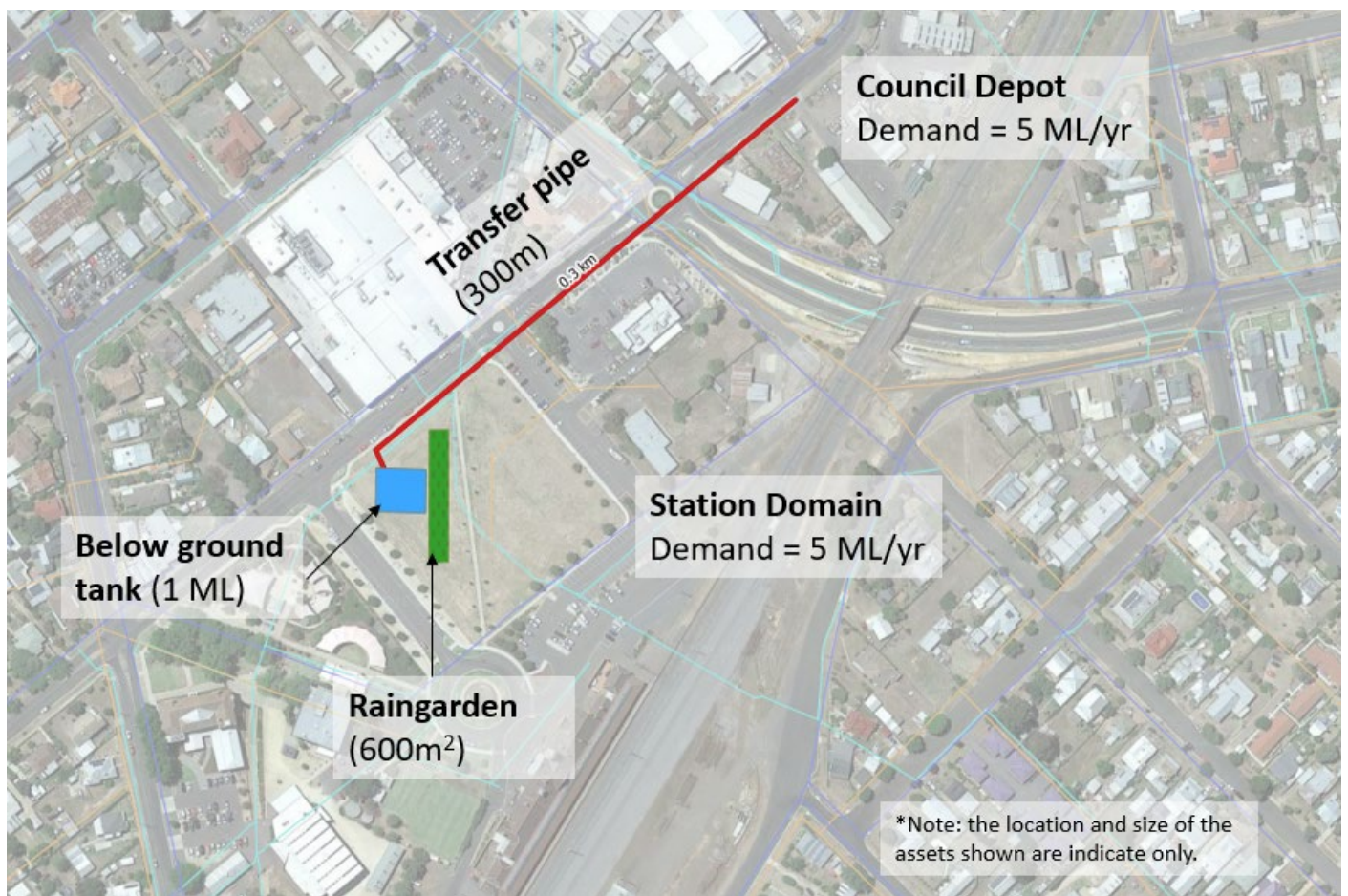


Figure 4.10: Proposed stormwater treatment and reuse network

Cost summary			
Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$123,799	\$1,615
	Electrics and power	\$40,250	\$0
	GPT	\$45,669	\$1,650
WSUD	Treatment	\$235,238	\$3,000
	Establishment	\$12,075	\$0
Storage	Main storage	\$853,755	\$3,712
Additional treatment	UV disinfection	\$17,303	\$1,444
Other Items	Item 1: Transfer mains	\$118,555	\$635
Total		\$1,446,644	\$12,056
Key Benefits			
A resilient water cycle		Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Mains potable water supply substitution:</b> The supply to the depot could substitute 3.8ML/year of potable water for non-potable water.</li><li>• <b>New water supplies:</b> The scheme would harness 7.2ML/year of stormwater to support local needs.</li><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 8.8ML/year by the end of the plan period.</li></ul>		<ul style="list-style-type: none"><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 225kg/year of nitrogen by the end of the plan period.</li><li>• <b>New irrigated green space:</b> 2 hectares of centrally-located green space will be improved through irrigation.</li></ul>	<ul style="list-style-type: none"><li>• <b>Amenity:</b> The community will benefit from a greatly improved central green space, providing an attractive view of the historic railway station.</li><li>• <b>Health and well-being:</b> Irrigated grass is much more effective than unirrigated grass in providing urban cooling on hot days. A greener space will also encourage outdoor recreation.</li></ul>
Evaluation			
Economic Evaluation		Scored Evaluation (Total score, range 13-60)	
Present Value of Costs: \$1,783,513		40	
Benefit Cost Ratio: 0.95			



## 4.7 Option 6: Stormwater harvesting from Lake Victoria for Phillips Gardens & Station Domain & Council Depot

### Description

The potential for a new wetland within Lake Victoria is proposed in Option 4. If this wetland is constructed there is treated stormwater could be harvested for non-potable reuse. The grounds surrounding Lake Victoria itself are already connected to the recycled water network. Therefore, treated stormwater would need to be used for demands further afield. Potential demands include Phillips Gardens, Station Domain and the Council Depot.

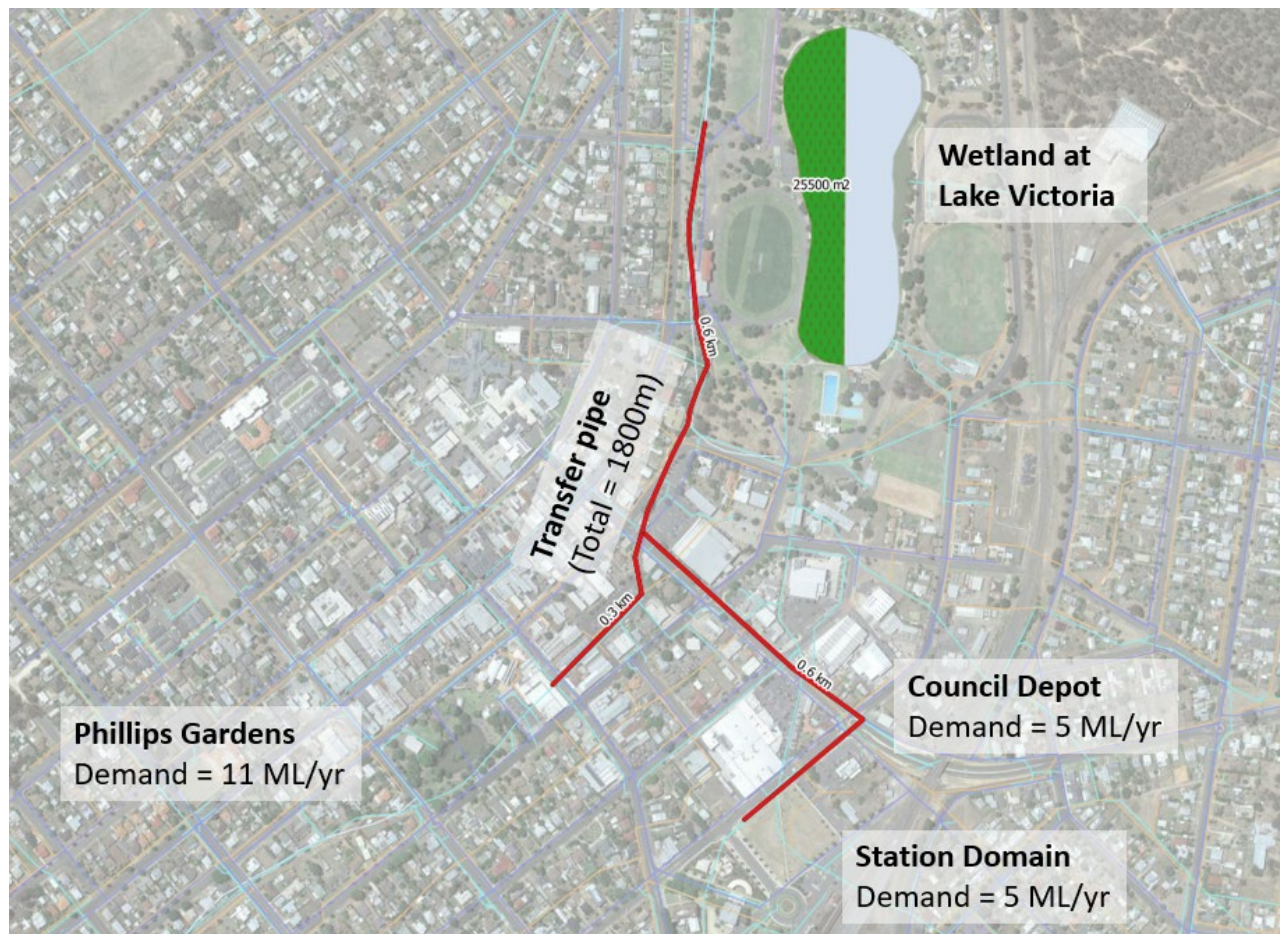


Figure 4.11: Overview of proposed reuse network

### Key analysis assumptions and infrastructure requirements

Option 6 requires:

- Approximately 50% of Lake Victoria is converted into a vegetated stormwater treatment asset (equivalent to 25,500m²). See Option 4 for more details. Water is transferred 1,500m via 150mm transfer pipework.
- Stormwater will be harvested from the wetland by drawing down the permanent pool up to 100mm. This avoids the need for a costly storage. Treated stormwater will undergo UV treatment prior to reuse.

- The demands serviced include: Phillips Gardens (11 ML/yr), Station Domain (5ML/yr) and the Council Depot (5ML/yr). The annual average supply of treated stormwater = 13.1 ML/yr (63% reliability)

### Cost summary

Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$99,628	\$1,299
	Electrics and power	\$40,250	\$0
WSUD	Treatment	\$3,085,521	\$21,831
	Establishment	\$87,871	\$0
Additional treatment	UV disinfection	\$29,282	\$2,444
Other Items	Item 1: Transfer mains	\$473,768	\$2,236
<b>Total</b>		<b>\$3,816,321</b>	<b>\$27,811</b>

### Key Benefits

A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"> <li><b>Mains potable water supply substitution:</b> The supply to the depot and Phillips Gardens could substitute 10ML/year of potable water for non-potable water.</li> <li><b>New water supplies:</b> The scheme would harness 13ML/year of stormwater support local needs.</li> <li><b>Reduced 'urban excess' stormwater flows:</b> Stormwater flowing from urban areas will reduce by 42ML/year.</li> </ul>	<ul style="list-style-type: none"> <li><b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 365kg/year of nitrogen by the end of the plan period.</li> <li><b>New irrigated green space:</b> 2 hectares of centrally-located green space will be improved through irrigation.</li> </ul>	<ul style="list-style-type: none"> <li><b>Amenity:</b> The community will benefit from a 5.1 ha area of well serviced and attractive lake and wetlands area (Lake Victoria) and a 2ha irrigated area (Station Domain).</li> <li><b>Health and well-being:</b> The improvement to water quality and access to the lake will improve recreation opportunities for the community. A greener station domain will also promote urban cooling and recreation.</li> <li><b>Education:</b> The introduction of a wetland to the lake and wider improvements is an opportunity for community co-design and engagement.</li> </ul>

### Evaluation

Economic Evaluation	Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$4,863,345	59
Benefit Cost Ratio: 0.68	

## 4.8 Option 7: Stormwater harvesting from Northern Wetland to shandy recycled water supply

### Description

There is an opportunity to construct a large regional wetland adjacent to Four Mile Creek on the northern outskirts of Maryborough. This wetland could treat a large portion of polluted urban stormwater runoff from the town. Treated stormwater could be harvested from the wetland to shandy with recycled water via a mixing tank prior to restricted reuse.

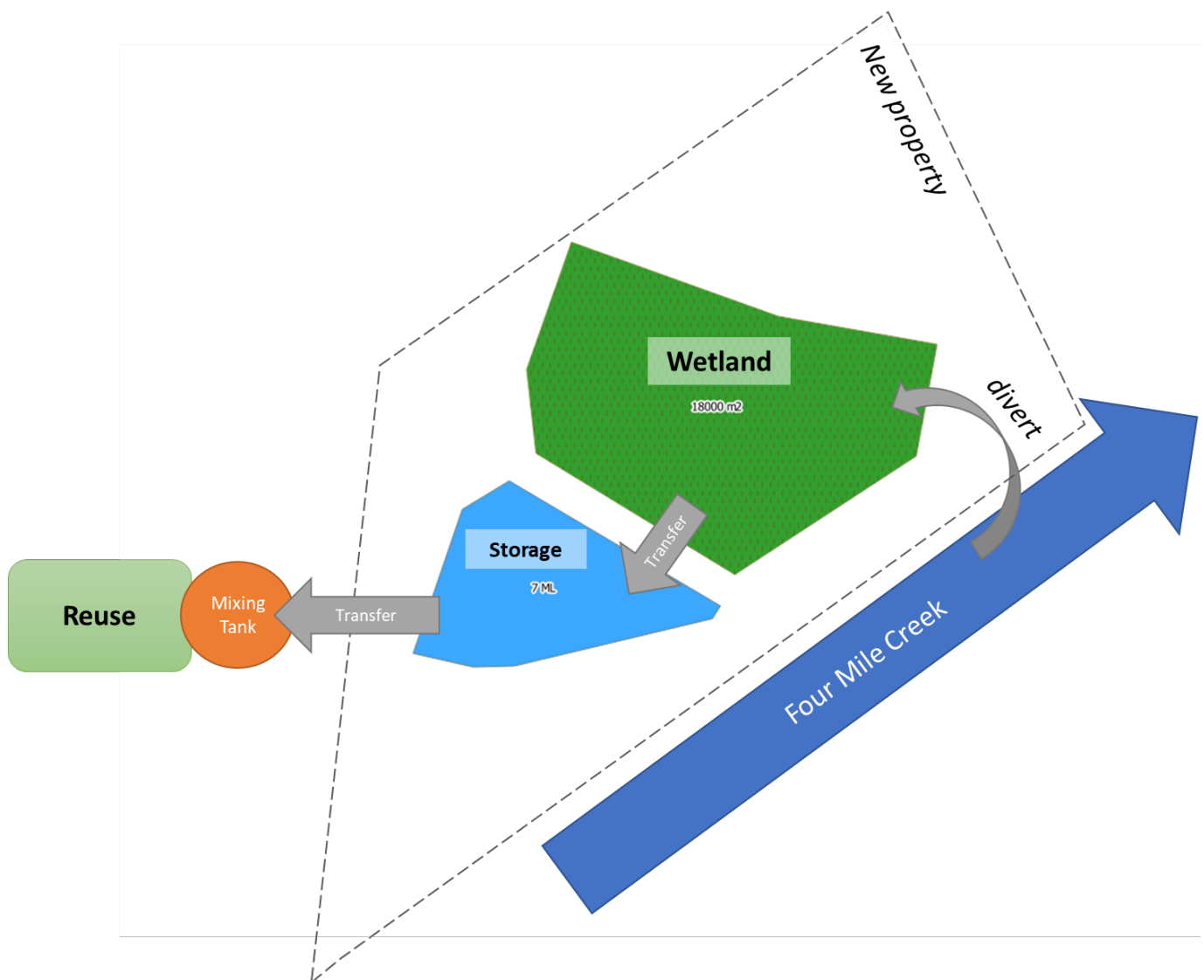


Figure 4.12: Schematic of storage and wetland adjacent to Four Mile Creek

## Key analysis assumptions and infrastructure requirements

The Northern Wetland system requires:

- A 1,400 ha (22% imperviousness) catchment with a 100L/s low flow bypass and gravity or pumped diversion with a capacity of 400 L/s.
- A gross pollutant trap upstream of the wetland.
- Purchase of private land to construct a treatment and reuse system.
- Total treatment area of 18,000m<sup>2</sup> consisting of a 1,800m<sup>2</sup> sediment pond and 16,200m<sup>2</sup> wetland.
- A wetland with a 350mm permanent pool and 350mm extended detention depth.
- A storage pond with a 7,000 ML capacity
- UV treatment is provided prior to shandy, peak treatment rate estimated at 1.5 ML/d.
- 200m of 225mm transfer pipework (wetland to shandy location).
- The demand for stormwater for shandy = 73.3 ML/yr (seasonal, assumes a 2:1 supply of Stormwater to Recycled Water, ignoring potable top up)
- The supply of stormwater for shandy = 44.9 ML/yr (61% reliability) with the shortfall made up with potable water.

Two alternative scenarios were considered for Option 7 which would reduce costs and deliver similar benefits. These are summarised in Attachment 5.

## Cost summary

Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$296,452	\$3,867
	Electrics and power	\$40,250	\$0
	GPT	\$86,834	\$1,650
WSUD	Treatment + Storage Pond	\$2,514,743	\$25,675
	Establishment	\$135,507	\$0
Other Items	Item 1: Transfer mains	\$137,880	\$962
	Item 2: Land acquisition	\$759,365	\$0
<b>Total</b>		<b>\$3,971,031</b>	<b>\$32,154</b>

Key Benefits		
A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>Supporting sustainable recycled water use:</b> By using stormwater as a source for shandying recycled water it will enable ongoing use of recycled water for irrigation.</li><li>• <b>New water supplies:</b> The scheme would harness 45ML/year of stormwater to support local needs.</li><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 153ML/year.</li></ul>	<ul style="list-style-type: none"><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 473kg/year of nitrogen by the end of the plan period.</li><li>• <b>New green infrastructure:</b> A new wetland will be created in Maryborough north which could be a valued community and ecological asset.</li></ul>	<ul style="list-style-type: none"><li>• <b>Amenity:</b> The community will benefit from new area of well serviced and attractive wetlands.</li></ul>
Evaluation		
Economic Evaluation	Scored Evaluation (Total score, range 13-60)	
Present Value of Costs: \$4,463,345	30	
Benefit Cost Ratio: 1.13		



## 4.8 Option 8: Stormwater harvesting from Northern Wetland to supplement potable supply

### Description

There is an opportunity to construct a large regional wetland adjacent to Four Mile Creek on the northern outskirts of Maryborough. This wetland could treat a large portion of urban stormwater runoff from the town. Treated stormwater could be harvested from the wetland and transferred to Centenary Reservoir where it could be treated further and utilized as a major new potable water resource for the town. While the yield from the natural catchments that feed the regional potable water supply are likely to substantially decrease due to climate change, runoff from urban areas is affected to a lesser degree, with decreases <3% predicted for urban stormwater harvesting schemes<sup>3</sup>. Accordingly, urban runoff could be a key resource for Maryborough. Extensive consultation would be required and regulatory support for this option would need to be gained to enable its delivery. Both domestically and internationally there are a small but growing number of example projects with stormwater being harvested and treated for potable reuse (see box 1).

The cross-town transfer also provides an opportunity to provide temporary storage in Goldfields Reservoir, potentially adding substantial volume to raise levels and provide additional recreation benefit.

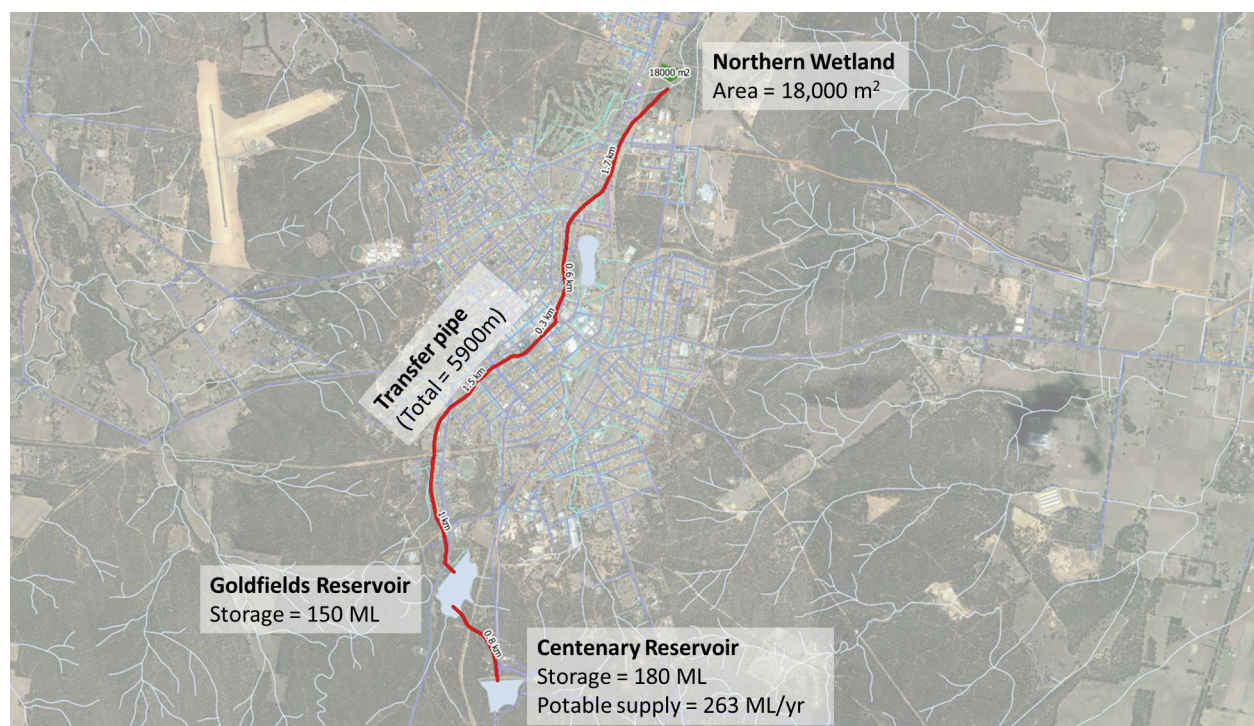


Figure 4.13: Schematic layout of the reuse scheme

<sup>3</sup> Kefeng Zhang, Desmond Manuelpillai, Bhupendra Raut, Ana Deletic, Peter M. Bach 2018, Evaluating the reliability of stormwater treatment systems under various future climate conditions, Journal of Hydrology, 568 (2019) 57-66



## Key analysis assumptions and infrastructure requirements

The Northern Wetland potable reuse system requires:

- A 1,400 ha (22% imperviousness) catchment with a 100L/s low flow bypass and gravity or pumped diversion with a capacity of 400 L/s.
- A gross pollutant trap upstream of the wetland.
- Purchase of private land to construct a treatment and reuse system.
- Total treatment area of 18,000m<sup>2</sup> consisting of a 1,800m<sup>2</sup> sediment pond and 16,200m<sup>2</sup> wetland.
- A wetland with a 300mm permanent pool and 600mm drawdown depth. The wetland requires specialist design and operation, a variable speed pump will control the water level in the wetland and also dictate the residence time (related to treatment).
- Storage in the Goldfields and/or Centenary Reservoir. Additional treatment may be required before discharge into either of these storages. Additional risks management will be required at Centenary Reservoir as this storage is part of the existing potable water network.
- Advanced treatment prior to reuse, the peak treatment rate is estimated at 3.3 ML/d.
- 5900m of 300mm transfer pipework (wetland to Goldfields and/or Centenary Reservoir).
- The supply of stormwater for potable reuse = 263 ML/yr.

## Cost summary

Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$296,452	\$3,867
General Infrastructure	Electrics and power	\$40,250	\$0
General Infrastructure	GPT	\$86,834	\$1,650
WSUD	Treatment	\$1,876,168	\$17,684
WSUD	Establishment	\$71,180	\$0
Additional treatment	Stormwater to potable	\$4,347,000	\$157,830
Other Items	Item 1: Transfer mains	\$3,157,725	\$14,453
Other Items	Item 2: Land acquisition	\$546,743	\$0
<b>Total</b>		<b>\$10,422,351</b>	<b>\$195,484</b>

Key Benefits		
A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"><li>• <b>New water supplies:</b> The scheme would harness 263ML/year of stormwater to support local needs. A new supply of this scale which could be provided at potable standard would defer a potential investment in a connection to the Goldfields Superpipe by an estimated 16 years.</li><li>• <b>Reduced ‘urban excess’ stormwater flows:</b> Stormwater flowing from urban areas will reduce by 284ML/year by the end of the plan period as it is taken up by the tree, or lost to infiltration.</li></ul>	<ul style="list-style-type: none"><li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 720kg/year of nitrogen by the end of the plan period.</li><li>• <b>New green infrastructure:</b> A new wetland will be created in Maryborough north which could be a valued community and ecological asset.</li><li>• <b>Support of Goldfields Reservoir:</b> The transfer of water to Goldfields reservoir could recharge the waterbody.</li></ul>	<ul style="list-style-type: none"><li>• <b>Amenity:</b> The community will benefit from new area of well serviced and attractive wetlands and top-up of Goldfields Reservoir.</li><li>• <b>Health and well-being:</b> The option will support additional recreational value at Goldfields Reservoir.</li></ul>
Evaluation		
Economic Evaluation		Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$15,670,883		60
Benefit Cost Ratio: 0.87		

**Box 1: Advances in stormwater reuse**

Victoria has become a world leader in the research and development of novel stormwater treatment technologies. Through the Cooperative Research Centre for Water Sensitive Cities (CRCWSC) and other collaborative efforts, local expertise is being brought to the world through projects in the United Kingdom, Israel, Singapore and China. Because of such efforts, stormwater has emerged as a viable alterable water resource that is increasingly being utilised in major urban and rural centres across the State.

The CRC for Water Sensitive Cities is conducting ongoing research to refine existing, and develop novel, stormwater harvesting technologies and thereby build on the proven concepts of Water Sensitive Urban Design (WSUD). Constructed wetlands and bioretention systems are two of the most common WSUD technologies used in Australian stormwater harvesting schemes. There is a strong and growing body of research indicating these systems can reduce a range of stormwater pollutants to meet water quality for a variety of end uses. Real world schemes support these research findings as wetlands are used as the sole treatment technology in several non-potable harvesting schemes and as the primary and secondary treatment element in potable harvesting schemes. Given the strength of existing research and operational schemes these natural treatment systems can provide an appropriate level of primary and secondary treatment as part of the stormwater reuse option.

Table 5.2: Examples of domestic and international stormwater reuse schemes

	End use	Treatment technology	Comments
Blackmans Swamp Creek stormwater reuse Scheme (Australia, NSW)	Potable drinking water.	Runoff is treated by constructed wetlands before mixing with the potable supply prior to secondary treatment in the Council's main water filtration plant (includes ozone treatment to destroy pathogens and Biologically Activated Carbon Filtration to consume the remnants of the compounds destroyed by the ozone).	The stormwater harvesting scheme was established in 2008 and was so successful that it was expanded in 2010. The scheme is expected to supply 35 per cent of Orange Council's typical 5,700 ML annual water usage.
Kalkallo stormwater reuse (Australia, Vic)	Potable drinking water.	Stormwater will be collected on site via conventional drainage systems, treated in a series of wetlands and settling ponds, stored in a dam and then treated to potable standard to supplement the development's recycled water supply.	This scheme is not yet operational, Kalkallo is a 1,200ha industrial precinct slated for construction over the next 10 to 15 years. The project is designed to recover the upfront capital and ongoing operational costs within 25 years.
The 1 <sup>st</sup> National Tap (Singapore)	Potable drinking water.	Stormwater is collected through a comprehensive network of drains, canals, rivers and stormwater collection ponds before it is collected in Marina Bay and directed to Singapore's 17 reservoirs for storage before passing through centralised waterworks for treatment to potable standards (membrane treatment is used at some of these plants).	Singapore one of the few countries in the world to harvest urban stormwater on a large scale for its water supply. Half of Singapore's land area is already part of the potable water supply catchment.
Renaissance Project (USA)	Potable drinking water.	Bar screens, alum and polymer injection, settling basin, wetland, water treatment plant.	An integrated water resource management program for urban runoff in an inner city area that utilises the 'treatment train' method to maximise the effectiveness of stormwater treatment.
Artificial Aquifer Recharge Scheme (South Africa)	Potable drinking water and industrial uses.	Multiple detention and retention basins, low salinity flows are channelled into two large spreading basins for infiltration, higher salinity baseflows are diverted to the coastal basins.	Utilises an urban stormwater collection system in the form of artificial aquifer recharge through infiltration basins.
Parafield stormwater harvesting and managed aquifer recharge (MAR)	Non potable uses including irrigation and industrial	Diversion to detention basins, treatment through wetlands that remove typically 90% of nutrients and bacteria and aquifer injection.	Long established stormwater reuse scheme (since 1999) relying primarily on wetlands for treatment
Troups Creek stormwater reuse and Household Reuse (Australia, Vic)	Toilets and outdoor taps.	Comprehensive treatment system that includes a wetland and stormwater treatment plant. It is expected that this system is somewhat overdesigned for the current end-use and its efficacy is being reduced by high sediment concentrations.	The project is now constructed and is operated by South East Water. Stormwater is supplied to 58 urban allotments via a dual reticulation network.
Royal Park stormwater reuse Project (Australia, Vic)	Irrigation (golf course, sports oval and parkland).	Sediment trap, constructed wetland and UV disinfection.	To minimise human health risks water is spray irrigated at night. The system has a back-up potable mains connection. Two water hydrants are also provided to allow trucks to fill up and use the treated water for irrigation of streetscape features.
City of Brimbank Alternative Water Project (Australia, Vic)	Irrigation (recreational reserves and a golf course)	Gross pollutant traps, UV disinfection.	A contemporary and local example of a council and retail water company partnering to own and operate several stormwater harvesting systems.

## 4.9 Option 9: Raw water transfer to shandy recycled water supply

### Description

This option considers the transfer of raw water from Centenary Reservoir to shandy recycled water in the recycled water network. Raw water provides a better source than potable water due to avoided treatment needs, however its use would reduce potable water reserves at the reservoir.

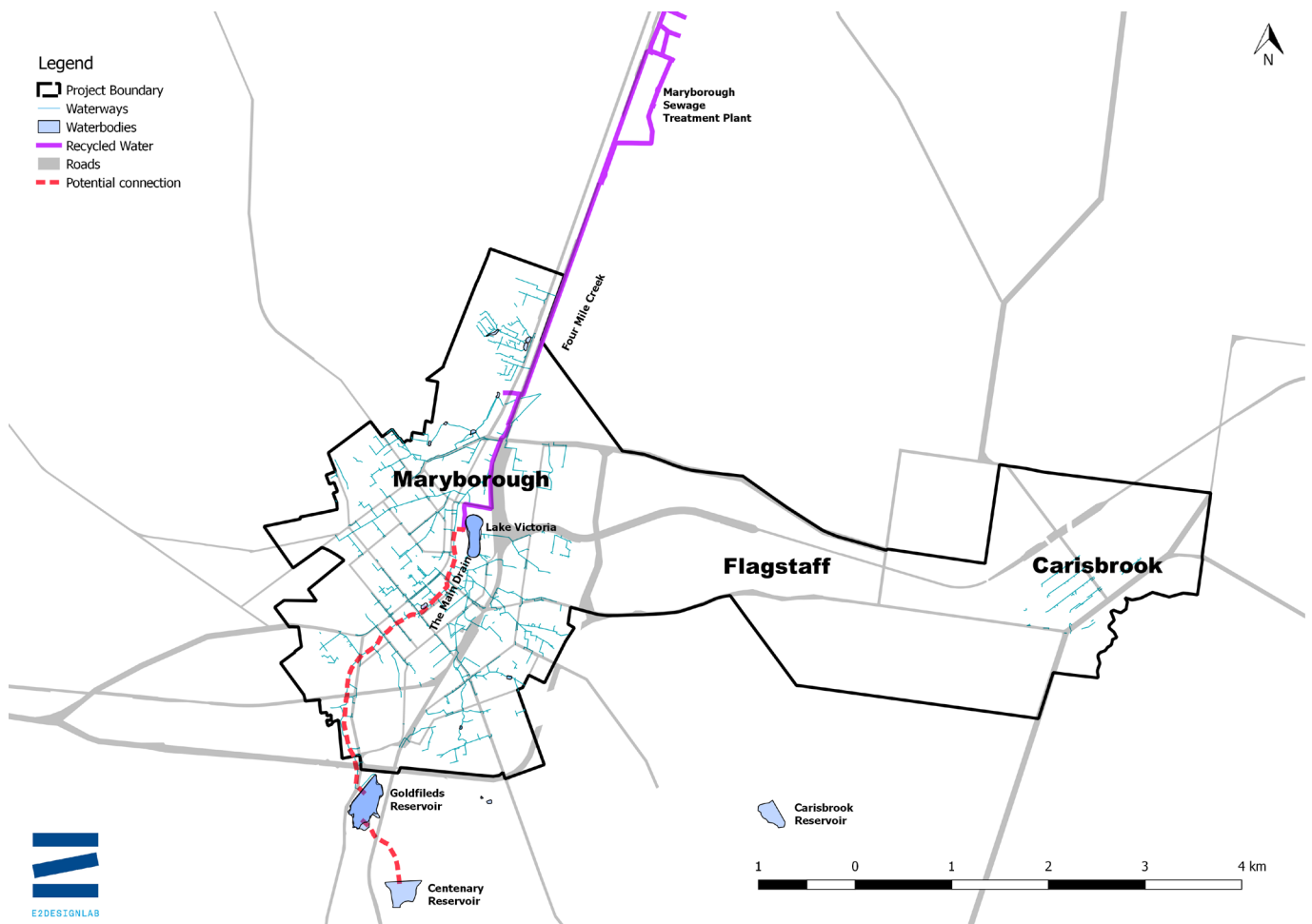


Figure 4.14: Schematic layout of existing infrastructure and potential integration of raw water supply with the recycled water network

### Key analysis assumptions and infrastructure requirements

The transfer of raw water would require a new pipeline to be built. The proposal includes a transfer pipe along the alignment of the Main Drain to join the recycled water network via a mixing tank. The transfer of raw water would

enable sustainable long-term use of recycled water by reducing salinity, but it would also deplete potable water resources for the area.

### Cost summary

Item	Capital Cost (\$)	Operating Cost (\$/yr)	Renewal (\$)
Transfer pipeline	\$ 1,329,411	\$ 6,473	None in plan period

### Key Benefits

A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"> <li>• <b>Supporting sustainable recycled water use:</b> By using raw water as a source for shandyng recycled water it will enable ongoing use of recycled water for irrigation.</li> </ul>		

### Evaluation

Economic Evaluation	Scored Evaluation (Total score, range 13-60)
Present Value of Costs: \$1,165,580	13
Benefit Cost Ratio: 0.41	





Through the development of this Plan, key delivery partners and stakeholders have come together. A regional IWM forum has been established for the Central Highlands Region which can support delivery of IWM projects in the Maryborough Area. To implement the recommended projects, the implementation plan sets out key tasks that need to be taken forward, timelines and key delivery partners.

In addition to project based responsibilities, research demonstrates that there are five key transition factors required to stimulate the governance and delivery conditions needed to support IWM projects. These include:

1. Champions
2. Tools and instruments
3. Platforms for connecting
4. Knowledge
5. Projects and application.

Stakeholders at the second workshop were asked to rate the collective capacity of the Maryborough community against these five transition factors, as shown in Figure 5.2.

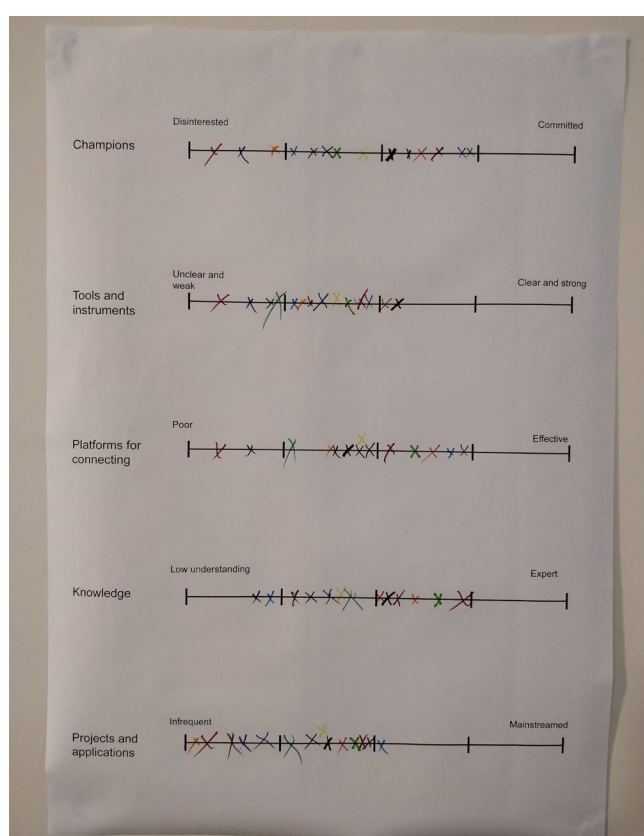


Figure 5.2: Results of the perceived performance of the Maryborough community and associated organisations against the 5 factors required to deliver IWM

The exercise shows there are mixed perspectives on Maryborough's position for all factors, but there was consensus that there is room for improvement in all areas.

**Champions** – The mixed rating here is probably indicative of the presence of active champions for IWM in some organisations and in parts of the community, but which aren't apparent in others. A more defined and active IWM network would help to coordinate efforts and to promote initiatives both internally in organisations and externally. An IWM practitioner group became active in 2018 as part of the IWM Forum process, and this could be established more formally to provide support and interaction between IWM champions in the region.

**Tools and Instruments** – This factor received a poor rating overall, indicating that more support tools and instruments such as investment, policy and delivery mechanisms are needed to support IWM in the area. While Water for Victoria provides guidance on IWM, it does not strictly require it to be undertaken. The split management responsibilities for the different streams of water may also contribute to the uncertainty. Tailored tools for regional towns and further capacity building in the area would be of benefit.

**Platforms for Connecting** - Communication processes were generally considered adequate but could be improved. The range in the scores again shows the wide range of stakeholders involved in IWM, and the challenges in providing effective means of collaboration. The establishment of the IWM Forum provides a platform for connecting organisations at a leadership and practitioner level, but initiatives are needed to also enhance community involvement in this area.

**Knowledge** - Perceptions of knowledge required for IWM were relatively more positive, suggesting a good base of understanding and skills in the area. Further development is still indicated, and could be consolidated through training programs with organisations such as Clearwater. Cross-organisational knowledge sharing networks may also be effective between local councils in the region.

**Projects and Application** – The delivery of on-ground IWM projects was perceived to be somewhat lacking. From discussion, there seemed to largely be a feeling that not enough was being delivered due to funding and implementation challenges. This Plan provides the basis for business cases for delivery of a range of projects and sets out an implementation plan to assist with the delivery of recommended projects.

## 5.2 Recommended IWM projects from option analysis

Based on the analysis and evaluation undertaken during the development of this plan a set of projects have been recommended for delivery.

The figure below presents both the results of both the economic evaluation (x-axis) and the scored evaluation (y-axis) in a comparative graph. By comparing both evaluations, we can determine which projects may have greater benefits than those recognised through a monetised economic analysis. This is particularly useful where the benefit-cost ratio of an option is less than 1, to give a clear articulation of the benefits which are perhaps not well appreciated by the economic analysis which could underpin a holistic business case for investment.

The two dashed red lines are used as comparison lines that divide the graph into four quadrants. These lines are 'moveable' based on the consensus of stakeholders regarding an acceptable performance. For the purposes of comparison, the scored benefit threshold is currently set at a score of 29 and the benefit-cost ratio threshold is set at 0.8. Projects in the top right-hand quadrant are justifiable in both analyses, while those in the left bottom quadrant could be justifiably dismissed from further investigation. Those in the other quadrants require further reasoning and clear reasons to be taken forward.

## Dual Assessment

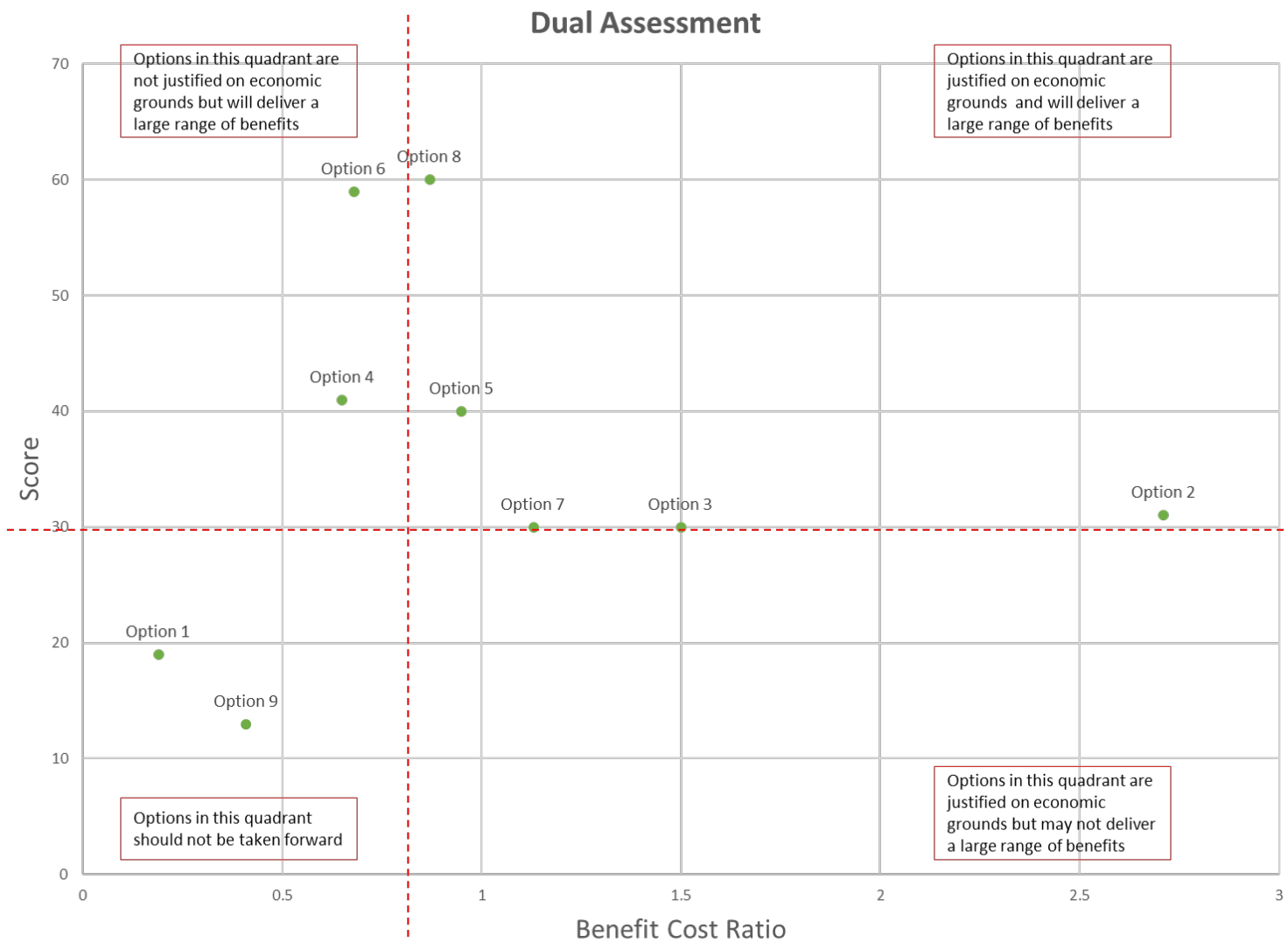


Figure 5.3: Comparison of option performance in an economic evaluation and a score evaluation

Based on this dual assessment, the following options have been taken forward into the recommendations and implementation plan:

**Options 2 and 3:** Stormwater-fed street trees in both new development areas and the commercial area of Maryborough demonstrated a very strong economic performance due to the multiple benefits they can return to the community.

**Option 5:** The stormwater harvesting scheme for station domain demonstrated a good economic business case while also showing benefit as a ‘ready-to-go’ project which could be delivered alongside other enhancements to station domain to deliver immediate community benefits.

**Options 7 and 8:** The creation of new wetland in the north of Maryborough to treat harvested stormwater from the main drain has been shown to be a viable project to ensure that recycled water can be used sustainably through a shandy arrangement (Option 7). Attachment 7 shows there are options to substantially reduce the cost of Option 7, which will further increase its attractiveness as an option. While this option is cost neutral with the base case, it also unlocks the opportunity to harness stormwater as a major new resource for the town, with the opportunity to deliver a cross-town transfer to Goldfields Reservoir and Centenary Reservoir in the future (Option 8).

**Options 4 and 6:** While the economic evaluation didn't provide justification for introduction of a wetland for Lake Victoria in monetary terms, the evaluation is unable to fully appreciate the potential social and environmental benefits of such a project. The scored evaluation recognised a much higher potential for the proposal, particularly when treated stormwater from the lake was utilised for irrigation of nearby green spaces (Option 6). The improvement of Lake Victoria was viewed by stakeholders and community representatives as a key priority for the area in workshops held for this project. Accordingly, further investigation of this option is recommended.

### 5.3 Recommended ongoing work to support IWM

While this Plan has identified and considered a range of IWM options in detail, there are also a number of water management initiatives which are already underway or have previously been identified as being required to support the local community and environment. It is recommended that these initiatives (summarised below) are taken forward, and key actions have been included in the Implementation Plan.

#### 5.3.1 Flood management

The Carisbrook Flood Study (2013) recommended a range of actions to be taken to improve flood management in the Carisbrook area. Many of these actions have already been completed, and planned works to manage overland flows from the South West of Carisbrook have been partly progressed, with planned implementation by 2020.

The development of a Flood Management Plan for Maryborough is about to commence, this will identify key actions and recommendations for improvement of flood management in the area. Central Goldfields Shire Council is also investigating planning controls which can be put in place to appropriately manage development in areas with significant flood risk.



### **5.3.2 Waterway Management Plan for Tullaroop Creek**

As identified in the Central Highlands IWM Forum Strategic Directions Statement, a waterway management plan for Tullaroop Creek is needed to understand and plan improvements to the Creek from a catchment perspective; understanding pressures and objectives for the creek relating to ecological health, flood management, water supply and recreational opportunities. The Plan can also consider flows to the creek and improvements to the public waterway reserve adjacent to Tullaroop Creek in Carisbrook.

### **5.3.3 Litter management**

Litter has been identified as a key water quality issue of concern for the communities of Maryborough and Carisbrook. It is recommended that both physical interventions, such as gross pollutant traps, and operational programs, such as targeted consultation and education along with clean-up activities, are considered to develop a plan for litter management.

### **5.3.4 Improvement of the reliability of the existing Class C recycled water supply to the Maryborough Golf Club and Princess Park precinct**

Central Highlands Water supplies recycled water from the Maryborough Wastewater Treatment Plant to the Central Goldfields Shire Council for irrigating grass playing surfaces at Princess Park and the Maryborough Golf Club.

While fit-for-purpose Class C recycled water provides a valuable and cost effective alternative to potable water for irrigation, from time to time the supply of recycled water is interrupted due to outbreaks of algae in the recycled water storage lagoons. Unfortunately, blooms most often occur in the warmer months, when reliance on recycled water for irrigation is at its highest.

During periods of interruption, Central Highlands Water works closely with reclaimed water customers to provide access to potable water as a short term alternative. This however comes at an additional cost and increases demand on Maryborough's drinking water resources.

To ensure fit for purpose recycled water remains available to meet the needs of the Maryborough community, CHW is pursuing several opportunities to reduce impact of algae on the reliability of the recycled water supply. These include:

- A new solar mixer has been installed in the recycled water storage lagoon at the Maryborough Wastewater Treatment Plant. The solar mixer will help to prevent

the onset of algae blooms by slowly mixing the water to avoid the conditions preferred by problem algae.

- Changes to Maryborough's customer base together with the adoption of water wise behaviour has seen the volume of wastewater entering the Maryborough Wastewater Treatment Plant reducing over time. This has had the effect of increasing the residence time of recycled water within the storage lagoons. CHW is investigating the opportunity to shorten the residence time, thereby reducing the opportunity for problem algae blooms to occur.
- CHW is also reviewing a range of commercial products for their potential to assist with preventing problem algae blooms. Some examples include:
  - Additives designed to naturally increase the water's resilience to algae blooms,
  - Electronic equipment that generates ultrasound to disrupt the growth of algae; and
  - Chemical algaecides.

### **5.3.5 Availability of water for Goldfields Reservoir**

The Goldfields Reservoir is situated downhill and approximately 600m north west of Central Highlands Water's Centenary Reservoir. Both are connected via an open stormwater channel.

The Centenary Reservoir is capable of receiving raw water supplied from Tullaroop Reservoir, Talbot Reservoir, Evansford Reservoir and the Moolort groundwater bores.

The connectivity that exists between the various reservoirs has been used previously to transfer raw water from the Tullaroop Reservoir into Goldfields Reservoir. In 2015, Central Highlands Water undertook improvement works on the open channel to increase the effectiveness of overground water transfers into Goldfields Reservoir.

Conditionally upon the availability of third party raw water entitlements and agreed commercial terms, the Central Highlands Water raw water network has the capability of transferring raw into the Goldfields Reservoir.

## 5.4 Implementation Plan

Six major IWM initiatives are recommended for the Maryborough area:

7. **Creating governance and delivery structures to support IWM**
8. **Harnessing stormwater for healthier street trees**
9. **Greening station domain as a key community asset**
10. **Creating a resilient and local alternative water supply network**
11. **Improving Lake Victoria for recreation and amenity**
12. **Continual improvement of waterways and flood management**

A set of actions are recommended for each initiative below, with a suggested timeframe and delivery partners attributed to each. Note that the timeline is indicative and subject to resourcing and planning by the relevant authorities.

Table 5.1: Implementation Plan

Recommended Action	Suggested Timeline	Delivery Partners ( <u>lead underlined</u> )
<b>Creating governance and delivery structures to support IWM</b>		
Create a governance group between the partners of this plan to implement and monitor the actions in this Plan. This should be done in coordination with other regional governance groups such as the IWM Forum.	Short term (1-5 years)	<u>Central Goldfields Shire Council, Central Highlands Water, North Central Catchment Management Authority</u>
<p>In addition to the project-focused actions below, the governance group should identify and implement opportunities to support the delivery of IWM in the Maryborough area by:</p> <ul style="list-style-type: none"> <li>• Identifying funding and grant options to support delivery of IWM</li> <li>• Fostering and supporting IWM champions</li> <li>• Developing tailored IWM tools and supporting capacity building to improve skills and knowledge in the area</li> <li>• Improving and creating platforms to connect and collaborate – within and between organisations and with the community.</li> </ul>	Short term (1-5 years)	<u>Central Goldfields Shire Council, Central Highlands Water, North Central Catchment Management Authority</u>

Recommended Action	Suggested Timeline	Delivery Partners ( <u>lead underlined</u> )
<b>Harnessing stormwater for healthier street trees</b>		
Develop detailed designs for integration of passively irrigated trees in: <ul style="list-style-type: none"> <li>a. New development areas</li> <li>b. Central commercial / highly trafficked areas (retrofit)</li> <li>c. Town entrances</li> </ul>	Short term (1-5 years)	<u>Central Goldfields Shire Council</u>
Secure capital funding to include passive irrigation in planned tree retrofits in Central Maryborough	Short term (1-5 years)	<u>Central Goldfields Shire Council</u>
Include requirements and guidance for inclusion of passively irrigated street trees in infrastructure and landscape design manuals.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u>
Review Central Goldfield Shire Council's street tree planting guidance to ensure tree species selected provide amenity and ecological value while also being compatible with future climates, compatible with passive irrigation (wet and dry tolerance) and which offer large canopy growth.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u>
Link designs and learnings with the Green-Blue Infrastructure Guidance for small towns (Central Highlands IWM Forum Strategic Directions Statement Priority Project)	Short term (1-5 years)	<u>Central Goldfields Shire Council</u> , Central Highlands Chamber of Councils
<b>Greening Station Domain as a key community asset</b>		
Include raingarden and stormwater harvesting system in future master planning of Station Domain.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u> , Committee for Maryborough, Dja Dja Wurrung
Determine if water storage can be accommodated as an above ground tank at the depot site or if an underground tank is required under or near the domain.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u>
Assemble details into business case for investment (as both a council investment and a potential application for grant funding)	Short term (1-5 years)	<u>Central Goldfields Shire Council</u> , Committee for Maryborough, Dja Dja Wurrung

Recommended Action	Suggested Timeline	Delivery Partners ( <u>lead underlined</u> )
Complete detailed design for stormwater harvesting scheme and construct scheme	Medium term (5-10 years)	<u>Central Goldfields Shire Council</u> , Dja Dja Wurrung
<b>Creating a resilient and local alternative water supply network</b>		
Continue monitoring of salinity levels of recycled water	Short term (1-5 years)	<u>Central Highlands Water</u>
Conduct monitoring of salinity levels of stormwater in the main drain to determine required shandy ratio of stormwater to recycled water to achieve desired salinity	Short term (1-5 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council
Reduce risk of algal blooms in treated wastewater lagoons at Maryborough Wastewater Treatment Plant to improve reliability of supply of recycled water	Short term (1-5 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council, Maryborough Golf Club
Complete detailed design of wetland and stormwater harvesting system at either the Wastewater Treatment Plant or a selected site in Northern Maryborough	Short term (1-5 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council, Dja Dja Wurrung, Goulburn Murray Water, North Central Catchment Management Authority
Construct and establish connection of harvested stormwater to existing recycled water network with appropriate mixing to shandy supply	Short term (1-5 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council, Maryborough Golf Club
Collaborate to enable transfers of raw water from Centenary Reservoir to Goldfields Reservoir to maintain levels in priority periods (subject to availability and commercial arrangements).	Short term (1-5 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council, Maryborough Water Ski Club Inc

Recommended Action	Suggested Timeline	Delivery Partners ( <u>lead underlined</u> )
Investigate medium-long term utilisation of large-scale stormwater harvesting to contribute to raw water supplies and supplement Goldfields Reservoir. This can be considered alongside other available medium-long term supplementary potable water supplied for the Maryborough area including groundwater and a connection to the Goldfields Superpipe. Advances in stormwater reuse and potential regulatory support for such an option should be reviewed on an ongoing basis. Box 1 provides a summary of existing examples of large scale stormwater reuse.	Medium term (5-10 years)	<u>Central Highlands Water</u> , Central Goldfields Shire Council, Dja Dja Wurrung, Goulburn Murray Water, North Central Catchment Management Authority, Maryborough Golf Club
<b>Improving Lake Victoria for recreation and amenity</b>		
Bolster and expand business case for the improvement of the Lake through community surveys, assessment of cultural value and more detailed investigations.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u> , Dja Dja Wurrung, Committee for Maryborough
Seek funding for lake improvement including construction of a wetland.	Short term (1-5 years)	<u>Central Goldfields Shire Council</u> , Dja Dja Wurrung, Committee for Maryborough, North Central Catchment Management Authority
Conduct a community co-design exercise for the lake and its surroundings.	Medium term (5-10 years)	<u>Central Goldfields Shire Council</u> , Dja Dja Wurrung, Committee for Maryborough
<b>Continual improvement of waterways and flood management</b>		
Complete actions identified in the Carisbrook Flood Study to manage flood risk	Short term (1-5 years)	<u>North Central Catchment Management Authority</u> , Central Goldfields Shire Council



Recommended Action	Suggested Timeline	Delivery Partners ( <u>lead underlined</u> )
Complete the Maryborough Flood Management Plan	Short term (1-5 years)	<u>North Central Catchment Management Authority</u> , Central Goldfields Shire Council
Explore opportunities to enhance the Main Drain corridor to promote walking and cycling and increase tree cover and amenity	Medium term (5-10 years)	<u>Central Goldfields Shire Council</u>
Develop a Waterway Management Plan for Tullaroop Creek (Central Highlands IWM Forum Strategic Direction Statement Priority Project)	Short term (1-5 years)	<u>North Central Catchment Management Authority</u> , Central Goldfields Shire Council, Central Highlands Water, Goulburn Murray Water, Dja Dja Wurrung
Continue delivery of stormwater management measures to improve waterways including litter management and water sensitive urban design	Ongoing	<u>Central Goldfields Shire Council</u> , <u>North Central Catchment Management Authority</u>

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## Attachment 1 – Stakeholder engagement

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Two stakeholder workshops were held as part of the development of this plan. The first workshop considered the vision and objectives for the plan and possible IWM options. The second workshop considered the IWM options which had been analysed and key delivery opportunities and barriers. The following tables summarise the invited stakeholders and those which attended.

Table A1: Workshop 1 Invitees and Attendees

Invited	Attended
Highview College	Highview College
Central Goldfields Shire	Central Goldfields Shire
Maryborough Golf Club	Maryborough Golf Club
Goldfields Sustainability Group	Goldfields Sustainability Group
Maryborough Water Ski Club Inc	Maryborough Water Ski Club Inc
North Central CMA	North Central CMA
Central Highlands Water	Central Highlands Water
Bucknall & Gowers Real Estate	
Colts Phelans Cricket Club Inc	
Maryborough City Soccer Club	
Maryborough Netball Association	
Maryborough Angling Club	
Maryborough Football Netball Club	
Goulburn Murray Water	

True Foods	
Maryborough Education Centre	
St. Augustine's	
Novo (Vic) Pty Ltd	
Sonac Australia Pty Ltd	
Havilah Hostel Inc	
Leshway Pty Ltd & M & T Smits Pty Ltd	
Carisbrook Racecourse	
McPherson's Printing Pty Ltd	
Ian & Wendy Mortlock	
Maryborough Fire Brigade	
Maryborough Midlands Historical Society	
St Lukes Anglicare	
Mitre 10 and CRT	
Maryborough Rotary Club	
Maryborough District Health Service	
First National Real Estate Maryborough	
Carramar Nurseries	
Goldfields Group of Fire Brigades	
Loraine Fitzpatrick	

Table A2: Workshop 2 Invitees and Attendees

Invited	Attended
True Foods	True Foods
Central Goldfields Shire	Central Goldfields Shire
Maryborough Golf Club	Maryborough Golf Club
Goldfields Sustainability Group	Goldfields Sustainability Group
Maryborough Water Ski Club Inc	Maryborough Water Ski Club Inc
Dja Dja Wurrung	Dja Dja Wurrung
Sonac Australia Pty Ltd	Sonac Australia Pty Ltd
Maryborough Midlands Historical Society	Maryborough Midlands Historical Society
North Central CMA	North Central CMA
Central Highlands Water	Central Highlands Water
Maryborough Netball Association	
Maryborough Angling Club	
Maryborough Football Netball Club	
Goulburn Murray Water	
Bucknall & Gowers Real Estate	
Maryborough Education Centre	
St. Augustine's	
Novo (Vic) Pty Ltd	
Colts Phelans Cricket Club Inc	
Havilah Hostel Inc	
Leshway Pty Ltd & M & T Smits Pty Ltd	
Carisbrook Racecourse	

McPherson's Printing Pty Ltd	
Ian & Wendy Mortlock	
Maryborough Fire Brigade	
Maryborough City Soccer Club	
St Lukes Anglicare	
Mitre 10 and CRT	
Maryborough Rotary Club	
Maryborough District Health Service	
First National Real Estate Maryborough	
Carramar Nurseries	
Goldfields Group of Fire Brigades	
Loraine Fitzpatrick	
Highview College	

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## Attachment 2 – Preliminary Assessment

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Please refer to an electronic copy of this report to zoom in on text.



					Objective theme 1 Resilient Water Cycle	Objective theme 2 Healthy Landscapes and Environment		Objective theme 3 Prosperous Community and Economy			
					Quantifiable	Quantifiable	Quantifiable	Quantifiable	Quantifiable		
Source	Option	Applicability yes/no	Site	Reason/Comment	ML/Year of potable water replacement	kg/year of nitrogen removed from waterway	ML/year of alternative water provided for recreation, productive uses or amenity	New amenity/productive areas created (ha)	Potential for community engagement / education (people)	Key Cost Factors (A: Advantage, D: Disadvantage)	Risk review
PO	Water supply leakage reduction	No		Basecase							
PO	Advanced water efficient practices - outdoor	No		Basecase							
PO	Advanced water efficient practices - buildings	No		Basecase							
GW	Groundwater harvesting for open space irrigation	No	Carisbrook	Not recommended - salinity and strained resource							
GW	Groundwater harvesting for non-potable uses in buildings	No	Carisbrook	Not recommended - salinity and strained resource							
GW	Groundwater harvesting for supplementary potable supply	No		Basecase							
GW	Groundwater harvesting for agricultural irrigation	No		Not recommended - salinity and strained resource							
RW	Rainwater harvesting for garden irrigation	No	Existing development	Basecase (high uptake of rainwater tanks in existing properties)							
RW	Rainwater harvesting for garden irrigation	Yes	New developments	Possible policy position	28	76	28		3181	A. Common technology A. Implementable by policy A. Water supply augmentation	Low
RW	Rainwater harvesting for garden or open space irrigation	No	Maryborough Educational Centre	Large roof area, site dominated by synthetic open spaces, not a current top ten potabel water user (~5ML/yr), tanks already on site.							
RW	Rainwater harvesting for garden or open space irrigation	No	Marborough District Health Service	Large roof but marginal scheme: private property + uncertain NP demands + elevated health risks + limited space available							
RW	Rainwater harvesting for garden or open space irrigation	No	Havilah Hostel (Retirement Home)	Large roof but marginal scheme: private property + uncertain NP demands + elevated health risks + existign tanks on site							
RW	Rainwater harvesting for garden or open space irrigation	No	Carisbrook Primary School	Collectively large roof area but fragmented and only one oval to irrigate							
RW	Rainwater harvesting for non-potable uses in buildings	No	Existing developments - residential	Basecase (high uptake of rainwater tanks in existing properties)							
RW	Rainwater harvesting for non-potable uses in buildings	Yes	New developments - residential	Possible policy position	36	99	-		3181	A. Common technology A. Implementable by policy A. Water supply augmentation	Low
RW	Rainwater harvesting for non-potable uses in buildings	No	Maryborough Sports & Fitness Centre	Large roof area but not a current top ten water user.							
RW	Rainwater harvesting for non-potable uses in buildings	No	True Foods	Large roof but marginal scheme: private property + uncertain NP demands							
RW	Rainwater harvesting for non-potable uses in buildings	No	Vault Self Storage	Large roof area but not a current top ten water user.							
RW	Rainwater harvesting for non-potable uses in buildings	No	Sutton Tools PTY Ltd	Large roof area but not a current top ten water user.							
RW	Rainwater harvesting for non-potable uses in buildings	No	McPhersons Printing Group	Large roof area but not a current top ten water user and existing tanks on site.							
RW	Rainwater harvesting for non-potable uses in buildings	No	Marborough District Health Service	Large roof but marginal scheme: private property + uncertain NP demands + elevated health risks + limited space available							
RW	Rainwater harvesting for non-potable uses in buildings	No	Maryborough Educational Centre	Large roof area, site dominated by synthetic open spaces, not a current top ten potabel water user (~5ML/yr), tanks already on site.							
RW	Rainwater harvesting for non-potable uses in buildings	No	Goldfields Shopping Centre	Large roof area but not a current top ten water user and very space constrained.							
RW	Rainwater harvesting for non-potable uses in buildings	No	Havilah Hostel (Retirement Home)	Large roof but marginal scheme: private property + uncertain NP demands + elevated health risks + existign tanks on site							
RW	Rainwater harvesting for non-potable uses in buildings	No	Carisbrook Primary School	Collectively large roof area but fragmented and site not a current top ten potable water user (<1.5ML/yr).							
RW	Rainwater harvesting for non-potable uses in buildings	No	Southern Cross Feeds	Large roof area but not a current top ten water user.							
RW	Rainwater harvesting for non-potable uses in buildings	No	Bryan Perry Pty Ltd	Large roof area but not a current top ten water user and multiple downpipes/roof structures.							
RW	Rainwater harvesting for hot water use in buildings	No	Existing developments - residential	Basecase (high uptake of rainwater tanks in existing properties)							
RW	Rainwater harvesting for hot water use in buildings	Yes	New developments - residential	Possible policy position	63	171	63		3181	A. Implementable by policy A. Water supply augmentation D. Complex plumbing D. Third party monitoring	High
RW	Rainwater harvesting for potable water use in buildings	No	Existing developments - residential	Basecase (high uptake of rainwater tanks in existing properties)							
RW	Rainwater harvesting for potable water use in buildings	No	New developments - residential	Regulatory barriers							
RW	Rainwater intercepted by green roofs	No	Hospital redevelopment?	No clear opportunities for planned new large roofs in strategic locations							
SW	Stormwater managed by vegetated device on-lot	Yes	New developments	Possible policy position		112	-	0.149	3181	A. Implementable by policy D. Uncommon element to deliver at small scale D. Householder maintenance	High
SW	Stormwater managed by vegetated device on-lot	Yes	Existing developments	Retrofit program		6	-	0.009	9123	D. Uncommon element to deliver at small scale D. Householder maintenance	High
SW	Stormwater managed by vegetated device in streets/carparks	Yes	New developments	Possible policy position		420	67	12	3181	A. Implementable through policy/design standards A. Inclusion with road construction	Low
SW	Stormwater managed by vegetated device in streets/carparks	Yes	Existing streets - town centre greening focus / road renewals	Passive irrigation / WSUD introduced with tree planting		57	9	1.575	12304	A. Planned works to introduce trees D. Possible design constraints	Low
SW	Stormwater managed by vegetated device in streets/carparks	Yes	Existing streets - retrofit	Retrofit into streets		57	9	1.575	615	D. Retrofit required D. Possible design constraints	Low
SW	Stormwater managed by vegetated device in streets/carparks	Yes	Clustered carparks of Woolworths, Maryborough Tyre Service, ALDI, Mitre10, Goldfields shopping centre, McDonalds	Permeability mitigate urban island and reduce SW generation		20	1	0.0252	12304	D. Retrofit required D. Possible design constraints	Low
SW	Stormwater managed by vegetated device in open space	No	New developments	Base case							
SW	Stormwater managed by vegetated device in open space	Yes	Bottom of Green St	Treatment of stormwater before release to creek in Carisbrook		24	-	0.03	500	A. May be an opportunity for gravity diversion D. Connection of multiple drains	Medium
SW	Stormwater managed by vegetated device in open space	Yes	Carisbrook Recreation Reserve			7	-	0.02	500	D. Lengthy inflow pipe	Medium
SW	Stormwater managed by vegetated device in open space	Yes	Jack Pascoe Reserve + Frank Graham Reserve			30	-	0.04	500	D. Diversion in road way	Low
SW	Stormwater managed by vegetated device in open space	Yes	JH Hedges Oval			29	-	0.04	500	D. Not Council land? D. Difficult diversion	Medium
SW	Stormwater managed by vegetated device in open space	Yes	MKM Oval / Ron Sinclair Reserve			76	-	0.09	500	A. Adjacent to Bet Bet Creek	Medium
SW	Stormwater managed by vegetated device in open space	Yes	Peel Street Oval + Cal Gulley Reserve			65	-	0.4	500	A. Adjacent to Drain	Low
SW	Stormwater managed by vegetated device in open space	Yes	Station Domain	Large open space, potential diversion of SW drain		97	-	0.6	12304	A. Adjacent to Drain	Low
SW	Stormwater managed by vegetated device in open space	Yes	Lake Victoria	Wetland to improve quality of SW entering Lake Victoria		460	-	2.7	12304	A. Economy of scale due to large treatment + catchment D. Retrofit required	Medium
SW	Stormwater managed by vegetated device in open space	Yes	Four Mile Creek near Whirrakee Dr	Treat stormwater in Maryborough North		320	-	2.0	500	A. Economy of scale due to large treatment + catchment D. Land acquisition D. Difficult diversion	High

SW	Stormwater managed by vegetated device in open space	No	Phillips Gardens	Limited / contested space							
SW	Stormwater managed by non-vegetated device on-lot	No		Vegetated options first preference for multiple benefits							
SW	Stormwater managed by non-vegetated device in streets/carparks	No		Vegetated options first preference for multiple benefits							
SW	Stormwater managed by non-vegetated device in open space	No		Vegetated options first preference for multiple benefits							
SW	Stormwater managed by detention device on-lot	No		Not recommended - significant flooding issues not due to intensification of urban areas							
SW	Stormwater managed by detention device in streets/carparks	No		Not recommended - significant flooding issues not due to intensification of urban areas							
SW	Stormwater managed by detention device in open space	No	New developments	Base case							
SW	Stormwater managed by detention device in open space	No	Carisbrook flood management works	Base case							
SW	Stormwater managed by detention device in open space	No	Maryborough South flood management works	Base case - detention basin has been included in Golf Course							
SW	Treated stormwater distributed to evapotranspiration fields	No		Lack of flow sensitive waterways to warrant option							
SW	Treated stormwater distributed to environmental flows in waterway	Yes	Tullaroop Creek	To be defined with Camille							
SW	Stormwater harvesting for open space irrigation/water feature	No	Lake Victoria	Base case							
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Carisbrook Recreation Reserve	Catchment too small, estimated demand 12 ML/yr		29	6	0.02	500	D. Lengthy inflow pipe D. New irrigation infrastructure	Medium
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Jack Pascoe Reserve + Frank Graham Reserve	Potential diversion of SW drain, Jack Pascoe is currently irrigated, potable demand = 4.6 ML/yr, estimated demand = 6.3 ML/yr. Frank Graham is not irrigated, estimated demand = 8.4 ML/yr.	7	36	7	0.04	500	D. Diversion in road way	Low
SW	Stormwater harvesting for open space irrigation/water feature	Yes	JH Hedges Oval	Potential diversion of SW drain. Currently irrigated, estimated demand = 9.3 ML/yr.	5	34	5	0.04	500	D. Not Council land? D. Difficult diversion	Medium
SW	Stormwater harvesting for open space irrigation/water feature	Yes	MKM Oval / Ron Sinclair Reserve	Potential diversion of SW drain. Not currently irrigated, estimated demand = 7.6 ML/yr.		83	6	0.09	500	A. Adjacent to Bet Bet Creek D. New irrigation infrastructure	Medium
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Peel Street Oval + Cal Gulley Reserve	Potential diversion of SW drain. Both not irrigated, Peel Street = 7.2 ML/yr, Cal Gulley = 6.0ML/yr.		76	9	0.4	500	A. Adjacent to Drain D. New irrigation infrastructure	Low
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Station Domain	Potential diversion of SW drain. Station Domain estimated demand = 5.0 ML/yr. Depot existing potable demand = 6.5 ML/yr potable demand, some rainwater tanks already installed.	4	108	8	0.6	12304	A. Adjacent to Drain	Low
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Lake Victoria	Transfer from victoria park to goldfields. Esitmted demand = 25ML/yr (5ha, 0.5m difference btw evaptran and rainfall.		470	13	2.7	12304	A. Economy of scale due to large treatment + catchment A. 50mm drawdown allows for 13ML supply => no storage costs. D. Lengthy pipe mains D. Retrofit required	Medium
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Four Mile Creek near Whirrakee Dr for Golf Club	Currently connected to recycled water network. Treat at Burns St.	11	340	11	2.0	500	A. Economy of scale due to large treatment + catchment D. Land acquisition D. Difficult diversion	Medium
SW	Stormwater harvesting for open space irrigation/water feature	Yes	Phillips Gardens	Potential diversion of SW drain. Currently irrigated, potable demand = 7.6 ML/yr, estimated demand = 11.4 ML/yr.	9		9		12304	A. Adjacent to Bet Bet Creek D. Retrofit required	Medium
SW	Stormwater harvesting for open space irrigation/water feature	No	Princes Park	Currently connected to recycled water network.							
SW	Stormwater harvesting for non-potable uses in buildings	No	Maryborough Sports & Fitness Centre	Potential diversion of SW drain, 4.2 ML/yr potable demand. Small internal demand.							
SW	Stormwater harvesting for non-potable uses in buildings	No	Marborough District Health Service	Potential diversion of SW drain, 13.1 ML/yr potable demand							
SW	Stormwater harvesting for supplementary potable supply	Yes	Harvest from Lake Victoria and distribution to goldfields then centenary		200		200	2.70	12304	A. Large buffer storages D. Lengthy pipe mains D. Complex diversion D. 900 L/s pump	Medium
SW	Stormwater harvesting for supplementary potable supply	Yes	North Maryborough harvest and transfer to Centenary via goldfields		400		400	4.00	12304	A. Large buffer storages D. Lengthy pipe mains D. Complex diversion D. 2000 L/s pump	Medium
SW	Stormwater harvesting for agricultural irrigation (greenhouses)	Yes	Assuming greenhouses within or near study area	Agricultural demands to be confirmed	48	130	48	5	100	D. Land need D. Quality may not be suitable without potable standard treatment	Medium
SW	Stormwater harvesting for agricultural irrigation (land)	Yes	Irrigation land to the north	Agricultural demands to be confirmed		542			20	A. Quality suitable for irrigation D. Potentially high cost to get it into a useable location D. Storage needed to buffer supply and demand near irrigation areas	Medium
WW	Wastewater managed by class B treatment device	No		As 100% WW not discharged to waterway, treatment upgrades considered based on reuse							
WW	Wastewater managed by class A treatment device	No		As 100% WW not discharged to waterway, treatment upgrades considered based on reuse							
WW	Treated wastewater distributed to lake or water feature	Yes	Lake Victoria	Potential connection to RW pipe as top up			15		12304	D. Class A & nutrient removal and biosolids mgt \$\$\$	High
WW	Treated wastewater distributed to lake or water feature	Yes	Phillips Gardens	Potential connection to RW pipe. Estimated demand 11.4ML/year to fill lake	11.4		11.4		12304	D. Class A & nutrient removal and biosolids mgt \$\$\$	High
WW	Treated wastewater distributed to lake or water feature	Yes	Goldfields Reservoir	Potential connection to RW pipe. Estimated demand = 25ML/yr (5ha, 0.5m difference btw evaptran and rainfall.			25		12304	D. Class A & nutrient removal and biosolids mgt \$\$\$	High
WW	Treated wastewater distributed to land	No		Base case							
WW	Treated wastewater distributed to evapotranspiration fields	No		Considered same as land							
WW	Treated wastewater distributed to environmental flows in waterway	No		Discharge of wastewater to waterways not compliant with EPA conditions							
WW	Treated wastewater harvesting for open space irrigation	No	Maryborough Golf Course	Base case							
WW	Treated wastewater harvesting for open space irrigation	No	Princes Park	Base case							
WW	Treated wastewater harvesting for open space irrigation	Yes	Extension to food cluster	Branch off existing. Estimated demand 4ML/year			4	1	500	D. High cost of infrastructure for small demand D. Salinity issues D. Some demand currently unirrigated	Medium
WW	Treated wastewater harvesting for open space irrigation	Yes	Extention to station domain	Branch off existing. Estimated demand 5ML/year			4	1	12304	D. High cost of infrastructure for small demand D. Salinity issues D. Some demand currently unirrigated	Medium
WW	Treated wastewater harvesting for open space irrigation	Yes	California Gully Recreation Reserve (6ML, currently unirrigated), Peel Street Reserve (7.3ML, currently unirrigated), Education Precinct (perhaps 15ML, currently unirrigated, may be synthetic)	Recycled water ring main - phase 1			28.3	3	1000	D. High cost of infrastructure for small demand D. Salinity issues D. Some demand currently unirrigated	Medium
WW	Treated wastewater harvesting for open space irrigation	Yes	Velodrome (6ML, currently unirrigated), MKM oval (7.6ML currently unirrigated), Hedges Oval (9.3ML irrigated)	Recycled water ring main - phase 2	9.3		22.9		1000	D. High cost of infrastructure for small demand D. Salinity issues D. Some demand currently unirrigated	Medium
WW	Treated wastewater harvesting for open space irrigation	Yes	Highview college (4ML, currently partially irrigated (1.1)), pascoe reserve (6.3, irrigated), frank graham oval (8.4, currently unirrigated)	Recycled water ring main - phase 3	6.3		15.8		1000	D. High cost of infrastructure for small demand D. Salinity issues D. Some demand currently unirrigated	Medium

WW	Treated wastewater harvesting for open space irrigation	Yes	New developments	Expanding the recycled water network - residential (recreational areas). Assume 5ML demand.			5	1	1489	D. High cost of infrastructure for small demand D. Salinity issues D. Scale of development unlikely to support Class A system	Medium
WW	Treated wastewater harvesting for open space irrigation	Yes	Non-potable collection point	For council use at depot - near station domain. Assume 5ML use.	5		5	0	500	D. High cost of infrastructure for small demand D. Salinity issues	High
WW	Treated wastewater harvesting for non-potable uses in buildings	Yes	Maryborough Depot	Potential extension of RW pipe, 6.5 ML/yr potable demand	6.5		0	0	200	D. High cost of infrastructure for small demand D. Salinity issues	High
WW	Treated wastewater harvesting for non-potable uses in buildings	Yes	Reduced salinity supply to golf club, princes park and station domain/depot		18		22	1	12304	D. RO plant required D. Brine disposal	Low
WW	Treated wastewater harvesting for non-potable uses in buildings	No	SONAC	Needs further investigation, but I think it is unlikely as Sonac will want potable water for blood processing, and if recycled water is going to be used for cooling, there could be issues due to salinity and pathogens on equipment							
WW	Treated wastewater harvesting for non-potable uses in buildings	No	Marborough District Health Service	Class A - would require upgrade. Difficult to access non-potable demand							
WW	Treated wastewater harvesting for non-potable uses in buildings	No	New developments	Class A - would require upgrade							
WW	Treated wastewater harvesting for non-potable uses in buildings	No	Havilah Hostel (Retirement Home)	Class A - would require upgrade. Difficult to access non-potable demand							
WW	Treated wastewater harvesting for agricultural irrigation (greenhouses)	No		Not recommended due to class A upgrade required							
WW	Treated wastewater harvesting for agricultural irrigation (land)	No		It's a possibility, but salinity is a key problem. Best next option in addition to current irrigation of WWTP farm and Freemantle is Ipsen property, which is adjacent to Freemantle and would/could be supplied from the Bet Bet Storage. This farm is favoured due to favourable soils (i.e. good leaching potential), which can help to combat salinity issues							
SW+WW	Shandied treated wastewater and treated stormwater for local uses	Yes	Golf club and northern demands	Mixing in north Maryborough/ Lake Victoria for distribution.	25	156	55	2.0	2500.0	A. Local source in northern area D. Additional land needed for recycled water displaced	Medium
Raw water	Raw water distributed to lake or water feature	Yes	Goldfields reservoir + Phillips Gardens + Lake Victoria	Centenial reservoir to Goldfields reservoir. Not considered due to impact on potable supply			41		12304	A. Possible to use main drain for distribution D. Use of potable source water	Medium
Raw water	Raw water distributed for open space irrigation	No		Centenial reservoir to non-potable ring main. Not considered due to impact on potable supply							
Raw water +	Shandied raw water + treated wastewater for northern uses	Yes	Golf club and northern demands				55		2500	A. Reduced salinity management A. Use existing distribution network D. use of potable source water	Low
Raw water +	Shandied raw water + treated wastewater for agriculture	Yes	To northern agriculture (90ha)					36	50	A. Reduced salinity management A. Use existing distribution network D. use of potable source water	Low
Saline water	Saline water distributed to lake or water feature	No		Salt reduction plant saline water to goldfields reservoir. Considered inappropriate to introduce to a freshwater environment							
Waterways	Waterway improvement, amenity and access	Yes	Main drain - maryborough	Improved amenity and planting				4	12304	A. In keeping with council priorities for investment D. Heritage limitations to waterway improvement works	Low
Waterways	Waterway improvement, amenity and access	No	Drainage corridors - Carisbrook	Not a focus compared with other opportunities for amenity							
Waterways	Waterway improvement, amenity and access	No	Main drain - maryborough	Daylighting of north east underground tributary. Not feasible due to limited catchment and flow							
Waterways	Waterway improvement, amenity and access	Yes	Tullaroop Creek (Deep Creek)	Revitalisation of Bland Reserve on Tullaroop Creek				0.25	500	A. Site established D. May be difficult to access drain / significant stormwater	Low
Waterbody	Carisbrook reservoir improvement	No	Carisbrook Reservoir	Revitalisation of Carisbrook Reservoir - not feasible - decommissioned and damaged							

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## Attachment 3 – Rainfall Analysis

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The 6 minute rainfall gauge at Natte Yallock was selected as an appropriate reference station to model rainfall in Maryborough due to the quality and quantity of data available. It is recognized that while every effort was made to choose a period that aligns with the long term mean annual average with the best quality data available, there are some gaps in the rainfall records as well as periods of accumulated data. It has been found that reuse predictions, analysis of inundation frequency and wetting and drying spells and flow frequency can be more sensitive to larger proportions of missing and accumulated data.

To address this, a patched point data set was developed for the rainfall station and period proposed. The procedure for developing the patched point rainfall data sets generally follows that described by SILO for preparation of the daily patched point data sets it makes available (Jeffrey et. al., 2001). Missing or suspect values are 'patched' with data from a nearby rainfall station. The approach recognizes that proximity is not always a good indicator of similarity. Therefore, the correlation between stations is used as the primary indicator of similarity. Under this approach, the station with the highest correlation to the target station is used to infill data first, then if data is not available the next station is adopted and so forth. For the 6 minute data, both missing data and accumulated data are infilled as follows:

- Missing data is replaced with data from the station with the highest correlation with data for that day.
- Accumulated data occurs where a daily rainfall total is available but no 6 minute distribution. The daily total is averaged across the whole day resulting in a correct total but an underestimate of rainfall intensity since rainfall typically occurs over a small portion of a day. Accumulated data is infilled by using the daily total for the target rainfall station and the 6 minute distribution from the station with highest correlation with data for that day.

The data for the reference station and period was infilled with details reported below.

### **Infilling of Rainfall Data**

The Narre Yallock rainfall gauge was infilled with the stations listed in Table A71. It can be seen in Figure A71 that the data quality across the whole period improves with the proportion of missing data reducing from 4% to 0% and accumulated data from 2% to 1%.

Table A71 - Rainfall stations used for correlation

Rainfall Station	Correlation
88009	0.77
81026	0.76
89111	0.74
89082	0.67
89002	0.66

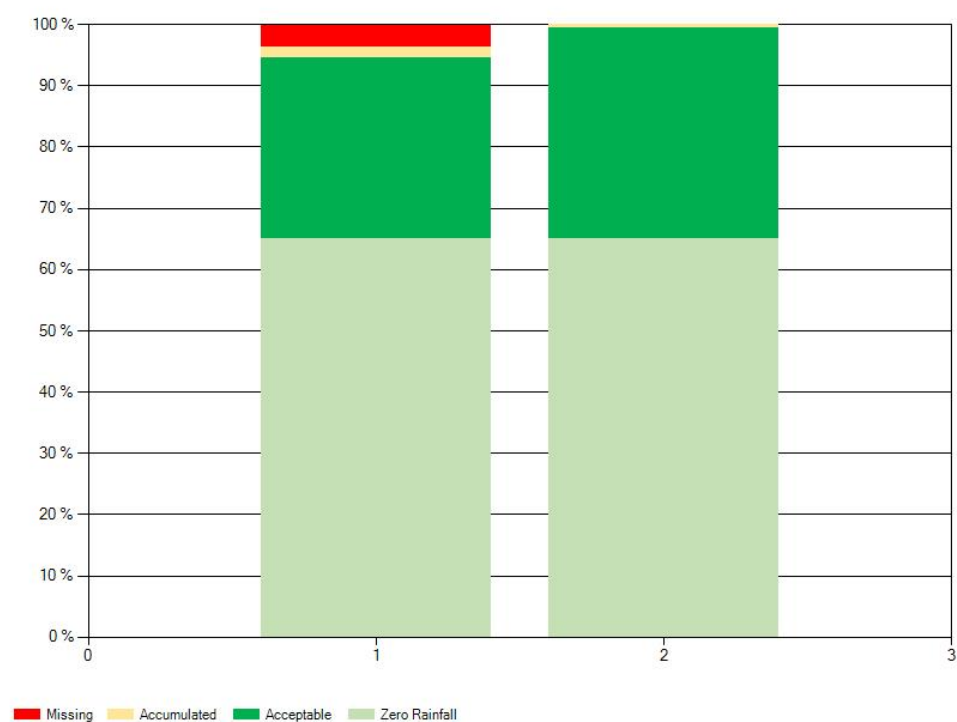


Figure A71 Natte Yallock rainfall data quality before and after infilling

Table A72 shows the impact of infilling data on the current 10 year reference period (1988-1997). In this period, the proportion of accumulated is reduced by 1% and missing data reduced by 4%.

Table A72 Effects of infilling on 1988-1997 period rainfall data quality

	1988-1997		
	Initial	Infilled	Target
Zero rain days	65%	71%	
Acceptable data days	25%	28%	

Accumulated data days	2%	1%	
Missing data days	8%	0%	
Mean annual rainfall (mm/year)	441	495	501

The target mean annual rainfall was calculated based on the weighted average of all daily rainfall stations within a 35km radius of Maryborough. Weighting was determined considering the number of years of data available at each gauge station.

The results indicate that the proportion of missing data is significantly reduced and accumulated data days are slightly reduced due to infilling of the data set. Therefore it is recommended that the Natte Yallock 1988-1997 reference period be used to model rainfall for the township of Maryborough.

### Summary of outcomes

Based on the analysis, it is proposed that the infilled Natte Yallock 1988-1997 rainfall template is adopted to model rainfall in Maryborough with Ballarat Monthly Areal PET. The proposed rainfall template is summarised in Table A73.

Table A73 Rainfall template for Maryborough

Rainfall station	Period	Target mean annual rainfall	Period mean annual rainfall	% accumulated	% missing
81038 Natte Yallock	1988-1997	501	495	1%	0%

### References

Jeffrey, S.J., Carter, J.O., Moodie, K.B. and Beswick, A.R. (2001). [Using spatial interpolation to construct a comprehensive archive of Australian climate data](#), *Environmental Modelling and Software*, Vol 16/4, pp 309-330. DOI: 10.1016/S1364-8152(01)00008-1.



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## Attachment 4 – Scored Assessment

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The economic assessment describes above provides an assessment framework to compare project costs and performance over a lifecycle. In some cases, benefits and dis-benefits are not easily evaluated in monetary terms and cannot be included in an economic assessment. To recognise the full range of objectives set for the project in the assessment, a dual assessment has been conducted, whereby key performance indicators across all objectives have been assessed using:

- A quantitative analysis, where possible, whereby performance of options is compared based on the relative performance of measured indicators out of a score of 10 (though these are not monetized); and
- Where a quantitative analysis is not possible, indicators are scored based on a qualitative judgement of relative performance.

A scoring framework of quantitative and qualitative indicators has been developed and a preliminary assessment has been made. The scored assessment is summarised against the three objective themes.

*Note: The scored assessment only evaluates benefits, and does not compare these to costs of projects. The economic analysis is a much superior platform to compare economic costs and benefits. The scored benefits instead highlight overall performance against the range of key objectives, and highlights objectives which aren't evaluated by the economic analysis.*

Quantified Indicators	Indicator	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
A Resilient Water Cycle	Water supplied in place of mains potable supply (ML/year)	49	0	0	0	4	10	45	263	73
	Urban excess stormwater removed (ML/year)	49	9	0.4	29	9	42	153	284	0
	Recycled water use enabled by salinity reduction (ML/year)	0	0	0	0	0	0	90	0	146
	Additional fit-for-purpose water supplies created (ML/year)	49	9	0.4	0	8	10	45	263	-73
Healthy landscapes and waterways	Pollution removed from waterways (kg Total Nitrogen/year)	137	106	6	333	225	365	473	720	0
	New irrigated green area created (m2)	0	20966	708	0	20000	20000	0	0	0
	Healthy waterbody area maintained or created (ha)	0	0	0	5	0	5	2	6.8	0
A prosperous community and economy	Number of community users (no. of people)	3181	3181	12304	12304	12304	12304	3000	0	3000
	Amenity and place-making benefit (relative judgement)	0	8	8	7	6	10	2	5	0
	Educational benefit (relative judgement)	8	3	3	5	3	6	1	3	1
	Health and well-being benefit (relative judgement)	0	6	8	6	8	10	0	4	0
Scaled Score	Indicator	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
A Resilient Water Cycle	Water supplied in place of mains potable supply (ML/year)	2	0	0	0	0	0	2	10	3
	Urban excess stormwater removed (ML/year)	2	0	0	1	0	1	5	10	0
	Recycled water use enabled by salinity reduction (ML/year)	0	0	0	0	0	0	6	0	10
	Additional fit-for-purpose water supplies created (ML/year)	2	0	0	0	0	0	2	10	-3
Healthy landscapes and waterways	Pollution removed from waterways (kg Total Nitrogen/year)	2	1	0	5	3	5	7	10	0
	New irrigated green area created (m2)	0	10	0	0	10	10	0	0	0
	Healthy waterbody area maintained or created (ha)	0	0	0	7	0	7	3	10	0
A prosperous community and economy	Number of community users (no. of people)	3	3	10	10	10	10	2	0	2
	Amenity and place-making benefit (relative judgement)	0	8	7	7	6	10	2	5	0
	Educational benefit (relative judgement)	8	3	3	5	3	6	1	1	1
	Health and well-being benefit (relative judgement)	0	6	10	6	8	10	0	4	0
Total Score		19	31	30	41	40	59	30	60	13

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## Attachment 5 – Option 7 Alternatives

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Two variations of Option 7 were examined in order to test alternative sites, demands, technologies and opportunities for cost savings. These include:

- **Option 7b:** Stormwater harvesting from Northern Sediment Basin to shandy recycled water supply
- **Option 7c:** Stormwater harvesting from Wetland at Maryborough STP to shandy recycled water supply

## Option 7b: Stormwater harvesting from Northern Sediment Basin to shandy recycled water supply

### Description

Option 7 includes a large regional wetland adjacent to Four Mile Creek on the northern outskirts of Maryborough. This wetland could treat a large portion of polluted urban stormwater runoff from the town, providing stormwater for reuse, as well as pollutant load reductions and habitat. To reduce the cost of this option the wetland could be replaced with a smaller sediment pond. The sediment pond would remove coarse sediments from diverted stormwater. Treated stormwater would be transferred to existing storages at the golf storage (~1 ML) and then shandied with recycled water network via a mixing tank prior to restricted reuse.

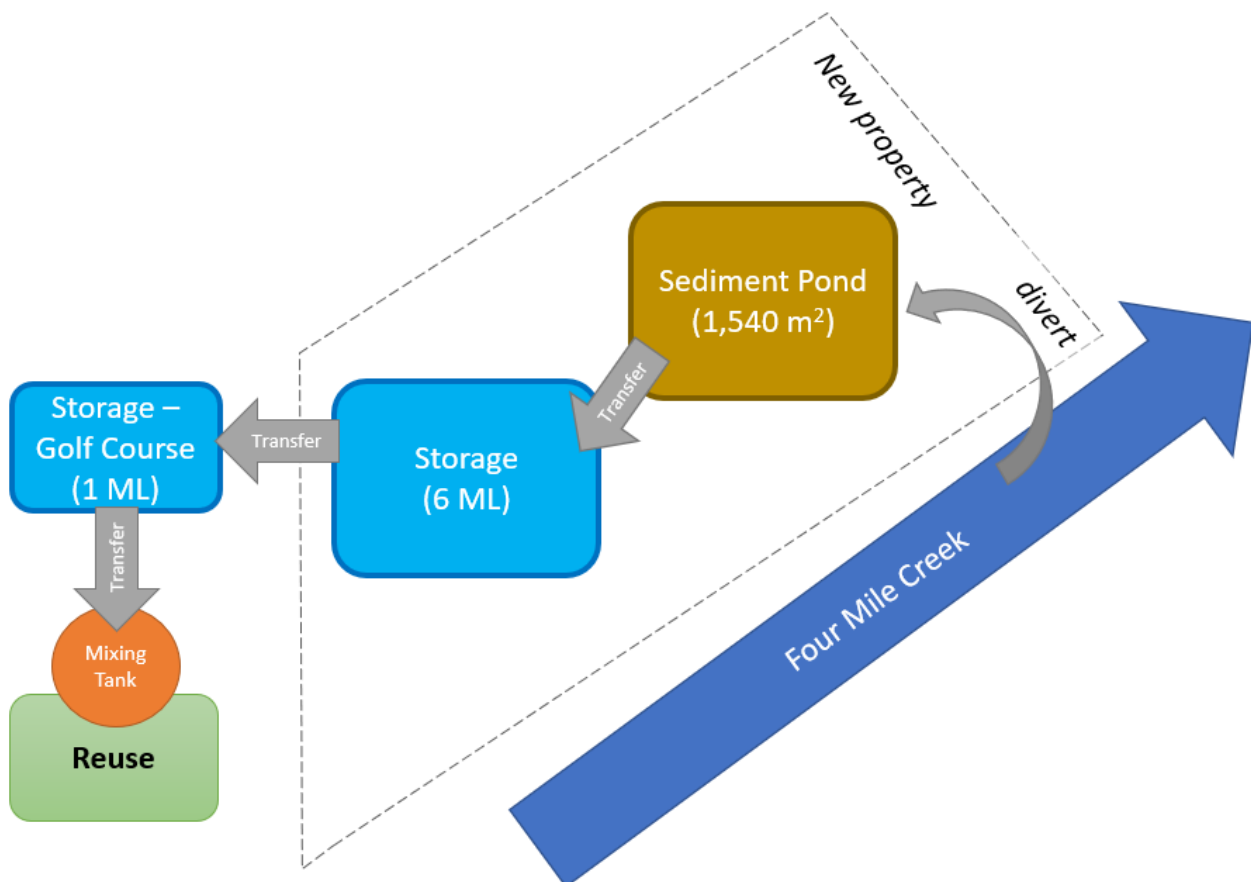


Figure A51: Schematic of storage and wetland adjacent to Four Mile Creek

### Key analysis assumptions and infrastructure requirements

The Northern Wetland system requires:

- A 1,400 ha (22% imperviousness) catchment with a 100L/s low flow bypass and gravity or pumped diversion with a capacity of 400 L/s.
- A gross pollutant trap upstream of the wetland.

- Purchase of private land to construct a treatment and reuse system (assumed the same area as for Option 7).
- Total sediment pond treatment area of 1,540m<sup>2</sup> (surface area) and 2,800 m<sup>3</sup> (volume).
- A storage pond with a 7,000 ML capacity (New = 6 ML, Existing at golf course = 1 ML)
- 200m of 225mm transfer pipework (wetland to shandy location).
- The demand for stormwater for shandy = 55 ML/yr (seasonal). This is lower than the demand in Option 7 as it assumes a 1:1 supply of Stormwater to Recycled Water. The salinity of the stormwater diverted from Four Mile Creek needs to be monitored in order to verify that it can be mixed with recycled water at a 1:1 ratio.
- The supply of stormwater for shandy = 38.3 ML/yr (70% reliability) with the shortfall made up with potable water.

### Cost summary

Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$296,452	\$3,867
	Electrics and power	\$40,250	\$0
	GPT	\$86,834	\$1,650
WSUD	Treatment + Storage Pond	\$918,779	\$21,196
	Establishment	\$112,881	\$0
Other Items	Item 1: Transfer mains	\$137,880	\$962
	Item 2: Land acquisition	\$230,847	\$0
<b>Total</b>		<b>\$1,823,924</b>	<b>\$27,675</b>

### Key Benefits

A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"> <li>• <b>Supporting sustainable recycled water use:</b> By using stormwater as a source for shandying recycled water it will enable ongoing use of recycled water for irrigation.</li> <li>• <b>New water supplies:</b> The scheme would harness 38ML/year of stormwater to support local needs.</li> <li>• <b>Reduced 'urban excess' stormwater flows:</b> Stormwater flowing from urban areas will reduce by 40ML/year.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 470kg/year of nitrogen by the end of the plan period.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>

## Option 7c: Stormwater harvesting from Wetland at Maryborough WSP to shandy recycled water supply

### Description

There is an opportunity to construct a large regional wetland at the Maryborough Sewage Treatment Plant (STP). This wetland could treat a large portion of polluted urban stormwater runoff from the town and would make use of existing land and storage (via retrofits of existing lagoon(s)) owned by Central Highlands Water. Treated stormwater could be harvested from the wetland to shandy with recycled water prior to reuse. Option 7b requires diversion of stormwater from a 'natural' section of Four Mile Creek, this contrasts Option 7 which diverts stormwater from an already modified / channelized section of the creek closer to the town.

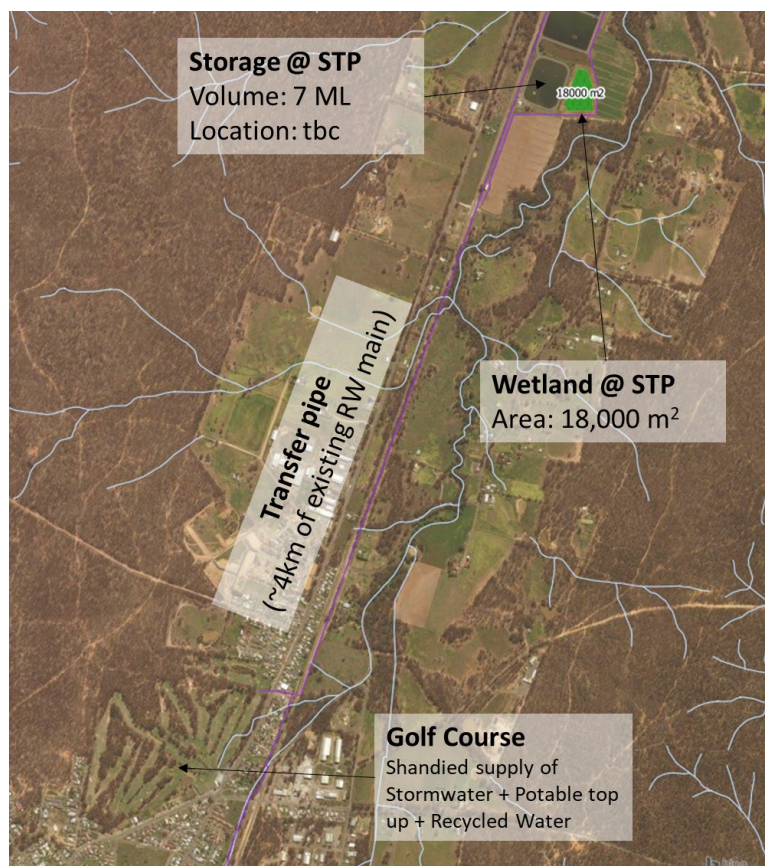


Figure A52: Schematic of storage and wetland adjacent to Four Mile Creek

### Key analysis assumptions and infrastructure requirements

The Northern Wetland system requires:

- A 1,400 ha (22% imperviousness) catchment with a 100L/s low flow bypass and gravity or pumped diversion with a capacity of 400 L/s.
- A gross pollutant trap upstream of the wetland.



- Total treatment area of 18,000m<sup>2</sup> consisting of a 1,800m<sup>2</sup> sediment pond and 16,200m<sup>2</sup> wetland.
- A wetland with a 350mm permanent pool and 350mm extended detention depth.
- A storage pond with a 7,000 ML capacity. A nominal \$110,000 has been included in the cost estimate to allow for the retrofit of existing lagoons at the Sewage Treatment Plant for use in the scheme.
- The demand for stormwater for shandy = 55 ML/yr (seasonal). This is lower than the demand in Option 7 as it assumes a 1:1 supply of Stormwater to Recycled Water, ignoring potable top up. The salinity of the stormwater diverted from Four Mile Creek needs to be monitored in order to verify that it can be mixed with recycled water at a 1:1 ratio.
- The supply of stormwater for shandy = 40 ML/yr (73% reliability) with the shortfall made up with potable water.

### Cost summary

Item		Capital Cost (\$)	Operating Cost (\$/yr)
General Infrastructure	Pumps	\$296,452	\$3,867
	Electrics and power	\$40,250	\$0
	GPT	\$86,834	\$1,650
WSUD	Treatment + Storage Pond	\$1,876,168	\$17,684
	Establishment	\$71,180	\$0
Other Items	Item 1: Lagoon retrofit	\$115,000	\$0
<b>Total</b>		<b>\$2,485,883</b>	<b>\$23,201</b>

### Key Benefits

A resilient water cycle	Healthy landscapes and environment	A prosperous community and economy
<ul style="list-style-type: none"> <li>• <b>Supporting sustainable recycled water use:</b> By using stormwater as a source for shandying recycled water it will enable ongoing use of recycled water for irrigation.</li> <li>• <b>New water supplies:</b> The scheme would harness 40ML/year of stormwater to support local needs.</li> <li>• <b>Reduced 'urban excess' stormwater flows:</b> Stormwater flowing from urban areas will reduce by 148ML/year.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Water Quality:</b> Pollutants will be removed from runoff and therefore from waterways. The proposal will remove 470kg/year of nitrogen by the end of the plan period.</li> <li>• <b>New green infrastructure:</b> A new wetland will be created in Maryborough north which could be a valued ecological asset.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>



# Maryborough IWM Economic Analysis

Central Highlands Water  
November 2018

## 1 Introduction

This report details the economic analysis undertaken to support the Maryborough Integrated Water Management (IWM) project. The study involved an economic analysis from a 'whole of society' perspective, and a distributional analysis that considered which entities might benefit from the investment, and which might pay.

The economic analysis undertaken for the Maryborough IWM is a marginal Cost Benefit Analysis assessment. This means that for each option, changes in costs and benefits compared to the base case were estimated in the analysis.

The base case is defined as 'business as usual' servicing for water and wastewater services, and stormwater quality management reflecting Best Practice Environmental Management (BPEM) standards. Under this base case, an estimated 30 per cent of dwellings have rainwater tanks, in order to meet building code requirements.

The CBA took into account capital, operating and renewal expenditure over a 50 year period. It also considered a number of economic benefits accruing to different parties.

Benefits and costs are identified and allocated across the 50 year analysis time period, and discounted to current year values using a 4.5 per cent real discount rate (the Victorian Water Sector Weighted Average Cost of Capital WACC).

Sensitivities of these and other assumptions were also tested.

## 2 Project costs

The analysis considered all relevant costs of each project option explored in the analysis, including upfront capital costs, ongoing operating and maintenance costs, and any renewal costs incurred within the 50-year assessment timeframe.

Table 1 provides the full costs of each project, discounted to present day dollars.

**Table 1: Present value costs per option, 4.5% real discount rate, 50 years<sup>1</sup>**

OPTION	PV TOTAL COST
Option 1	\$2,537,710
Option 2	\$586,132
Option 3	\$212,208
Option 4	\$4,704,447
Option 5	\$1,783,513
Option 6	\$4,863,345
Option 7	\$4,463,345
Option 8	\$15,670,883
Option 9	\$1,165,580

## 3 Benefit description

The project team has adopted a 'whole of society' perspective for the analysis, considering benefits to all society members, including Central Highlands Water, local residents, broader society (particularly for environmental benefits), along with industrial and agricultural users.

We discuss these in turn.

### 3.1 POTABLE SUBSTITUTION

Some projects produce a supply of water that would substitute for water from the potable network. This may be from producing additional water for the potable network, or from producing a non-potable supply that replaces water from the potable network.

This value is calculated at the avoided costs to the water supply network. Depending upon the option and its impacts on the system, this could include:

- Avoided transfer cost within the local system
- Avoided potable treatment cost
- Deferral of augmentation: an augmentation of the local system is scheduled for 2025. This is expected to be connection to the Superpipe, which will also require the purchase of additional 500ML of entitlement.

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<sup>1</sup> Source: project team analysis

Alternatively, it may prove possible to augment the local groundwater supplies by an additional 500ML of groundwater entitlement. We consider both of these options.

Key potable substitution assumptions and data inputs are summarised in Table 2.

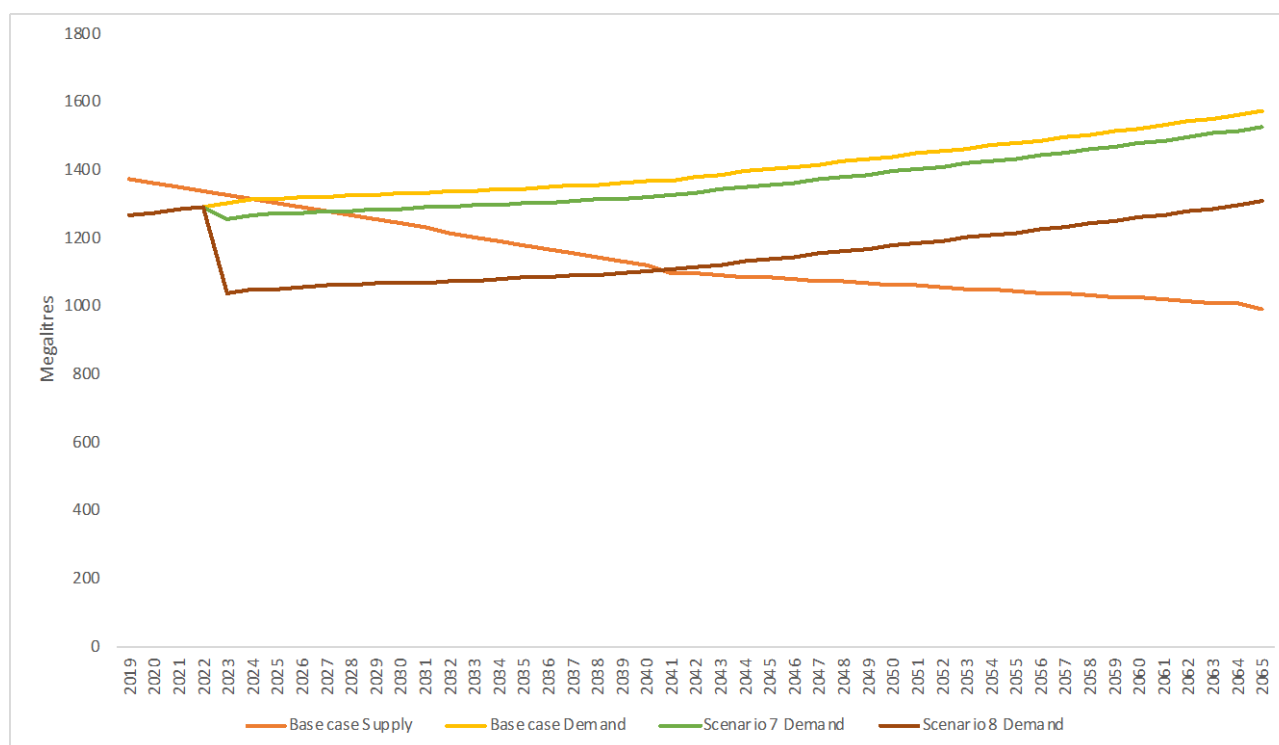
**Table 2: Potable substitution inputs and assumptions**

KEY INPUTS	PRICE	VOLUME (ML)	SOURCE / NOTE
Groundwater entitlement purchase cost (\$/ML)	\$2,000	500	Personal communication, Pat Russel, CHW
Raw water supply (\$/ML)	\$79		Source: CHW, average transfer cost of Tullaroop 'good' and 'fair'
Raw water supply (Superpipe)	\$150		Source: CHW, assumes Forward Flow from Sandhurst Reservoir
Raw water supply (Moolort groundwater)	\$111		Source: Central Highlands Water
Purchase for raw water supply (Option 9)	\$200,000		Assumes 100ML entitlement (73ML delivered each year), purchased in first year
System augmentation year	2024		1 year before demand exceeds supply under median climate change scenario
Avoided opex before first augmentation	\$524		Source: CHW, average treatment and transfer cost of Tullaroop 'good' and 'fair'
Avoided opex after augmentation groundwater	\$543		Source: CHW (Moolort groundwater costs)
Avoided opex after augmentation superpipe	\$549		Source: CHW, comprised of Forward Flow from Sandhurst Reservoir (\$150/ML) and potable treatment cost (\$399.12/ML)
Capital cost augmentation groundwater	\$1,000,000	500	Personal communication, Pat Russel, CHW
Capital cost augmentation superpipe	\$18,083,000	500	Personal communication, Pat Russel, CHW. Includes purchase of 500ML surface water entitlement at \$2,000/ML

### 3.1.1 AUGMENTATION DEFERRAL

Options 7 and 8 produce larger volumes of potable substitution, and thus can defer the augmentation planned for 2025.

As can be seen in Figure 1, in the case of Option 7 the deferral is three years. However, for Option 8 which produces an additional 263ML/year in local potable supplies, this defers the need for the next system augmentation by 16 years. If the next augmentation is the Superpipe connection, costing over \$18m, this produces significant cost savings to CHW and its customers.



**Figure 1: Supply / demand balance, adjusted for Option 7 and Option 8**

### 3.2 POLLUTION ABATEMENT FROM WATERWAYS

Several of the projects remove pollution from waterways, which can enhance both the aesthetics of the waterway and their ecosystem health. Stormwater pollution from urban runoff has contains a range of pollutants that are harmful to waterways. These can be treated a number of ways, including wetlands, Bioretention, swales and rainwater tanks.

In regard to estimating the value of stormwater pollution abatement, Melbourne Water has an offset scheme for stormwater pollution, which uses Nitrogen as the indicator pollutant. The Melbourne Water offset scheme currently values nitrogen abatement at a capitalised value of \$7,226 per kilogram of nitrogen, reflecting the cost of wetland treatment in Melbourne.

There are a number of reasons why use of this value is imperfect for use in Maryborough:

- Nitrogen abatement was originally targeted in Melbourne to address a threshold in nitrogen identified for Port Phillip Bay. It was subsequently recognised that waterway health was also improved by wetland treatment of stormwater.
- The cost of wetland treatment in Maryborough will be significantly less expensive than in Melbourne, where high land value contributes to the cost of wetland construction.
- Cost does not necessarily reflect benefit.

In Maryborough, there appears to be no pressure from the EPA to improve waterway health, suggesting that pollution load may be less pressing in the Melbourne catchments. For the above reasons, a stormwater value of 50 per cent of the current Melbourne Water nitrogen offset value has been adopted for this project (\$3,613/kg capitalised). This is consistent with similar recent work in Ballarat.

### 3.3 COMMUNITY WILLINGNESS TO PAY – NON-USE VALUE

There is evidence that the broader community would be willing to pay (WTP) more in water bills for increased wastewater recycling. No direct study of the community WTP for wastewater and stormwater recycling over alternative water supplies in the Maryborough context has been undertaken.

However, a recent study<sup>2</sup> explored the community willingness to pay for increased water recycling by surveying a statistically significant sample of Sydney water customers and exploring their WTP for higher water bills in return for more recycling to be used by others (industrial, municipal, residential, environmental flows). The results found strong and consistent WTP for more recycling, estimated at between \$450 and \$1220 per ML.

While this is a rigorous and defensible economic non-use value, transferring this value to the current study requires significant caveats. The original study explored recycled water only, although there is no reason to expect that the community would preference wastewater recycling before stormwater reuse. The original study was undertaken in Sydney, while our context is in Maryborough.

As such, we take a conservative assumption of 50% of the lower value of the range for each type of use produced in the analysis, from \$819 to \$1,132/ML. All options that involve public open space irrigation (including street trees and green space) receive a WTP value of \$819/ML, and Option 5 which produces stormwater for industrial reuse receives a WTP value of \$1,132/ML.

**Table 3: Community Willingness to pay values (\$/ML)**

TYPE OF ALTERNATIVE WATER USE	VALUE USED IN ANALYSIS (\$/ML)
Commercial	\$1,132
Public Open Space	\$819

### 3.4 VALUE OF INCREASED TREE CANOPY COVER – RESIDENTIAL AND COMMERCIAL PROPERTY VALUE

There is a large body of research linking the size, quality and health of street trees and property price increases. In this case, the size of the street tree canopy on property-adjacent public open space (street verges) is positively correlated with increased property prices.

Pandit et al (2014)<sup>3</sup> found in a study of public and private tree canopy that increasing street tree canopy from a starting point of 20 per cent of coverage by a further 10 per cent (a 50 per cent increase), produced a property price increase of around 1.8 per cent of the median property price.

For this study, residential street tree canopy starts from a lower base (5 per cent of coverage), and increases to 18 per cent over coverage. This is a 360 per cent increase.

We conservatively apply the value from the original study, reduced to 75 per cent of this value in the interests of conservatism.

<sup>2</sup> Australian Water Recycling Centre of Excellence. 2013. The Economic Viability of Recycled Water Projects. Figures updated to 2017 using CPI

<sup>3</sup> Pandit, R., Polyakov, M. and R. Sadler, 2014. Valuing public and private urban tree canopy cover, Australian Journal of Agricultural and Resource Economics (2014)



We also apply this to the average house price in Maryborough, estimated at \$225,000, producing a value per street tree of \$3,038.<sup>4</sup>

There is less research that has explored this type of effect in the commercial setting. Clearly, it can be expected that a similar effect will take place. However, the value impact may indeed be larger (if the commercial setting has high use and aesthetics or shading are important factors), or smaller (if the opposite is true).

In the absence of credible evidence specifically tailored to the commercial context, we adopt the value per tree estimated in the residential setting: \$3,038 per tree.

For both options, we defer the value of street tree improvement by five years (as the benefits of the investment will not be evident until the trees mature).

### 3.5 AESTHETIC VALUE OF IMPROVEMENTS TO LAKE VICTORIA

One option involves stormwater treatment through constructed wetlands in Lake Victoria, that would be accompanied by community assets such as boardwalks. Lake Victoria is a significant community asset, and a drawcard for visitation (the caravan park is situated on the lake, and many positive comments about the lake are posted to tourism sites).<sup>5</sup>

Studies have been undertaken that seek to quantify the 'recreation' value of high value recreation sites in Victoria,

Establishing the economic value of recreational use requires an economic estimate of recreation value. A number of studies have estimated the economic value of recreation in Victorian parks and other sites, using the Travel Cost Method. Table 4 presents three consumer surplus values for recreation, which are suitable for use in cost benefit analysis. The values are updated to 2018 dollars, and an average estimated which is used in this analysis.

**Table 4: Economic value of recreation<sup>6</sup>**

VALUE ESTIMATES	YEAR	2018
\$2.91	1999	\$4.83
\$2.86	1999	\$4.75
\$3	2000	\$4.98
Average		\$4.85

Council estimates that 30,000 visitors from outside the local area come to visit the lake in a given year and local residents contribute 60,000 additional visits per year.

If the improvements to the water quality and aesthetics of the lake increase visitors' value by only 10 per cent per visit, this produces an additional \$43,650 in economic value per year.

<sup>4</sup> <https://www.realestate.com.au/neighbourhoods/maryborough-3465-vic>

<sup>5</sup> [https://www.tripadvisor.com.au/Attraction\\_Review-g488324-d9975818-Reviews-Lake\\_Victoria-Maryborough\\_Victoria.html](https://www.tripadvisor.com.au/Attraction_Review-g488324-d9975818-Reviews-Lake_Victoria-Maryborough_Victoria.html)

<sup>6</sup> Source: <http://ageconsearch.umn.edu/bitstream/124541/2/Read.pdf> (access 10 September 2018)

### **3.6 VALUE OF ADDITIONAL IRRIGATION OF GREEN SPACE**

Some options in this study add irrigation to areas of urban green space, that would not be irrigated in the base case. There is no credible study to draw on to estimate the value of green space irrigation (that is, the change in value produced from irrigation compared to unirrigated green space).

In the absence of this, we estimate the value at the replacement cost of potable irrigation, acknowledging that this is an imperfect measure.

### **3.7 AVOIDED POTABLE TREATMENT COST**

Option 8 replaces the use of potable water with raw water, saving treatment cost valued at \$445/ML before system augmentation in 2025 (the average treatment cost of surface water treatment from Tullaroop); then either

- \$399/ML (treatment of water supplied through the Superpipe under that augmentation option); or
- \$432/ML (treatment of additional groundwater supplies under that augmentation option).

### **3.8 ECONOMIC ANALYSIS RESULTS**

The overall results of the analysis are provided in Table 5 for the Superpipe augmentation option, and Table 6 for the Groundwater augmentation option.

Under the central assumptions adopted for this analysis (considering the Superpipe augmentation option), two options produce net benefits (that is, total benefits exceed total costs): Options 2, and 3. A further two to three options produced quantified benefits that were similar in scale to quantified costs: Options 7, 5 and 8. Remaining options were uncompetitive on quantified benefits and costs. We discuss these in turn:

- Options 2 and 3 are street tree irrigation options, and produced the largest net benefits of all options. This was driven predominantly by the aesthetic value estimated by increased canopy, which was significantly higher than the expected cost of producing that increased tree canopy.
- Option 7 produced stormwater to shandy with recycled water to supply northern demands, producing a benefit cost ratio (BCR) of 0.99. This suggests that the project produced \$0.99 for every dollar invested. Importantly, almost \$2.8m of the total \$5.8m in present value benefit was derived from pollution abatement, which does not have a financial funder.
- Option 5, the stormwater harvesting for Station Domain and Council Depot project, produced a marginally negative BCR of 0.95, of which the majority of benefit was pollution abatement. Importantly for this project, the project team does not have a benefit that appropriately measures the aesthetic value of the irrigation of Station Domain – in the absence of an economic value for this benefit, we have adopted the avoided cost of potable irrigation, which may underestimate the community value produced from this investment.
- Option 8 produces stormwater treatment for reinjection into the potable network. The project team has assumed that current potable treatment costs will be incurred for this option, although it is possible that the Department of Health will require a higher standard of treatment for indirect potable reuse of stormwater. The main quantified benefit for this option was deferral of the Superpipe augmentation by 16 years, producing a saving to CHW and its customers of \$7m PV.

**Table 5: Analysis results (Superpipe augmentation option), 50 years, 4.5% discount rate real, \$PV**

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
<i>Costs</i>									
Capital	\$1,536,949	\$543,398	\$202,145	\$2,997,203	\$1,324,735	\$3,494,719	\$3,186,558	\$8,363,427	\$1,066,787
Operating + Maintenance	\$893,000	\$42,734	\$10,062	\$411,236	\$214,346	\$494,445	\$490,719	\$5,199,306	\$98,792
Renewal	\$107,762	\$0	\$0	\$1,296,008	\$244,432	\$1,304,738	\$1,186,068	\$2,108,150	\$0
Total costs	\$2,537,710	\$586,132	\$212,208	\$4,704,447	\$1,783,513	\$5,293,902	\$4,863,345	\$15,670,883	\$1,165,580
<i>Benefits</i>									
Potable substitution	\$167,782	\$0	\$0	\$0	\$38,818	\$88,032	\$394,143	\$2,310,143	\$0
Pollution abatement	\$314,188	\$244,391	\$39,675	\$2,279,372	\$1,535,773	\$2,496,221	\$2,780,547	\$4,227,014	\$0
Street tree value	\$0	\$1,299,568	\$274,066	\$0	\$0	\$0	\$0	\$0	\$0
Aesthetic value Lake Victoria	\$0	\$0	\$0	\$776,037	\$0	\$776,037	\$0	\$0	\$0
Green space irrigation (avoided cost of pota	\$0	\$0	\$0	\$0	\$38,818	\$101,655	\$0	\$0	\$0
Augmentation deferral	\$0	\$0	\$0	\$0	\$0	\$0	\$1,717,728	\$7,019,728	\$0
Community WTP	\$0	\$42,669	\$5,549	\$0	\$80,853	\$153,150	\$590,394	\$0	\$0
Avoided potable treatment cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$475,242
<b>Total benefits</b>	<b>\$481,970</b>	<b>\$1,586,628</b>	<b>\$319,290</b>	<b>\$3,055,409</b>	<b>\$1,694,261</b>	<b>\$3,615,096</b>	<b>\$5,482,812</b>	<b>\$13,556,884</b>	<b>\$475,242</b>
<b>Net benefits</b>	<b>(\$2,055,740)</b>	<b>\$1,000,496</b>	<b>\$107,082</b>	<b>(\$1,649,038)</b>	<b>(\$89,252)</b>	<b>(\$1,678,806)</b>	<b>\$619,466</b>	<b>(\$2,113,999)</b>	<b>(\$690,338)</b>
<b>Benefit-cost ratio (BCR)</b>	<b>0.19</b>	<b>2.71</b>	<b>1.50</b>	<b>0.65</b>	<b>0.95</b>	<b>0.68</b>	<b>1.13</b>	<b>0.87</b>	<b>0.41</b>

**Table 6: Analysis results (Groundwater augmentation option), 50 years, 4.5% discount rate real, \$PV**

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
<i>Costs</i>									
Capital	\$1,536,949	\$543,398	\$202,145	\$2,997,203	\$1,324,735	\$3,494,719	\$3,186,558	\$8,363,427	\$1,066,787
Operating + Maintenance	\$893,000	\$42,734	\$10,062	\$411,236	\$214,346	\$494,445	\$490,719	\$5,199,306	\$98,792
Renewal	\$107,762	\$0	\$0	\$1,296,008	\$244,432	\$1,304,738	\$1,186,068	\$2,108,150	\$0
Total costs	\$2,537,710	\$586,132	\$212,208	\$4,704,447	\$1,783,513	\$5,293,902	\$4,863,345	\$15,670,883	\$1,165,580
<i>Benefits</i>									
Potable substitution	\$166,052	\$0	\$0	\$0	\$38,489	\$87,171	\$390,279	\$2,287,497	\$0
Pollution abatement	\$314,188	\$244,391	\$39,675	\$2,279,372	\$1,535,773	\$2,496,221	\$2,780,547	\$4,227,014	\$0
Street tree value	\$0	\$1,299,568	\$274,066	\$0	\$0	\$0	\$0	\$0	\$0
Aesthetic value Lake Victoria	\$0	\$0	\$0	\$776,037	\$0	\$776,037	\$0	\$0	\$0
Green space irrigation (avoided cost of pota	\$0	\$0	\$0	\$0	\$38,489	\$100,794	\$0	\$0	\$0
Augmentation deferral	\$0	\$0	\$0	\$0	\$0	\$0	\$94,991	\$388,195	\$0
Community WTP	\$0	\$42,669	\$5,549	\$0	\$80,853	\$153,150	\$590,394	\$0	\$0
Avoided potable treatment cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$510,162
<b>Total benefits</b>	<b>\$480,240</b>	<b>\$1,586,628</b>	<b>\$319,290</b>	<b>\$3,055,409</b>	<b>\$1,693,603</b>	<b>\$3,613,374</b>	<b>\$3,856,211</b>	<b>\$6,902,705</b>	<b>\$510,162</b>
<b>Net benefits</b>	<b>(\$2,057,470)</b>	<b>\$1,000,496</b>	<b>\$107,082</b>	<b>(\$1,649,038)</b>	<b>(\$89,910)</b>	<b>(\$1,680,528)</b>	<b>(\$1,007,134)</b>	<b>(\$8,768,178)</b>	<b>(\$655,418)</b>
<b>Benefit-cost ratio (BCR)</b>	<b>0.19</b>	<b>2.71</b>	<b>1.50</b>	<b>0.65</b>	<b>0.95</b>	<b>0.68</b>	<b>0.79</b>	<b>0.44</b>	<b>0.44</b>

- Option 9 produced a BCR of 0.44, suggesting a poor investment. The only quantified benefit of this project was avoided potable treatment cost of replacing potable water with raw water before shandying. This benefit did not exceed the additional capital costs of the project.
- Option 1 involved the addition of rainwater tanks on all new dwellings in Maryborough, producing potable substitution and pollution abatement benefits. These were dwarfed by the capital, operating and renewal costs of this infrastructure, producing a BCR of 0.19 (a return of \$0.19 for every dollar spent on the option).

Revisiting this analysis under the alternative Groundwater augmentation option reduces the benefits for projects that defer augmentation, due to the much reduced augmentation capital costs of groundwater (\$1m in additional entitlement) compared to Superpipe (\$18m in capital cost and additional entitlement).

Option 7 reduces from a BCR of 1.13 to 0.79, and Option 8 reduces from a BCR of 0.87 to 0.44. As such, if groundwater augmentation is a genuine augmentation option, neither of these options might be justified in proceeding.

However, options that produce benefits related to avoided potable treatment have higher benefits from this option, as the base case of groundwater treatment is more expensive than was surface water treatment for the Superpipe option. Option 9 BCR increases from 0.41 (Superpipe scenario) to 0.44 (Groundwater scenario), however neither option appears attractive on the quantified data alone.

### 3.9 SENSITIVITY TEST

We test the analysis for some key sensitivities, particularly discount rate and analysis period.

We test discount rate at 3 and 8 per cent.

**Table 7: Sensitivity test results**

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
Central assumptions	0.19	2.71	1.50	0.52	0.95	0.56	0.99	0.85	0.41
3% discount rate	0.17	2.76	1.58	0.45	0.88	0.51	0.82	0.68	0.50
8% discount rate	0.22	2.53	1.33	0.64	1.07	0.66	1.36	1.18	0.28
25 year analysis period	0.14	2.38	1.46	0.53	0.76	0.56	1.01	0.87	0.29

Some of the results are quite sensitive to discount rate and analysis period, particularly

- Option 5 which produces a positive result under an 8 per cent discount rate;
- Option 7 which switches to a positive result under an 8 per cent discount rate or a 25 year analysis period; and
- Option 8, which switches to a positive result under an 8 per cent discount rate.

For all three of those options, the results vary significantly depending up on discount rate.

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**Document review and authorisation**

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1.0	Draft	10/09/2018	K. Whiteoak	K. Whiteoak	H. Buck	K. Whiteoak	C. Morgan
1.1	Draft	12/09/2018	K. Whiteoak	K. Whiteoak		K. Whiteoak	C. Morgan





# Maryborough Recycled Water Base Case

September 2018

## 1 Recycled Water Base Case

### 1.1 BACKGROUND

#### 1.1.1 CURRENT SCHEME

Central Highlands Water (CHW) have been supplying Class C recycled water for a number of years to the following customers for the irrigation of turf and fodder crops:

**Table 1-1: Overview of current CHW Maryborough recycled water scheme**

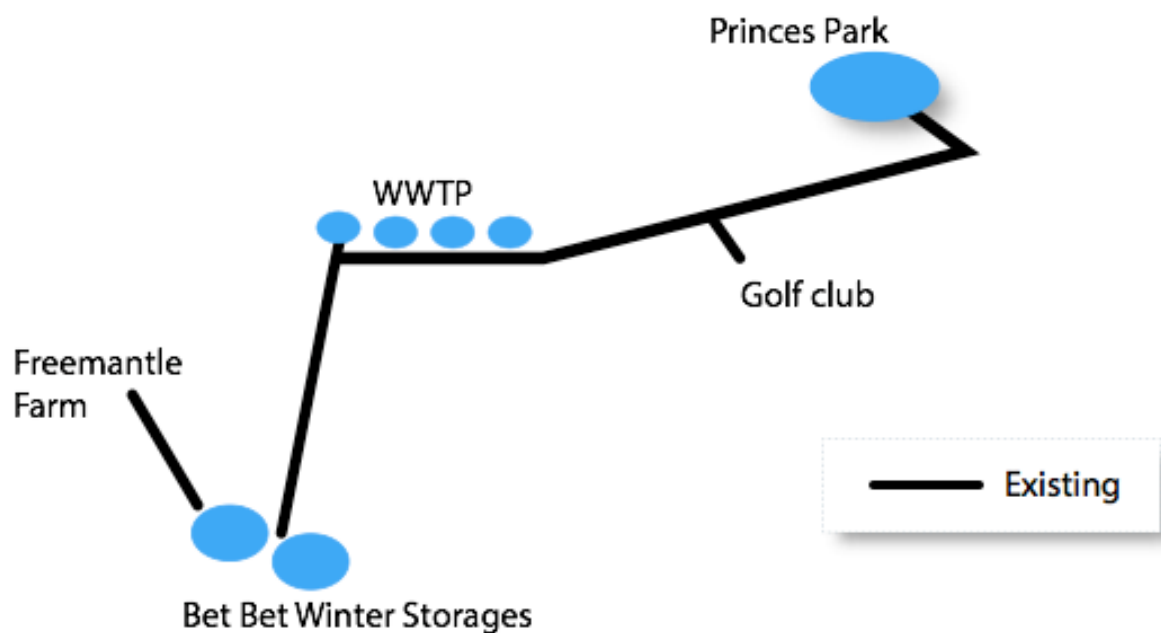
SITE	AREA (HA)	ENTERPRISE	EIP VOLUME & AVERAGE ANNUAL USAGE (ML/ANNUM)		CUSTOMER TYPE
			EIP	Usage	
Princes Park (oval)	4	Kikuyu and Santa Ana Couch	30	20	Third party private site - managed by Central Goldfields Shire
Golf Club	<ul style="list-style-type: none"> <li>Fairways: 12</li> <li>Greens &amp; Tees: 2.5</li> <li>Total: 14.5</li> </ul>	<ul style="list-style-type: none"> <li>Fairways: Santa Ana Couch</li> <li>Greens &amp; Tees: Bentgrass (Pennecross)</li> </ul>	110	90	Third party private site – managed by Maryborough Golf Club

On-site land at the Maryborough Farm – leased by Bartlett	<ul style="list-style-type: none"> <li>▪ Perennial pasture: 15</li> <li>▪ Lucerne: 15</li> <li>▪ Oats (not irrigated): 5</li> <li>▪ Total irrigated: 30</li> </ul>	<ul style="list-style-type: none"> <li>▪ Perennial pasture</li> <li>▪ Lucerne</li> <li>▪ Oats (cover crop - not irrigated)</li> </ul>	200	80	Second party lease – managed by lessee Bartlett
Freemantle (private land)	52	Lucerne	230	180	Third party private site – managed by Freemantle

Note: the EIP volumes are the maximum volume of recycled water that can be provided to each site according to the sites Environment Improvement Plan (EIP). The average annual volume is typically how much recycled water each site uses. It is not uncommon for the EIP volume to be greater than the usage volume due to the implications of EPA's 90th percentile containment requirements (i.e. the scheme is required to develop more land for irrigation than will be required in most years).

An overview of the scheme is provided in Figure 1-1 below and shows that:

- Supply to the Golf Club, Princes Park and on-site land leased by Barlett is from the winter storages at CHW's Maryborough Farm (WWTP), while Freemantle accesses recycled water from the Bet Bet Storage.
- The Bet Bet storage is located approximately 8 km north of the Maryborough Farm, and is adjacent to the Freemantle farm. Recycled water is gravity fed from the storage to the Freemantle property. The storage has a capacity of approximately 400 ML, and was built in 2007.



**Figure 1-1: Overview of current Maryborough recycled water scheme**

### 1.1.2 SALINITY

Maryborough's water supply is a combination of surface water sourced from the Evansford, Talbot, Tullaroop and Maryborough's Centenary Reservoirs, plus groundwater from the Moolort groundwater system when required.

In comparison to other areas across Victoria and CHW's catchment, these potable water sources can be relatively saline, which has prompted CHW to install a salt reduction plant (SRP) at Maryborough's Water Treatment Plant (WTP). Operation of the SRP will be necessary in some years to ensure the towns of Maryborough, Carisbrook, Talbot and the surrounding district receive potable water with a suitable salinity. Consequently, the SRP may be required to treat both surface water and groundwater depending on conditions, and, depending on the quality of these raw water sources, may not be needed at all in some years. Use of the SRP is therefore expected to vary from year to year.

When in operation, the SRP will produce a brine which requires management. CHW plan on discharging the brine into Maryborough's sewer system, where it will be combined with all other sewage from Maryborough, and ultimately, managed by Maryborough's recycled water scheme.

Previous studies undertaken by consultants MWH (April 2016) and RMCG (March 2017), have shown that when produced, the addition of the brine to the sewer has the potential to increase the recycled water salinity that is currently being used for irrigation from approximately 1,785 EC ( $\mu\text{S/cm}$ ) to 3,775 EC ( $\mu\text{S/cm}$ ).

From an irrigation perspective, this is a very high salinity and has the potential to negatively impact on the different forms of turf and fodder crops that are being irrigated, and soil health. Even the current salinity of 1,785 EC ( $\mu\text{S/cm}$ ) is relatively high, and the upper limit of what may be considered sustainable from a turf irrigation perspective (particularly golf greens).

CHW therefore plan on managing the potential salinity increases from the addition of the brine by:

- Shandyng (mixing / diluting) the recycled water supplied to the golf course and Princes Park with potable water
- Assuming management, control and ownership of all agricultural recycled water irrigation operations, thereby taking responsibility for any potential salinity risks that could eventuate from the saline recycled water irrigation.

It is noted that MWH's April 2016 report also concluded that Maryborough's recycled water management scheme needs an additional 39 ha of Lucerne irrigation (or equivalent water use crop) in order to maintain compliance with EPA's 90<sup>th</sup> percentile containment requirements.

### 1.1.3 TURF SALINITY TARGETS

A key component of the future recycled water management for Maryborough is establishing the shandy target for the turf irrigations at the golf course and Princes Park.

The aim is to maintain class A soil salinity at all of the turf irrigation sites (i.e.  $\leq 3.8 \text{ dS/m ECe}$ ) and have an irrigation salinity that isn't going to impact on turf health.

Salt balance modelling that draws upon the principles presented in FAO Publication 29 (*Ayers and Westcot, Water Quality for Agriculture, Rev. 1, 1985*), published data on salinity tolerances for some of the turf species to be irrigated, and current practices have been used to help determine the required shandy rate.

The investigations have shown that a shandy rate of 2:1 (i.e. 2 parts potable water : 1 part recycled water) is required if the turf irrigation sites are going to maintain Class A soil salinity and receive an irrigation salinity that isn't going to impact on turf health. The key data used to arrive at this conclusion is presented in Table 1-2 and Table 1-3 below, with the final outcomes of the 2:1 shandy provided in Table 1-4.

**Table 1-2: Relative salt tolerances for a range of turf species**

SPECIES	SOIL SALINITY (ECe dS/m)	IRRIGATION SALINITY (ECw dS/m)
Kikuyu	Preferred salinity for all irrigation sites is Class A soil salinity i.e. $\leq 3.8$ dS/m ECe	100% yield up to 4.5 dS/m
Santa Ana Couch		Tolerant up to 5.6 dS/m
Bentgrass (Penncross)		Limited published data but current experience from Maryborough Golf Club is that it is coping with recycled water salinity of $\sim 1,785$ EC $\mu\text{S/cm}$ (or 1.8 dS/m). It is however known to be more salt sensitive than other turf species and therefore, would benefit from as low salinity as possible

**Table 1-3: Current water salinities**

SOURCE	AVERAGE SALINITY (EC $\mu\text{S/cm}$ )
Maryborough potable water	$\sim 815$
Current recycled water supplied to golf course and Princes Park	$\sim 1,785$
Future recycled water salinity assuming maximum brine discharge from SRP	$\sim 3,775$

**Table 1-4: Resultant salinities after 2:1 Shandy**

SOURCE	IRRIGATION SALINITY AFTER 2:1 SHANDY WITH POTABLE WATER (EC $\mu\text{S/cm}$ )	RESULTANT SOIL SALINITY FROM IRRIGATION WITH 2:1 SHANDIED RECYCLED WATER (ECe dS/m)*
Current recycled water supplied to golf course and Princes Park	1,140	2.4
Future recycled water salinity assuming maximum brine discharge from SRP	1,802	3.8

\*assumes 5% soil leaching rate

Table 1-4 shows that at a 2:1 shandy, the turf irrigation sites are expected to receive an irrigation salinity of between 1,140 EC ( $\mu\text{S/cm}$ ) to 1,800 EC ( $\mu\text{S/cm}$ ), and stay within the limits for Class A soil salinity of  $\leq 3.8$  dS/m (ECe). The 2:1 shandy will therefore be able to maintain the irrigation salinity at or below the current recycled water levels and within the desired soil salinity range.

This therefore means that the golf course and Princes Park will be using less recycled water than currently occurring, and that the volume of recycled water that is no longer applied to these site will need to be off-set by an increase in agricultural irrigation area.

CHW will need to supply an additional 10 ha of agricultural land with recycled water to offset the reduced recycled water volume at the golf course and Princes Park, as illustrated in Table 1-5 below.

**Table 1-5: Resultant salinities after 2:1 Shandy**

SITE	TOTAL WATER USE (ML/yr)	VOLUME SHANDY WATER @ 2:1 SHANDY (ML/yr)	VOLUME OF RECYCLED WATER @ 2:1 SHANDY (ML/yr)	EXCESS RECYCLED WATER DUE TO 2:1 SHANDY (ML/yr)	ADDITIONAL LAND REQUIRED TO MANAGE EXCESS RECYCLED WATER (ha)
Golf Course	90	60	30	60	8.3
Princes Park	20	13.3	6.7	13.3	1.9
<b>Total</b>	<b>110</b>	<b>73.3</b>	<b>36.7</b>	<b>73.3</b>	<b>10.2</b>

## 1.2 BASE CASE

The recycled water base case for Maryborough is therefore centred around ensuring the scheme has enough irrigation infrastructure (i.e. winter storage and irrigation area) to maintain EPA 90<sup>th</sup> percentile compliance, and manage the anticipated recycled water salinity.

The base case therefore consists of:

- Establishing a 2:1 shandy of recycled water with potable water at the golf course and Princes Park
- Developing 49 ha of additional irrigation area: 39 ha from MWH's 90<sup>th</sup> percentile water balance modelling plus 10 ha to offset reduced recycled water irrigation volume at the golf course and Princes Park due to the 2:1 shandy
- CHW assume management, control and ownership of all agricultural recycled water irrigation operations, thereby taking responsibility for any potential salinity risks that could eventuate from the saline recycled water irrigation.

This proposal has been prepared by:

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**Document review and authorisation**

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## **8.7 PLANNING APPLICATION 133/18 – USE AND DEVELOPMENT OF A PROMOTION SIGN AT 4189 PYRENEES HIGHWAY, FLAGSTAFF**

**Author:** Planning Officer

**Responsible General Manager:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

The purpose of this report is for Council to consider a planning permit application for the use and development of a promotion sign at 4189 Pyrenees Highway, Flagstaff which has been received. The definition of a 'Promotion Sign' in the Central Goldfields Planning Scheme is:

*A sign of less than 18sqm that promotes goods, services, an event or any other matter, whether or not provided, undertaken or sold or for hire on the land or in the building on which the sign is sited*

Public notice of the application has resulted in five written objections.

The application has been assessed against the policy and specific controls of the planning scheme and it is considered that the proposed sign is excessive in size and is incompatible with the rural landscape character of the area.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Built and Natural Environment

**Outcome:** Central Goldfields Shire celebrates the rich built and natural heritage and a sustainable environment.

**3.3 Objective:** Protect and enhance the environment while planning for growth

### **BACKGROUND INFORMATION:**

Central Goldfields Shire generally has a lack of signage clutter. The rural areas in particular are characterised by a lack of off-site commercial promotion signs. With the exception of tourist advisory or service club signage, the arterial road between Maryborough and Carisbrook is free of any off-site promotion signs and has very little promotion signage at all.<sup>1</sup>

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<sup>1</sup> Flagstaff is a small settlement located between Maryborough and Carisbrook.

**REPORT:****Proposal**

The proposal is to erect a promotion sign at 4189 Pyrenees Highway, on a lot located at the south east corner of the intersection with Madmans Lane in Flagstaff. A copy of the site and elevation drawings are attached to this report (See Attachment 1).

The proposed sign is 8.25 metres long and has a total height of 5 metres with an advertising area on each face of 17.74m<sup>2</sup>. Below the advertising face there is a skirting board 0.85m high running the full length of the structure with a small area identifying the business name of the structure's owner. The distance between the natural ground level and the bottom of the skirting is 1.9m. No illumination of the billboard is proposed.

The sign would be located near the south-east corner of Pyrenees Highway and Madmans Lane, at right angles to the Highway which would ensure visibility of each side of the sign travelling between Maryborough and Carisbrook. The sign will be setback about 21 metres from Madmans Lane and one metre from the eastern title boundary of the lot. The forward edge of the sign would abut the title boundary of the frontage of the lot presenting to the Pyrenees Highway.

Both faces of the sign are proposed to be utilised for commercial advertising; one viewed by eastbound traffic and the other by westbound traffic on the Pyrenees Highway.

**Site and Surrounds**

The subject land is described as Lot 1, TP430715U, known as 4189 Pyrenees Highway, Flagstaff. The land is a corner lot, irregular in shape with a 22.70m metre frontage to the Pyrenees Highway to the north and a 50.52m abuttal to Madmans Lane to the west. The Pyrenees Highway is an arterial road which links (among other towns) Carisbrook and Maryborough.

The corner lot covers an area of about 1,135sqm and is sparsely vegetated and gently undulating. The subject land is undeveloped and located in the Industrial 1 Zone (IN1Z), and affected by the Bushfire Management Overlay (BMO), Environmental Significance Overlay, Schedule 2 (ESO2), Erosion Management Overlay (EMO), and the Salinity Management Overlay (SMO).

The surrounding land to the North and West is zoned Low Density Residential Zone (LDRZ); the land to the South and East is zoned Industrial 1 Zone (IN1Z). So this lot forms the interface between the two zones at Madmans Lane. A shared use path is constructed along the northern side of the Pyrenees Highway between Maryborough and Carisbrook. An aerial photograph of the subject land and surrounds is attached to this report (See Attachment 2).

**Planning Scheme Provisions**

Council must take into consideration the State Planning Policy Framework (SPPF) and the Local Planning Policy Framework (LPPF) including the Municipal Strategic Statement (MSS).

**State Planning Policy Framework:****Clause 11 Settlement**

This clause outlines that planning is to recognise the need for, and as far as practicable contribute towards achieving a number of key principles, including achieving a high standard of urban design and amenity.

**Clause 12 Environmental and Landscape Values**

This clause outlines that Planning should protect sites and features of nature conservation, biodiversity, geological or landscape value.

**Clause 15 Built Environment and Heritage**

Clause 15 states:

*Planning should ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context, and protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value.*

*Creating quality built environments supports the social, cultural, economic and environmental wellbeing of our communities, cities and towns.*

*Land use and development planning must support the development and maintenance of communities with adequate and safe physical and social environments for their residents, through the appropriate location of uses and development and quality of urban design.*

*Planning should achieve high quality urban design and architecture that:*

- *Contributes positively to local urban character and sense of place;*
- *Reflects the particular characteristics, aspirations and cultural identity of the community;*
- *Enhances liveability, diversity, amenity and safety of the public realm;*
- *Promotes attractiveness of towns and cities within broader strategic contexts; and*
- *Minimises detrimental impact on neighbouring properties.*

**Clause 18.02 Transport**

This clause includes the following relevant strategies:

- *Plan or regulate new uses or development of land near an existing or proposed transport route to avoid detriment to, and where possible enhance the service, safety and amenity desirable for that transport route in the short and long terms; and*
- *Plan and regulate the design of transport routes and nearby areas to achieve visual standards appropriate to the importance of the route with particular reference to*

*landscaping, the control of outdoor advertising and, where appropriate, the provision of buffer zones and resting places.*

### **Local Planning Policy Framework:**

#### **Clause 21.03 Protecting and enhancing heritage**

This policy identifies that *‘the heritage and landscape setting of the Shire’s towns are important elements of their lifestyle and “urban village” character’.*

#### **Clause 21.13 Enhancing Lifestyle Qualities of Townships**

This policy states that:

*‘...the townships of Carisbrook, Dunolly, Talbot, Bealiba, Majorca, Timor/Bowenvale and Moliagul all possess an “urban village” and distinctive heritage character’. The policy identifies Objective 1 as ‘enhance the “urban village” and townscape character of the Shire’s townships’ and includes as a Strategy – ‘Improve important heritage and tourist precincts in towns such as town centres and town entrances’.*

#### **Local Planning Policy 22.01 Urban design**

This local policy has a basis which details *‘Residents value the quality of lifestyle offered by the Shire’s urban centres. Urban heritage and landscape character of these centres provides the appeal for residents and tourist’.* The policy identifies various objectives including:

- *To preserve and enhance the visual amenity and character of the Shire’s city and towns.*
- *To ensure the siting and design of new development has regard to built form, landscape character and visual qualities of urban centres.*
- *To enhance the visual qualities and character of the major road entrances to Maryborough and townships in the Shire.*
- *To encourage and promote high quality tourist development that preserves heritage and landscape character.*
- *To provide opportunities to promote the Shire’s tourism image at key locations such as city/town centres and entrances and major attractions.*

In order to achieve these objectives, Local Policy 22.01 identifies various policies as follows:

- *Encourage development where the design and siting of new development has demonstrated the following:*
  - *How building scale, height, mass and external finishes reflect dominant building forms, particularly heritage buildings and structures.*
  - *How the proposal contributes to the overall appearance and character of the town.*

- *The site has the capacity to accommodate the proposed development, including traffic circulation and car parking.*
- *How the proposals responds to identified streetscape character.*
- *Retention of native vegetation and other natural features and landscaping and tree specie selection that is consistent with the landscape character of the city, town or locality.*
- *Promotion of an identified tourism image, especially along city/town entrances and within city/town centres.*
- *Encourage development proposals along or near to city and town where:*
  - *A city's or town's image is reflected along the entrance.*
  - *The character of the entrance is enhanced.*
  - *Proposed landscaping is consistent with identified planting themes.*
- *Encourage significant architectural treatment of new buildings and features at key entrance sites that enhance the visual quality and character of the entrance and create a memorable entrance.*
- *Encourage protection and enhancement of landmarks, heritage and natural features, and the location of clearly visible signage to improve legibility of the urban area for tourists.*
- *Encourage proposals that are located within urban areas or located to take advantage of proximity to urban centres.*
- *Discourage unplanned linear development along major highways and roads.*

#### Local Planning Policy 22.05 Industrial Development

This policy aims to facilitate well planned industrial areas with good road access and levels of visual amenity, to ensure that development within industrial areas does not adversely affect the amenity of residential areas and to encourage industrial development which adds value to local product.

It contains specific policy statements to,

*'...encourage industrial development in rural areas and in unsewered urban areas where the proposal can demonstrate' ... that the impact on the visual amenity of the rural landscape is minimised'.*

#### **Zones and Overlays**

##### Clause 33.01 Industrial 1 Zone

The land is located within the Industrial 1 Zone which includes in its objectives:

- *To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.*

The relevant decision Guidelines of this zone include:

- *Any natural or cultural values on or near the land.*
- *Streetscape character.*
- *Interface with non-industrial areas.*

This zone is a Category 2, (Low Limitation) area for advertising signs.

#### Overlays:

##### *Environmental Significance Overlay – Schedule 2 - Air Emissions Buffer*

This overlay (Clause 42.01) identifies an air emissions buffer around the former Penney and Lang Abattoirs and Maryborough Wastewater Plant. The overlay aimed to protect these uses from the encroachment of development that has the potential to experience amenity problems from close location to these industries. It requires consideration of whether new uses will affect the viability of these major industrial uses, the effects of existing uses on the new use and whether the proposal is in accordance with the proper and orderly planning of the area.

##### *Erosion Management Overlay*

This overlay (Clause 44.01) aims to protect areas prone to erosion, landslip or other land degradation processes, by minimising land disturbance and inappropriate development. It requires planning approval for all buildings and works and the removal of all vegetation, including dead vegetation. Key considerations for applications under the overlay include measures to manage drainage, soil disturbance and runoff and whether the works are likely to cause landslip.

##### *Salinity Management Overlay*

This overlay (Clause 44.02) aims to identify areas subject to saline ground water discharge or high ground water recharge and contribute to their restoration, including protection of new buildings. The overlay requires planning approval for all buildings and works and the removal of all vegetation, including dead vegetation. Key considerations for applications under the overlay relate to state and regional land protection policies, the need to remove vegetation for defensible space, the need to re-plant and protect vegetation.

##### *Bushfire Management Overlay*

At Clause 44.06 this overlay identifies the purposes and the bushfire management objectives to ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire. However, a permit is not required for this proposal under the provisions of this overlay.



## **Particular Provisions**

### Clause 52.05 Advertising Signs

The purpose of this clause includes:

- To provide for signs that are compatible with the amenity and visual appearance of an area, including the existing or desired future character.
- To ensure signs do not contribute to excessive visual clutter or visual disorder.
- To ensure that signs do not cause loss of amenity or adversely affect the natural or built environment or the safety, appearance or efficiency of a road.

This clause includes extensive decision guidelines specific to the assessment of advertising signage applications. These include:

- The character of the area.
- Impacts on views and vistas.
- The relationship to the streetscape, setting or landscape.
- The impact on road safety.

### Clause 65 Decision Guidelines

Simply because a permit can be granted does not imply that a permit should or will be granted. The responsible authority must decide whether the proposal will produce acceptable outcomes in terms of the decision guidelines of this clause.

### Assessment of Application

Council has a number of policies that aim to enhance town entrances and encourage design, signage and landscape treatments that enhance the sense of arrival in the Shire's townships.

The policy setting acknowledges the need to provide opportunities for commercial and tourism uses at highway entrances, but this must be done in a manner that respects the township character, heritage values and the scale of the streetscapes.

While the zone identifies that there should be a 'low limitation' on advertising signs this should not be at the expense of existing landscape character, which is dominated by open rural landscapes with trees. While it is zoned industrial, the land is one of several vacant blocks, and these along with nearby residential properties and native forest provide the streetscape of this section of the road.

The subject land forms part of the entranceway to the small settlement of Flagstaff from the East. Flagstaff is a small settlement in the middle of the inter-urban break between the two larger settlements of Maryborough to the west which is separated mostly by crown land native forest reserves, and Carisbrook to the east which is separated largely by open farming land, and the site and proposed signage would form part of the approach for traffic to both of these larger towns.

As outlined above the immediate streetscape surrounding the signage location is one of modest residential properties including some in relatively close proximity, vacant lots, and native forest, and the wider landscape of this inter-urban break between larger towns is formed predominantly of open farm land and native forest, providing the largely rural setting and a relatively uncluttered landscape character.

There is no existing off-site promotion signage along the arterial link experiencing significant traffic flows including tourists to the two towns and to the surrounding Central Goldfields region.

It is considered that the proposed sign would not enhance the entry to the small settlement of Flagstaff or the approach to the larger towns of Carisbrook and Maryborough. It would dominate the rural location, is excessive in scale to its surroundings and is not sympathetic to the existing rural setting or landscape character that provides a welcoming entrance to the settlement.

#### Assessment against Clause 52.05 Advertising Signs

Decision guidelines under this clause relevant to this proposal include:

The character of the area including:

*The sensitivity of the area in terms of the natural environment, heritage values, waterways and open space, rural landscape or residential character.*

*The compatibility of the proposed sign with the existing or desired future character of the area in which it is proposed to be located.*

*The cumulative impact of signs on the character of an area or route, including the need to avoid visual disorder or clutter of signs.*

The proposed commercial billboard is incompatible with the rural landscape character of the area as an entrance to an urban village.

Impacts on views and vistas:

*The potential to obscure or compromise important views from the public realm.*

*The potential to dominate the skyline.*

*The potential to impact on the quality of significant public views.*

The Pyrenees Highway between Maryborough and Carisbrook contains no off-site promotion signage. The road between both towns has low scale buildings, and open rural vistas with established roadside native vegetation.

The development of the promotion sign would detrimentally compromise the entrances and views to open vistas from the arterial road. The proposed advertising billboard would by its nature be visually prominent and together with the elevated position provided by the supporting posts, the sign would dominate the local landscape and significantly impact the views from passing vehicular and pedestrian traffic.

The relationship to the streetscape, setting or landscape:

*The proportion, scale and form of the proposed sign relative to the streetscape, setting or landscape.*

*The position of the sign, including the extent to which it protrudes above existing buildings or landscape and natural elements.*

*The ability to reduce the number of signs by rationalising or simplifying signs.*

At 17.74m<sup>2</sup> in area of the advertising faces and an overall height of five metres the sign would visually dominate the rural setting and local landscape views.

The relationship to the site and building:

*The scale and form of the sign relative to the scale, proportion and any other significant characteristics of the host site and host building.*

*The extent to which the sign displays innovation relative to the host site and host building.*

*The extent to which the sign requires the removal of vegetation or includes new landscaping.*

The application has not demonstrated that the proposed sign bears any relationship to the significant characteristics of the site, namely the existing native vegetation and rural character. For all the foregoing reasons that have been outlined, it is determined that the proposal does not achieve compliance with the purpose and decision guidelines of Clause 52.05 (Advertising Signs).

## **Referrals**

In accordance with the requirements of the planning scheme, the application was referred to VicRoads. VicRoads has advised that, in principle, it has no objection subject to a condition requiring the proposed sign to meet the VicRoads ten point road safety checklist.

## **Alternative Options**

Council could choose to issue a Notice of Decision to grant a permit. For the reasons outlined in this report, this is not recommended by Council Officers.

## **CONSULTATION/COMMUNICATION:**

Public Notice of the application was given by way of public notice in the local newspapers as follows:

- Maryborough Advertiser on 14 December 2018; and
- Carisbrook Mercury on 13 December 2018.

This notice resulted in five written objections being received. No submissions supporting the proposal were received, and a consultation meeting was not held. The following is a summary of the various concerns raised by the objectors, and Officer comments.

A Hearing was held on 19 February 2019 and three objectors spoke against the proposal.

### *Traffic Safety Issues*

The Pyrenees Highway is a busy road and the proposed sign is located within about 20 metres of the intersection of Madmans Lane with the Pyrenees Highway. The proposal was referred (as required by the planning scheme) to VicRoads, who had no concerns in principle, but required the proposed sign to meet the VicRoads ten point road safety checklist.

Council's Engineering Unit advised that while there were no vehicle movement statistics for Madmans Lane recorded at the time of this report, there are a particularly large number of truck movements into Madmans Lane associated with the recycling facility further down the lane, and that any distraction to drivers in the vicinity of this intersection is therefore of significant concern.

The lack of any turning lane at the intersection prevents cars from easily passing any right-turning rubbish trucks from Maryborough, and objectors have also raised concerns in regards to the safety of school children using regular school bus services which currently stop close by.

### *Impact on Rural Character or Views / Visual Pollution*

The applicant contends that the proposed promotion sign fits within the site context and has a relationship with the highway corridor.

The assessment of the likely impact of the sign by Planning Officers is that it would have a detrimental effect on the uncluttered rural landscape character of the streetscape and wider area, particularly for adjacent residences and as an impact upon both the entranceway to the small settlement of Flagstaff and the approach to Maryborough and Carisbrook.

### *Content of Sign*

The applicant contends that typically, at least 50% of the advertising content is for businesses located within a 5km radius of the sign. However, the applicant acknowledges that the advertising content of the sign will be at the sole discretion of the signage company.

### *Lack of Economic Benefit*

As above, the applicant contends that a significant percentage of regional advertising have businesses within 5km of such a sign which is directly linked to the stimulation of economic activity, though acknowledging that not all advertising will be from local businesses.

However, it is considered that that is a moot point. Even if a net economic benefit were to be demonstrated, Council's policy position is that that should not be at the expense of the visual amenity of the highly valued rural landscapes in the region.

### *Precedent*

Any planning permit application is considered on the merits of the proposal, however, the location of a promotion sign may create a compromised visual environment where further large commercial signage may proliferate.

### *Property Values*

When assessing the applicability of any proposal under the provisions of the planning scheme, the effect of a proposal upon property values cannot be taken into account particularly due to difficulty in proving such effect.

### **FINANCIAL & RESOURCE IMPLICATIONS:**

The assessment of planning permit applications is within the normal operational budget of Council.

Should any party (applicant or objector) appeal the determination of the application (permit condition or issue of permit) additional VCAT appeal costs will be incurred.

### **CONCLUSION:**

Planning application 133/18 proposes the erection of a promotion sign at 4189 Pyrenees Highway, Flagstaff. Five objections have been received following notice of the application.

An assessment of the proposal has been undertaken and it is considered that the application does not accord with relevant policy, nor achieve compliance with the purpose and decision guidelines of Clause 52.05 *Advertising Signs*. It is therefore recommended that the application be refused by Council.

Council must determine a position on the application for a planning permit and take one of the following options:

- I. Approve a planning permit and issue a Notice of Decision to Grant a Planning Permit for the proposal (with or without conditions); or
- II. Issue a Refusal to Grant a Planning Permit for the proposal; appeal rights apply to the applicant

### **ATTACHMENTS:**

1. Proposed Promotion Sign Site Plan and Elevation drawings.
2. An aerial photograph of the subject land and environs

**RECOMMENDATION:**

*That Council consider the planning permit application PA 133/18 and determine to issue a Notice of Decision to Refuse to Grant a Planning Permit for the display of a promotion sign at Lot 1 on TP430715U, 4189 Pyrenees Highway, Flagstaff, on the following grounds:*

- 1. The sign would adversely impact the rural landscape character of the location as an entrance to a local settlement or urban village, which is outlined in local policy.*
- 2. The sign is excessive in scale to its surroundings and is not sympathetic to the rural setting or urban village character that provides a welcoming entrance to the local settlement of Flagstaff.*
- 3. The sign would be a dominant element in the existing rural area and in the streetscape which is an entrance to the local settlement of Flagstaff and a significant approach to the larger towns of Maryborough and Carisbrook.*
- 4. The sign would have an impact on driver attention and traffic safety given the location adjacent the intersection of Madmans Lane with the Pyrenees Highway.*



# FLAGSTAFF - PROPOSED DOUBLE SIDED, NON-ILLUMINATED PROMOTION SIGN

4189 PYRENEES HIGHWAY,  
FLAGSTAFF VIC 3465

## TOWN PLANNING DRAWINGS

- A01 COVER PAGE
- A02 SITE PLAN
- A03 FLOOR PLAN & ELEVATIONS
- A04 PERSPECTIVE VIEWS



PHOTO 01



PHOTO 02



PHOTO 03



PHOTO 04



PHOTO 05



### KEY PLAN

SCALE 1 : 1000


PHOTO LEGEND	
NO.	DESCRIPTION
01	PHOTOGRAPHIC VIEW OF THE PROPOSED LOCATION FOR THE PROMOTION SIGN FROM THE WEST.
02	PHOTOGRAPHIC VIEW OF THE PROPOSED LOCATION FOR THE PROMOTION SIGN FROM THE EAST.
03	PHOTOGRAPHIC VIEW OF THE PROPOSED LOCATION FOR THE PROMOTION SIGN FROM THE NORTH.
04	PHOTOGRAPHIC VIEW NORTH FROM THE PROPOSED LOCATION OF THE MAJOR PROMOTION SIGN.
05	PHOTOGRAPHIC VIEW EAST FROM THE PROPOSED LOCATION OF THE MAJOR PROMOTION SIGN.

### ISSUE/AMMENDMENTS SCHEDULE

01 14.11.2018  
TOWN PLANNING ISSUE

## TOWN PLANNING

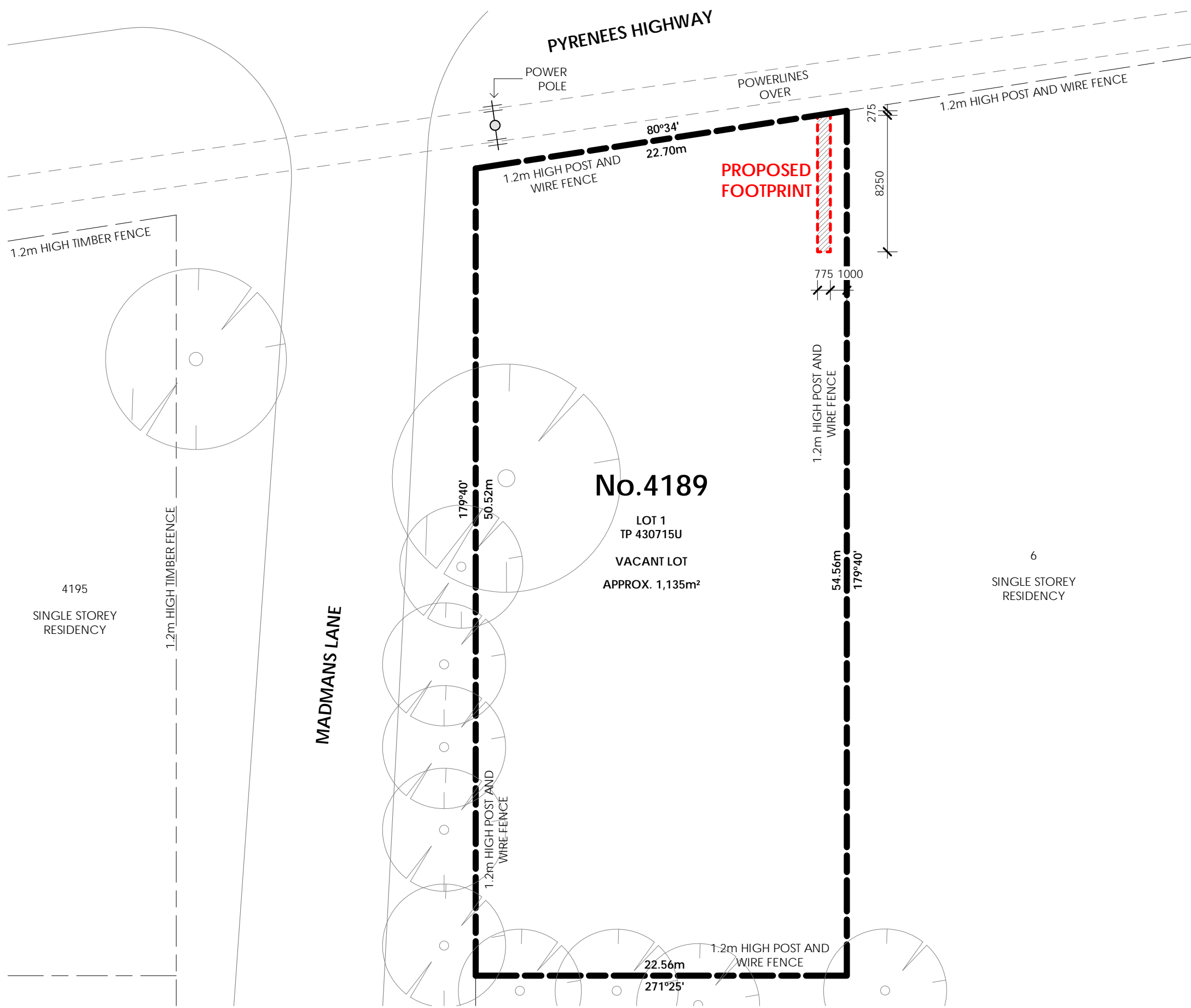
NOT FOR CONSTRUCTION

<div></div> <div><p>PROJECT FLAGSTAFF - PROPOSED DOUBLE SIDED, NON-ILLUMINATED PROMOTION SIGN</p><p>ADDRESS 4189 PYRENEES HIGHWAY, FLAGSTAFF VIC 3465</p></div>	NORTH POINT		DATE	DRAWING NO.	DRAWN BY
			14.11.2018	A01	JAMES
			PROJECT NO. 18-021	PAGE SIZE A3	ISSUE NO.

### REGIONAL BILLBOARD CO.

A 62 John Street, ELTHAM VIC 3095  
E james@regionalbillboardco.com.au  
M 0400 096 182





SITE PLAN  
SCALE 1 : 250

### ISSUE/AMMENDMENTS SCHEDULE

01	14.11.2018	TOWN PLANNING ISSUE
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### LEGEND

- PROPERTY BOUNDARY
- EXISTING BUILDINGS ONSITE
- PROPOSED MAJOR PROMOTION SIGN FOOTPRINT
- EXISTING TREE TO BE RETAINED

## TOWN PLANNING

NOT FOR CONSTRUCTION



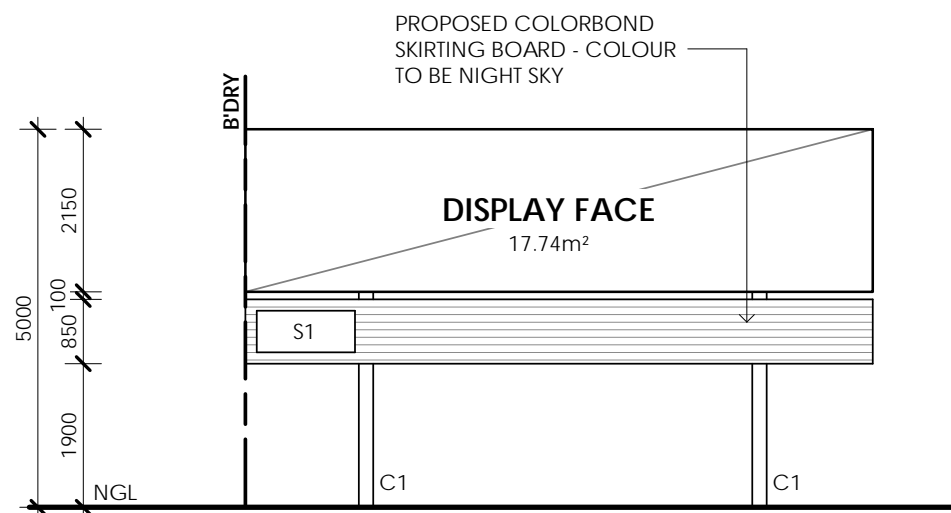
PROJECT  
FLAGSTAFF - PROPOSED DOUBLE SIDED,  
NON-ILLUMINATED PROMOTION SIGN  
ADDRESS  
4189 PYRENEES HIGHWAY,  
FLAGSTAFF VIC 3465

#### NORTH POINT

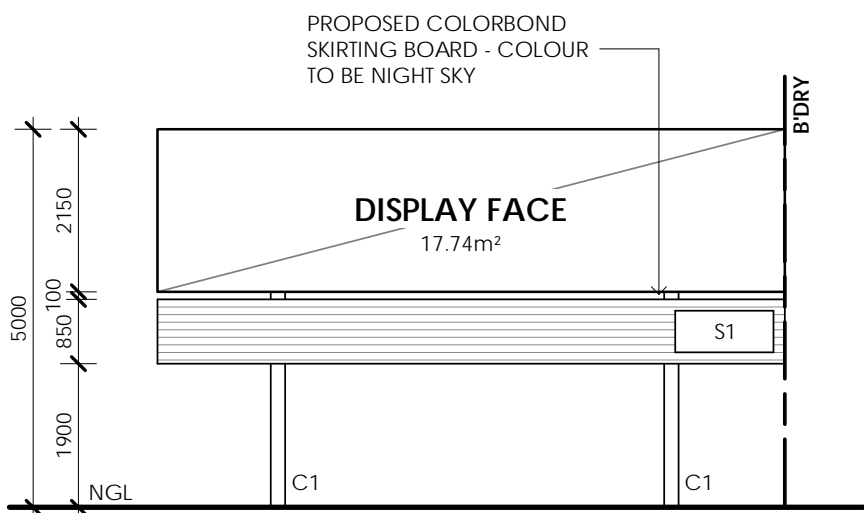


DATE 14.11.2018	DRAWING NO. A02	DRAWN BY JAMES
PROJECT NO. 18-021	PAGE SIZE A3	ISSUE NO.

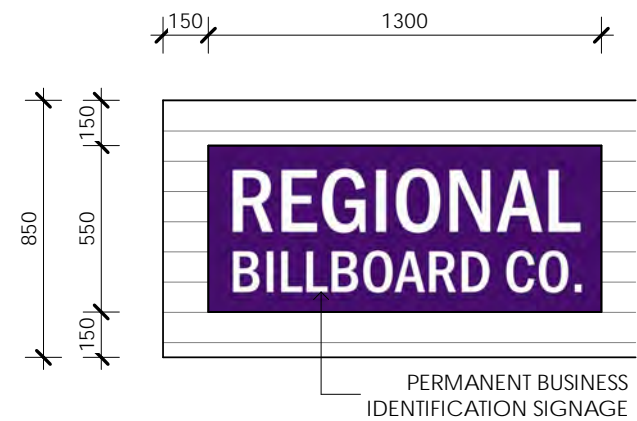
REGIONAL BILLBOARD CO.  
A 62 John Street, ELTHAM VIC 3095  
E james@regionalbillboardco.com.au  
M 0400 096 182



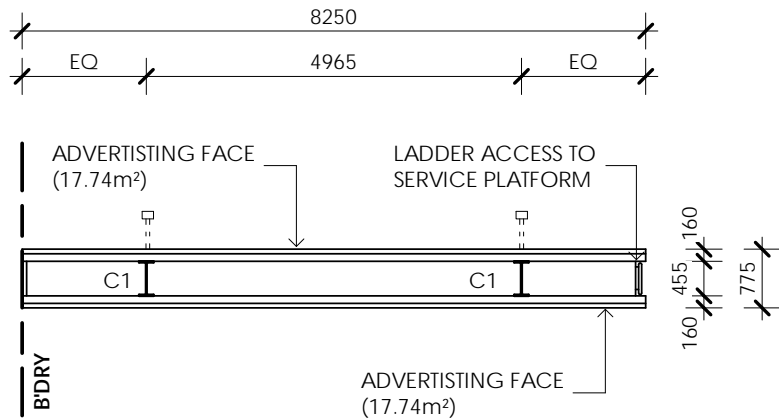
EAST ELEVATION  
SCALE 1 : 100



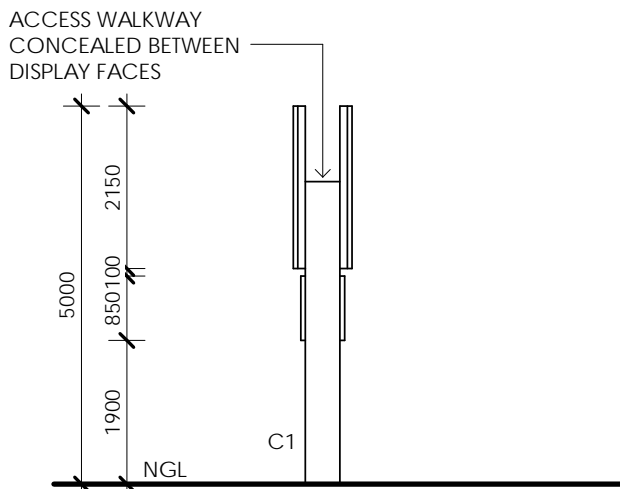
WEST ELEVATION  
SCALE 1 : 100



S1 - SIGNAGE DETAIL  
SCALE 1 : 25



FLOOR PLAN  
SCALE 1 : 100

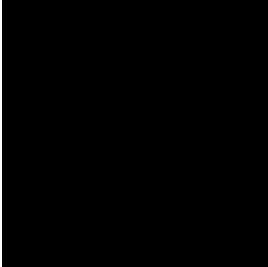


NORTH ELEVATION  
SCALE 1 : 100

**MATERIALS BOARD**



C1  
PROPOSED COLUMN -  
POWDERCOAT BLACK  
FINISH



BLACK PAINT  
PROPOSED BLACK PAINT  
FINISH TO ALL FEATURES,  
TRIMS AND LIGHTING



SKIRTING BOARD  
PROPOSED COLORBOND  
SKIRTING BOARD WITH  
NIGHT SKY FINISH

**ISSUE/AMMENDMENTS SCHEDULE**

01 14.11.2018  
TOWN PLANNING ISSUE

**LEGEND**

C1 PROPOSED COLUMN - POWDERCOAT  
BLACK FINISH

NGL NATURAL GROUND LINE

S1 PERMANENT SIGN 1 - REFER TO DETAIL

**TOWN PLANNING**

NOT FOR CONSTRUCTION



PROJECT  
FLAGSTAFF - PROPOSED DOUBLE SIDED,  
NON-ILLUMINATED PROMOTION SIGN  
ADDRESS  
4189 PYRENEES HIGHWAY,  
FLAGSTAFF VIC 3465

**NORTH POINT**



DATE  
14.11.2018

PROJECT NO.  
18-021

DRAWING NO.  
A03

PAGE SIZE  
A3

DRAWN BY  
JAMES

ISSUE NO.

REGIONAL BILLBOARD CO.

A 62 John Street, ELTHAM VIC 3095

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M 0400 096 182

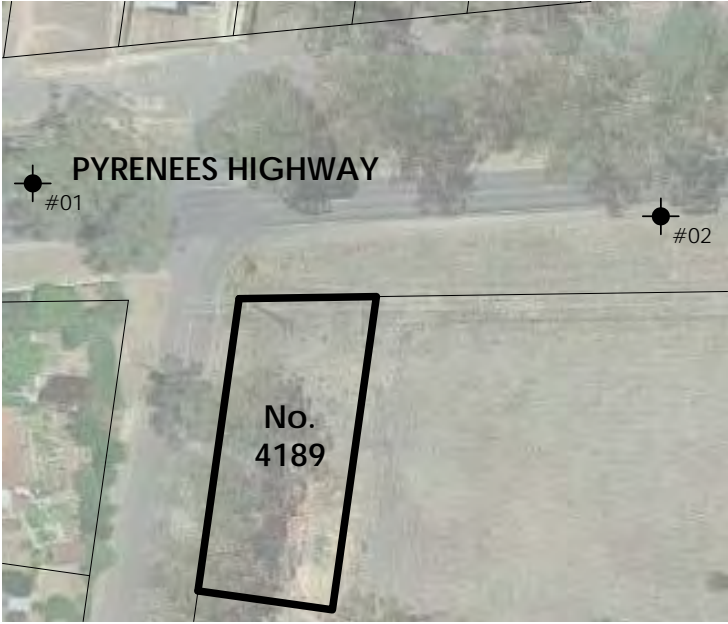




EXISTING PERSPECTIVE VIEW #01 - WESTBOUND TRAFFIC



EXISTING PERSPECTIVE VIEW #02 - EASTBOUND TRAFFIC



PERSPECTIVE VIEW REF  
SCALE 1 : 1250



PROPOSED PERSPECTIVE VIEW #01 - WESTBOUND TRAFFIC



PROPOSED PERSPECTIVE VIEW #02 - EASTBOUND TRAFFIC

ISSUE/AMMENDMENTS SCHEDULE

01 14.11.2018  
TOWN PLANNING ISSUE

GENERAL NOTES

PROPOSED PERSPECTIVE VIEW IS AN ARTISTS IMPRESSION OF THE PROPOSAL ONLY. SIZE AND SCALE ARE REFERENCED ON THE FLOOR PLANS AND ELEVATIONS.

THE PROPOSAL SEEKS THE APPROVAL OF THE ERECTION AND DISPLAY OF A DOUBLE SIDED, NON-ILLUMINATED PROMOTION SIGN

ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SUPPLIED TOWN PLANNING REPORT

REFER TO THE TOWN PLANNING REPORT FOR THE WRITTEN STATEMENT REGARDING THE METHODOLOGY DURING THE PREPARATION OF PERSPECTIVE VIEWS

LEGEND

#00 PERSPECTIVE VIEW - LOCATION IN WHICH PHOTOGRAPHIC VIEWS WERE TAKEN

TOWN PLANNING

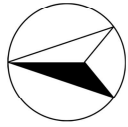
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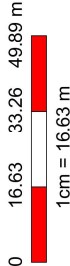


Subject land: 4189 Pyrenees Highway, Flagstaff  
Planning application PA 133/18

Date: 07/02/2019



Scale 1 : 1,663





**8.8 ACTION PLAN PROGRESS REPORT – SIX MONTHS TO 31 DECEMBER 2018**

**Author:** Chief Executive Officer

**Responsible General Manager:** Chief Executive Officer

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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**SUMMARY/PURPOSE:**

The purpose of this report is to provide Council with an update on the status of the projects identified in the 2018/19 Action Plan.

**POLICY CONTEXT:**

Under Section 125 of the Victorian Local Government Act 1989 Council must prepare a Council Plan, which identifies the strategic objectives of the Council and strategies for achieving the objectives for at least the next four years. The Council Plan must also be reviewed annually. An Annual Plan is not required to be prepared under the Local Government Act, however it is best practice and provides Council and the community with a regular progress report against the objectives in the Council Plan.

**BACKGROUND INFORMATION:**

The 2017-2021 Refreshed Council Plan was adopted by Council at the Ordinary Meeting of Council in August 2018. The 2018/19 Action Plan was developed to support the achievement of the strategic objectives identified in the Refreshed Council Plan and to provide a reporting framework to measure progress against the Council Plan. The 2018/19 Action Plan was adopted by Council at the Ordinary Meeting of Council in October 2018.

This is the first progress report against the Action Plan and is for the six months to 31 December 2018.

**REPORT:**

There has been significant progress against the initiatives and projects outlined in the 2018/19 Action Plan. There are 102 actions identified in the plan, of these 32 are complete, 68 are underway or ongoing and only 2 have not yet commenced.

**CONSULTATION/COMMUNICATION:**

In April 2018 the Have Your Say Campaign was launched throughout the Shire. This campaign sought to gather feedback from the community, particularly parts of the community who historically did not have much input to plans and strategies ensuring that future direction of the Shire is community driven. The campaign was designed to be simple, inclusive and mindful of our diverse demographics. The campaign consisted of a post card system with 40 collection points throughout the Shire and social media was also used to gather feedback from our communities via an online survey. Have Your Say was advertised widely through local media outlets. Council received 524 submissions from the community. The Have Your Say

Campaign has informed the process of refreshing the 2017-2021 Council Plan to ensure its relevance.

**FINANCIAL & RESOURCE IMPLICATIONS:**

The 2018/19 Budget and the four year Strategic Resource Plan were prepared in line with the initiatives identified in the Action Plan subject to grants from State and Federal Government being received in some cases.

Council has been successful with a number of grant funding applications to support projects in the Action Plan including the following:

- Go Goldfields \$1.4 million over two years
- Economic Development and Tourism Strategy - \$200,000
- TAC Road Trip \$199,000 over two years
- Youth Engage Program \$125,000 over two years
- Freeza Program \$73,500 over three years
- Sustainability Victoria Energy Saver Program - \$15,298
- Recreation Strategy - \$30,000
- Fixing Country Roads Program - \$500,000
- DDA compliance upgrades at the Maryborough Leisure Centre - \$430,000

**CONCLUSION:**

The 2018/19 Action Plan outlines the projects and programs being undertaken during the year to meet the objectives of the Council Plan. The report showing progress for the six months to 31 December 2018 will be presented at the next Council Meeting.

**ATTACHMENTS:**

1. Action Plan Progress Report December 2018

**RECOMMENDATION:**

*That Council notes the Action Plan Progress Report December 2018.*



OBJECTIVES	INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS	
OUR COMMUNITY OUTCOME: A SUPPORTED, COHESIVE COMMUNITY, LIVING A FULL AND HEALTHY LIFE.							
1.1	Build an aspiring community, achieving and living a full life where:	Continue delivery of the Go Goldfields program, and work towards program sustainability.	Implement Library Strategic Plan	Council	Manager Social Inclusion and Go-Goldfields	October/ November 2018	Library Strategic Plan 2018 -2020 consultation completed, draft strategy being prepared.
	Family violence is unacceptable in our community	Advancement of projects in areas of: Early Years Literacy Engagement of Young People Addressing Family Violence Work Readiness	Teddy Bears Picnic (activity)	Council/ Go Goldfields partnerships	Manager Social Inclusion and Go-Goldfields		A total of 98 children and 58 adults were in attendance. Nine children from Talbot Kindergarten travelled by train to Maryborough to attend the event.
	Children are loved and safe						
	Everyone has the language and literacy skills needed						
	Young people are celebrated a they strive to reach their full potential	Develop a 10 year Community Plan	Library, Laptime Toddler time	Council	Manager Social Inclusion and Go-Goldfields	Ongoing	Toddler time - July to Dec 2018, 20 events, 510 participants. Laptime - 9 families attended term 4 in 2018.
	Everyone can learn, earn, achieve and dream	Develop a Gender Equity Policy for the organisation	Supported Playgroup Small talk	DEWLP	Manager Community Services	Ongoing	63 familes and 73 children have attended sessions in terms 3 and 4 in 2018.
			Maternal Child and Health - Let's Read	DET	Manager Community Services	Ongoing	Let's read program funding has ceased. 59 newborn enrolments with 100% home visit rate. 556 Key Age and Stages consultations. 682 immunisations
			Short Flix Festival	BBRF & RDV- Go Goldfields	Manager Social Inclusion and Go-Goldfields	December 2017 – November 2018 Event October 2018	Activity complete. 10 young filmmakers,9 short films. 370 people visit across 3 days, over 40 young people and community members involved, - 10 film making professionals + 3 professional actors. Also a number of visitors to the shire over the weekend—over 1200 people attended.
			Business Case for Youth Hub	BBRF	Manager Social Inclusion and Go-Goldfields	March - June 2019	Currently identifying funding opportunities

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
			Empower	Grant (multiple sources)	Manager Social Inclusion and Go-Goldfields	2018-2022 * four year project dependent on Grant approval	Grant application not successful.
			Implementation of Family Violence Action Plan	RDV- Go Goldfields partnerships	Manager Social Inclusion and Go-Goldfields	Ongoing	Implementation phase - work in services development and coordination, justice and accountability, gender equity and expertise, and community engagement and empowerment.
			16 days of Activism – Marigolds Project	Family Violence Victoria	Manager Social Inclusion and Go-Goldfields	November 2018 (annual)	Activity completed. Marigolds and petunia flower beds, approximately 20 participants attended the launch event, Little People Big Voices Project over 1000 children made loved and safe bears promoting the message of 'all children deserve to be loved and safe'.
			Free from Family Violence – Priority: Change the Story - Gender equity statement	Grant (dependent on success)	Manager Social Inclusion and Go-Goldfields	Commence February 2019 - Jan 30 2020	Grant successful. Project plan completed.
			Shire Wide Literacy Strategy	Grant	Manager Social Inclusion and Go-Goldfields	Commenced July 2018 – 2019	Consultations held within the shire 255 responses. These interviews were held in various places in the shire including schools, library, street interviews and kitchen table conversations. Thematic analysis completed to inform strategy development.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
			Youth Engage Program	Youth Central	Manager Social Inclusion and Go-Goldfields	Current - December 2020	Christmas Party / Breakup 28- In attendance Youth Space After School Program – 27 attending overall coming more than once a week. Duke of Ed Volunteer Program – 3 volunteering every week until 21 November 2018 Engage leadership Group – 6
			FreeZa Program	Youth Central	Manager Social Inclusion and Go-Goldfields	Current – December 2021	Outdoor Movie Night - 180 in attendance Flash Nights Round 2 – 50 in attendance
			L2P	VicRoads	Manager Social Inclusion and Go-Goldfields	Current – June 2019	20 young people active in driving matches with a wait list of 8 young people. Driving covers 35,000 kilometers per year with 8 community mentors. Currently funding is due for review in June 2019.
			TAC Road Trip	TAC	Manager Social Inclusion and Go-Goldfields	Current – June 2021	Commenced September 2018. 18 young people participated in workshops to prepare for their Learners permits, licensing and hazard perception training. Driving preparation is only one aspect of the program with social, education and employment outcomes and referrals also being provided to ensure inclusion and social connections for young people.
1.2	Support and encourage volunteerism in the community	Provide a safe, fun, encouraging and welcoming environment for Volunteers and promote the benefits of a volunteer organisation.	Support and train volunteers to deliver the annual Energy Breakthrough event	Council, CEP, sponsorships, community groups	Manager Strategy and Economic Development	November (Annual)	Event complete - over 900 volunteers were trained and supported the running of the 2018 event.
			Continue to engage and train volunteers to support council operations in services such as the Visitor Information Centre and L2P	Council	General Manager Community Wellbeing	Ongoing	32 volunteers currently active in L2P, Art Gallery and the VIC, with four new volunteers this year

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
		Develop a Community Support Policy (including Grants Program) to assist the work of community groups	Develop a Community Support Policy	Council	General Manager Community Wellbeing	Dec-18	Anaylsis being undertaken on level of support currently provided. Policy currently being drafted.
1.3	Ensure that all of our community, regardless of diversity, can live a full and healthy life.	Implement Central Goldfields Public Health and Wellbeing Plan.	Review and refresh the Central Goldfields Public Health and Wellbeing Plan in light of the refresh of the Council Plan	Council	Manager Community Services	Mar-19	Project plan being developed.
		Actively participate in The Healthy Hearts Project	Support and participate in the roll out of the Healthy Hearts Project	DHHS/RDV	General Manager Community Wellbeing	Across two financial years 2018/19, 2019/20	Inception meeting held. Local PCG to be formed.
		Continue participation with Loddon Campaspe Regional Partnership	Loddon Mallee Regional Partnership projects include:				
			Early Years Language and Literacy	DHHS / RDV	CEO	Jun-19	Loddon Campaspe Early Years Strategy PCG formed and consultants appointed.
			Healthy Hearts (see above)	DHHS / RDV	General Manager Community Wellbeing	See above	See above
			Youth Our Critical Asset	DHHS / RDV	General Manager Community Wellbeing	Ongoing	Youth engagement completed. Report with service options currently being prepared for consideration
			A Growing Economy – development of a Regional Economic Statement	DHHS / RDV	CEO	Dec-18	Draft Regional Economic Statement developed by Regional Partnership Working Group. Will come to a future Council Meeting for endorsement
1.4	Provide leadership in municipal emergency and fire prevention planning and strengthen public safety	Coordinate Municipal Emergency Management Plans and Committee	Complete Emergency Management Plans of Council Facilities and Evacuation drills	Council	Manager Infrastructure	Jun-19	Plans have been updated in the Council offices and an evacuation drill was carried out 30 October 2018.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
		Implement recommendations from flood management plans including flood mitigation works	Continue to participate in the Northern Victorian Emergency Management Cluster	Council	Manager Community Engagement	June 2019 and ongoing	Ongoing participation in cluster, and attendance by GMCW and EMC
			Help develop and adopt the Cluster Influenza Pandemic Plan	Council	Manager Community Engagement	Mar-19	In progress
			Full review and adopting of the Municipal Fire Management Plan 2018 – 2021	Council	Manager Community Engagement	Mar-19	In progress
			Review and adopt the Neighbourhood Safer Places Plan	Council	Manager Community Engagement	Oct-18	NSP reviewed and adopted by Council on 23 October 2018
			Implement the Carisbrook Flood and Drainage Management Plan, specifically the completion of the western levy and additional creek clearing	Natural Disaster Resilience Grant Scheme	Manager Infrastructure	June 2019 and on-going	Stages 1 and 2 of Flood levy project complete. Recommendations from Jacobs peer review report currently being addressed by consultants including minor amendments to design of Stages 3 and 4 of Flood levy to define construction envelope of final levy for land requirements, planning approvals and construction. Additional creek clearing requirements being defined and outline of works being prepared for consultation and approval.
		Extend and upgrade township CCTV systems.	Conduct a Community Safety Forum	Council	General Manager Community Wellbeing	Sep-18	Forum held in partnership with Go Goldfields, Victoria Police, Maryborough District Health Service, Department of Justice, Department of Human Services and Department of Education and Training on 5 September 2018 at the Maryborough Town Hall.
1.5	Facilitate an active and inclusive arts community	Develop a Community Arts Strategy	Complete Story Seats project	Go Goldfields	Manager Social Inclusion and Go-Goldfields	September – October 2018	8 seats complete. Installation underway with seats installed in Phillips gardens, Dunnolly and Bealiba.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
		Participate in regional cultural programs including the Regional Centre for Culture.	Seek funding to develop an Arts and Culture Strategy	Council	Manager Tourism Events and Culture	Jun-19	Currently looking at opportunities. Will also be included as a priority in the Economic Development and Tourism Strategy.
			Broaden and extend arts and culture engagement with schools and the community	Council	Manager Tourism Events and Culture	June 2019 – ongoing	Ongoing initiatives being implemented on the back of Regional Centre for Culture.
			Support the rollout of the Regional Centre for Culture events	Creative Victoria	Manager Tourism Events and Culture	Dec-18	Complete in 2018. Successful year of events for Central Goldfields Shire and the broader region.
			Reestablish the Friends of the Gallery	Council	Manager Tourism Events and Culture	Mar-19	In progress
1.6	Promote and enhance passive and active recreation	Develop a Central Goldfields Shire Recreation Plan	Develop a Recreation and Open Space Strategy	Sport and Recreation Victoria /Council	Manager Strategy and Economic Development	June 2019 – on going	Grant funding confirmed. Specification for consultant out for tender.
		Continue to implement priorities from Major Recreation Reserves Master Plans	Develop an all-access changing places change room at the Maryborough Sports and Leisure Centre	Sport and Recreation Victoria /Council	Manager Strategy and Economic Development	Jun-19	Grant funding confirmed. Changeroom component preliminary design complete. Consultation with Recreation Facility contractor required to progress other components to define final scope of project to allow design to be finalise.
		Implement priorities from the Walking and Cycling Strategy	Complete designs for recreation reserves in Carisbrook and Dunolly	Council	Manager Strategy and Economic Development	Apr-19	Design contract awarded for Carisbrook Recreation Reserve. Meetings with Dunolly stakeholders undertaken.
			Develop a design for a Skate Park in Maryborough	Council	Manager Strategy and Economic Development	Apr-19	Meeting with stakeholders held. Brief for consultant being developed,



OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
1.7	Support positive development for residents of all ages and abilities.	Develop a Municipal Early Years Plan	Participate in the development of a regional Early Years Language and Literacy Strategy	DHHS/RDV	Manager Community Services	Jun-19	Loddon Campaspe Regional Partnership undertaking this work for the region. Consultants have been appointed, data collation complete, engagement with service providers to commence in February 2019.
		Facilitate the transition of service delivery models for HACC and NDIS					
		Implement priorities from the Positive Ageing Strategy	Identify and support clients with their transition to the NDIS	DHHS	Manager Community Services	Jun-19	All clients transitioned to the NDIS
		Support positive life opportunities for people living with a disability.					
			Implement wellness and reablement model through Home Support Services and Social Support groups	DHHS	Manager Community Services	Apr-19	Staff currently receiving training on wellness and reablement model.
			Review the Disability Action Plan	DHHS/Council	Manager Community Services	May-19	Project plan being developed.
			Develop an interactive space at the Maryborough Library for members of the community with autism, sensory disabilities and other cognitive challenges	DHHS	Manager Social Inclusion and Go-Goldfields	Mar-19	Planning underway in conjunction with the development of a Library Strategy.
			Examine models of service delivery and viability of aged services	Council	Manager Community Services	June 2019 and ongoing	Participated with Loddon Campaspe Councils in workshops to review local impact of changes to the service models.
			Engage with the community and complete a report on the future of Library services in the Shire	Council	Manager Social Inclusion and Go-Goldfields	Mar-19	Community consultations held in Dunnolly and Maryborough, surveys provided to residents of Bealiba, Dunnolly and Talbot. Approximately 250 hard copy surveys returned. Online survey also provided.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
1.8	Maximise all forms of connectivity for the community	Advocate for enhanced passenger rail services.	Include enhanced passenger rail services in all advocacy documents.	Council	CEO	July – September 2018	Complete, included in Loddon Campaspe and CHCV advocacy documents.
		Advocate for improved digital connectivity.					
		Deliver local Community Transport Plan	Participate in the Mildura Passenger Rail project	Council	General Manager Community Wellbeing	Ongoing	Project brief developed and procurement process for consultants to undertake work has commenced.
		Implement priorities from the Walking and Cycling Strategy	Facilitate a Community Transport Forum	Council / Transport for Victoria	General Manager Community Wellbeing	November 2018 – January 2019	Complete. Forum held on 31 January.
OUR ECONOMY OUTCOME: A VIBRANT LOCAL ECONOMY WHICH CONTRIBUTES TO THE MUNICIPALITY’S ECONOMIC PROSPERITY.							
2.1	Facilitate an environment which is conducive to industry/business Growth and employment growth and retention.	Develop an Economic Development and Tourism Strategy  Develop Job creation/retention initiatives  Participate in the development and implementation of Regional Economic Development Strategies.	Develop and Economic Development and Tourism Strategy for Central Goldfields Shire	RDV	Manager Strategy and Economic Development	September 2018 – August 2019	Grant funding confirmed. Specification for consultant out for tender.  Draft Regional Economic Statement developed by Regional Partnership Working Group.
2.2	Develop a skilled workforce to support economic growth	Support work readiness initiatives, specifically within the Go Goldfields program.	Implement the Go Goldfields Work Readiness Action Plan 2018 – 2020	RDV / Go Goldfields	Manager Social Inclusion and Go-Goldfields	Ongoing	Meeting held of the Employment, Education and Training Action Group.Through collaborative efforts, Skills and Jobs Centre provided outreach information sessions in November. Partnerships Addressing Disadvantage application workshops held, feedback session attended by General Manager Community Wellbeing and Manager Social inclusion/Go Goldfields.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
2.3	Promote Central Goldfields as a place of choice to live, work and play.	Review Council's Population Growth Strategy	Participate in the development of a Regional Freight Strategy	RDV	General Manager Infrastructure, Assets and Planning	Dec-18	Completed. Regional Freight Strategy endorsed by Council on 25 Septmeber 2018.
		Participate in Regional Economic Development Strategies	Participate in the development of a Regional Economic Statement	RDV / Loddon Campaspe Regional Partnership Council / CHCV Councils	CEO	Dec-18	Draft Regional Economic Statement developed by Regional Partnership Working Group
		Advocate for the development of the Maryborough Ballarat (Rail) Growth Corridor.	Include enhanced passenger rail services in all advocacy documents.		CEO	July – September 2018	Complete, included in Loddon Campaspe and CHCV advocacy documents. Meetings held with Transport Victoria.
		Advocate for a wastewater scheme for Talbot township	Wastewater for a growing Talbot included in Priority Projects document	Council	CEO	July – September 2018	Included in Loddon Campaspe and CHCV advocacy documents. Meetings held with Central Highlands Water and DELWP. Strategic planning work required to support development of a business case.
2.4	Provide a supportive environment for existing business to prosper	Include support for existing business in the Economic Development and Tourism Strategy	Develop an Economic Development and Tourism Strategy for Central Goldfields Shire	RDV	Manager Strategy and Economic Development	September 2018 – August 2019	See above
		Support Committee for Maryborough and other business groups in the Central Goldfields Shire	Continued support for Committee for Maryborough	RDV	Manager Strategy and Economic Development	Ongoing	Joint meetings held with Committee for Maryborough and Council.
			Participate on the Board of Bendigo Regional Tourism		Manager Tourism Events and Culture	Ongoing	Continued ongoing representation on Bendigo Regional Tourism Board by GMCW and MTEC.
2.5	Strengthen and facilitate diversification for the Agri-business and food processing sectors	Update and renew the Food Cluster Strategy  Seek direct and value-adding opportunities in the sector.	Review Food Cluster Strategy when developing the Economic Development Strategy	Council	Manager Strategy and Economic Development	April/June 2019	Development of Economic Development Strategy to commence February 2019.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
2.6	Grow the digital capability of the Shire	Encourage NBN connections and advocate for improved NBN services.	Advocate for mobile towers in blacks spots identified in the Regional Development Australia - Loddon Mallee Mobile Coverage Report	Federal and State governments	General Manager Infrastructure, Assets and Planning	On-going	Mobile phone black spots information provided to Government for funding application. The two black spot sites in Central Goldfields have the support of the Victorian Government as priority sites for the Commonwealth Government’s Mobile Blackspot Funding Program.
		Continue to advocate to minimise mobile phone black spots.					
		Encourage growth of digital platforms.					
2.7	Capitalise on tourism and the visitor economy through growth of events and promotion of unique local experiences	Advance the Goldfields Heritage Development and Opportunity Project towards World Heritage Listing.	Participate in State Government review of Regional Tourism Boards	Council	General Manager Community Wellbeing	Jun-19	State Government set to commence review shortly. Continue to advocate the importance of the RTB's through Bendigo Regional Tourism
		Review and update the business and marketing plan for Energy Breakthrough	Update Business marketing plan for Energy Breakthrough	RDV	Manager Strategy and Economic Development	September 2018 – August 2019	Consultant engaged and doing preliminary investigations and consultation with stakeholders.
		Identify opportunities for new events in the Central Goldfields Shire	Complete Bendigo Regional Tourism website	BRT	Manager Tourism Events and Culture	Oct-18	Due early March 2019. Ongoing development issues with contractor (through BRT) has been the delaying factor.
			Implement Regional Tourism projects through partnerships	BRT/VGTE/VV	Manager Tourism Events and Culture	Jun-19	Regional Tourism website due March 2019. Accessible Tourism Audit report complete. Goldfields Villages DMP in progress. Regional Itineraries project complete - 4 versions.
			Roll out the Maryborough and surrounds branding toolkit project	Council	Manager Tourism Events and Culture	Feb-19	Complete.
			Produce the Maryborough and surrounds Official Visitor Guide	Council	Manager Tourism Events and Culture	Dec-19	Complete. Guide launched on 31 January 2019.
			Advance and advocate for Goldfields Heritage Project for World Heritage Listing	Council	Manager Tourism Events and Culture	Ongoing	Ongoing advocacy taking place with VGTE and relevant bodies.
		3. OUR BUILT AND NATURAL ENVIRONMENT OUTCOME: OUR SHIRE CELEBRATES THE RICH BUILT AND NATURAL HERITAGE AND A SUSTAINABLE ENVIRONMENT.					

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
3.1	Ensure investment in roads, footpaths and buildings meet community needs now and in the future	Undertake service planning to establish asset requirements to deliver services	Build an all access change room at the Maryborough Leisure Centre – Indoor Pool	Grant and council funding (SRV or Fed. Community Sport Infra.)	Manager Strategy and Economic Development	Jun-19	Grant funding confirmed. Changeroom component preliminary design complete. Consultation with Recreation Facility contractor required to progress other components to define final scope of project to allow design to be finalise.
		Review and update Asset Management Plans and prepare a 10 year capital works program					
		Develop a plan to divest from assets that are surplus to community needs	'E' Waste Shed Extension and Carisbrook Transfer Station Pavement Rehabilitation	Grant and council funding (Sustainability Victoria)	Manager Infrastructure	Mar-19	Grant funding received. Contract awarded and shed to be built February/March 2019.
			Porteous Road Bridge Upgrade	Grant (Bridges Renewal program)	Manager Infrastructure	May-19	Tender to be awarded at February Council Meeting.
			Railway St/Gillies St Y Intersection Upgrade	Grant (R2R) and Council	Manager Infrastructure	May-19	Work commenced January 2019.
			Gordon Rd/Pyrenees Hwy Intersection Upgrade	Grant (R2R) and Council	Manager Infrastructure	Jun-19	Project completed 14 December 2018
3.2	Improve the appearance of township entrances and streetscapes		Carisbrook Creek Clearing	Federal and State government natural disaster recovery	Manager Infrastructure	Jun-19	Additional creek clearing requirements being defined and outline of works being prepared for consultation and approval.
		Renew and update urban design frameworks in the Shire	Improve the landscaping associated with the Town Entry signs	Council	Manager Operations	October – November 2018	Improvement works completed December 2018
		Collaborate with township tree committees on tree plantings and maintenance	Reconvene and reconfigure the public places street tree committees.	Council	Manager Operations	Quarterly meetings, commencing November 2018	Proposal for new shire wide committee to be considered by Council at a future Council Meeting.
			Update the Gordons Gardens Masterplan	Council	Manager Operations	Feb-19	Public feedback session completed, Consultant to be engaged early 2019

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
3.3	Protect and enhance the environment while planning for growth	Review and update the Central Goldfields Planning Scheme and Municipal Strategic Statement	Undertake an Energy Audit of council buildings to determine works to reduce council's energy consumption	Sustainability Victoria Grant	Manager Infrastructure	Jan-19	Audit completed, awaiting final report due early 2019. Draft reports have been received and commented on.
		Develop a Strategic Planning program	Develop Strategic Planning Program	Council	Manager Strategy and Economic Development	Dec-18	Program will be developed early 2019 now that a Manager Strategy and Economic Development has been appointed.
		Participate in regional environmental projects through the Central Victorian Greenhouse Alliance	Review Municipal Strategic Statement	Council	Manager Strategy and Economic Development	Jun-19	Not commenced.
		Implement the actions from Council's Sustainability Plan	Prepare the Maryborough Flood Study	Subject to grant funding	Manager Strategy and Economic Development	Feb-19	Awaiting specification from NCCMA
			Prepare and exhibit and finalise the Planning Scheme Flood Amendment	Subject to grant funding	Manager Strategy and Economic Development	Jun-19	Subject to grant funding.
			Participate in the development of Central Highlands Integrated Water Management Plan	Council / Central Highlands Water	Manager Infrastructure	Dec-18	Participated in working group and forums. Plan has been completed by CHW and endorsed by Council at December Council Meeting.
3.4	Ensure waste management meets current and future demand and standards	Review and update Council's Waste Management plan	Undertake a Waste Management Strategy Refresh	Council	Manager Infrastructure	Mar-19	Consultant engaged and doing preliminary investigations.
		Participate in regional waste projects through the Grampians Central West Waste and Resource Recovery Group	Participate in regional waste projects through the Grampians Central West Waste and Resource Recovery Group	Council / Sustainability Victoria	Manager Infrastructure	Ongoing	Projects include: Waste and Recycling Audit Feasibility Study complete, Collaborative Procurement involving planning for the development of model collaborative waste services across the region, E-Waste ban education services, Closed landfill self assessments, Development of regional waste and resource recovery planning and development of data collection models.



OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
3.5	Protect and preserve our heritage assets	Implement recommendations from Cultural Heritage Plans for heritage listed buildings  Seek funding assistance to maintain and preserve heritage assets	Seek external heritage funding to undertake repairs to the Maryborough Outdoor pool	Council /Heritage Victoria	Manager Strategy and Economic Development	On-going	Grant funding round not announced to date.
4. OUR ORGANISATION OUTCOME - CENTRAL GOLDFIELDS SHIRE IS A PROACTIVE, WELL GOVERNED, PROFESSIONAL AND FINANCIALLY SUSTAINABLE ORGANISATION.							
4.1	Ensure the financial sustainability of Council through efficient and effective delivery of services	Undertake service planning across the organisation to set sustainable service levels that meet community needs	Implement a Fleet Management System	Council	General Manager Corporate Performance	November 2018 - March 2019	Software purchased. Training and go live early 2019.
		Undertake service planning across the organisation to set sustainable service levels that meet community needs	Undertake a review of all services	Council / Local Government Victoria	General Manager Corporate Performance	December 2018 – May 2019	Initial meeting held with service owners on 4 February 2019. Draft service plans due 4 March 2019.
		Develop a 10 year financial plan	Develop 10 year financial plan	Council /Local Government Victoria	General Manager Corporate Performance	November - March 2019	Software purchased. Will be utilised during preparation of the 2019/20 Budget.
		Review budget and financial reporting processes to improve monitoring of financial performance	Review budget and financial reporting	Council / Local Government Victoria	Manager Finance	October – December 2018	Funding confirmed for purchase and implementation of management reporting software to support improved budget and financial preparpation and reporting.
		Develop a fees and charges policy	Develop Fees and Charges Policy	Council	Manager Finance	Completed June 2018	Completed June 2018.
4.2	Provide effective and accessible community information and opportunities community contributions to policy and program development	Implement the Community Engagement Framework	Introduce new engagement program including listening posts, Administrator meeting times and Community Voices Panel	Council	Manager Community Engagement	Ongoing	Listening posts introduced and scheduled quarterly. Administrator meeting time scheduled Tuesday mornings. Expressions of interest called for establishment of Community Voices Panel.
		Develop a website that is accessible, easy to use and allows all transactions to be conducted online	Update Council’s Website	Council	Manager Community Engagement	Dec-18	Complete. New Website live December 2018.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
			Roll out and embed Customer Service Charter across Council	Council	Manager Community Engagement	Ongoing	Community engagement sessions being conducted in line with Charter. Community Voices Panel endorsed by Council and being established in January
4.3	Provide leadership in governance and Council decision making	Develop and implement a cultural change program to develop a high performing, customer focused organisation	Implement the Culture Change program	Council	Manager People and Culture	Commenced – ongoing	Workshops held in 2018. Restructure finalised in October 2018. All HR Policies reviewed and updated.
		Implement recommendations from the Local Government Inspectorate report	Complete the Governance and Reform Program actions	Council	All managers and general managers <sup>(1)</sup>	Oct-18	The Governance and Reform Program concluded in October 2018, at which point all 37 recommendations had been completed. A final report on the program was tabled at the November 2018 Council meeting.
		Implement recommendations from Internal Audits completed as part of the four year Internal Audit Program	Complete Internal Audit program	Council	All managers and general managers(1)	Commenced (4 year program)	Recommendations being implemented on an ongoing basis. Progress is reported to the Audit & Risk Committee each quarter.
4.4	Ensure the health and wellbeing of our staff	Review and update Occupational Health and Safety policies and practices	Review and update OHS policies and procedures	Council	Manager Governance Property and Risk	Mar-18	Scoping of external review completed and new policy framework which is compliant with current OH&S legislation has been drafted. New manual to be written in this format in first quarter of 2019.
		Re-establish and support a Health and Wellbeing Committee	Support activities of the Health and Wellbeing Committee	Council	Manager People and Culture	Ongoing	Health & Wellbeing committee is reactivated and meeting bi-monthly.

OBJECTIVES		INITIATIVES	PROJECTS	FUNDING SOURCE	RESPONSIBLE MANAGER	TIMING	PROGRESS
		Implement health and wellbeing initiatives in the Enterprise Agreement	Update HR Policies incorporating Health and Wellbeing initiatives in Enterprise Agreement	Council	Manager People and Culture	Mar-19	Enterprise Agreement has 3 wellbeing initiatives: 1. Stress in the workplace - Council has an ongoing Employee Assistance Program in place 2. OH&S commitment to consultation - management consults with the OH&S committee which is very active 3. Working in Inclement Weather Policy to be updated
			Reactivate the Workplace Achievement Program	Council	Manager People and Culture	Dec-18	Not commenced.

## **8.9 DRAFT RATING STRATEGY 2019-2021**

**Author:** General Manager Corporate Performance

**Responsible General Manager:** General Manager Corporate Performance

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### **SUMMARY/PURPOSE:**

This report provides information on the development of Council's Draft Rating Strategy 2019-2021 document.

### **POLICY CONTEXT:**

Central Goldfields Shire Council's Council Plan 2017-2021(2018 Refresh) – Our Organisation:

**Outcome:** Central Goldfields Shire is proactive, well governed, professional and financially sustainable organisation.

**4.1 Objective:** Ensure the financial sustainability of Council through efficient and effective delivery of services.

### **BACKGROUND INFORMATION:**

Municipal rates are Council's single biggest income source, representing 40.9% of income in the 2018-2019 budget. Council's rating strategy articulates to the community how the total rate revenue to be raised is allocated between individual ratepayers.

Council's current rating strategy was adopted on 24 June 2014.

Local Government Victoria produced a better practice guide in 2014 entitled "Revenue and Rating Strategy" which is aimed at assisting Councils to review their rating strategy. This guide recommends that Council should review its rating strategy every two years.

Municipal revaluations are conducted under the auspice of the Valuer-General Victoria, and up until 31 December 2017 they were conducted biennially. From 31 December 2018 the revaluations will be performed annually and will be used for the rating year commencing 1 July immediately after the revaluation date.

Council's current rating strategy was discussed by the administrators and executive staff at an Assembly of Council held on 4 December 2018. This discussion identified three possible changes to the current rating strategy, and each of these possible changes have been included in the options modelled in the draft rating strategy.

### **REPORT:**

A Draft Rating Strategy 2019-2021 document has been prepared for consideration and is included as Attachment 1.

The Draft Rating Strategy 2019-2021 has identified four options for change to the current rating strategy. These four options are:

- Option 1 - Do nothing
- Option 2 - Reduce the municipal charge to 10% of total property rating income
- Option 3 - Reduce the municipal charge to 10% and remove the three “Other” splits
- Option 4 - Reduce the municipal charge to 10% and move to a uniform rate

The relative merits and impacts of each option has been discussed in detail within the strategy. The strategy also provides a recommendation to manage rate shock from large valuation variations.

Of the four options considered in the strategy, Option 3 - Reduce the municipal charge to 10% and remove the three “Other” splits is the preferred options because it reduces the municipal charge to a level that will ensure compliance with proposed legislation, and also provides improved equity between ratepayers by removing the current “double dipping” effect of the three “Other” differential rating categories. The strategy also provides for a mechanism to manage future rate shock from large valuation variations. Phasing in elements of the proposed changes over three and five years will also minimise the annual impact of the changes on individual ratepayers.

#### **CONSULTATION/COMMUNICATION:**

Consultation is the level of community engagement chosen for this draft strategy under our Community Engagement Framework Policy. Consultation will be undertaken with the community and the Community Voices Panel once the Draft Rating Strategy 2019-2021 has been endorsed by Council. This consultation will be undertaken as a standalone exercise in February-March 2019 and include a survey and information provision, supported by print, website and social media. The intended conclusion of this process is the adoption of a Rating Strategy at the April 2019 Council meeting.

#### **FINANCIAL & RESOURCE IMPLICATIONS:**

Work on reviewing the rating strategy has been completed in house using existing resources. Any changes to Council's rating strategy will have a zero impact on the total rates raised by Council.

#### **CONCLUSION:**

A review of Council's 2014 Rating Strategy has been completed by Council staff and a Draft Rating Strategy 2019-2021 document has been prepared for consultation with the community.

Four options, detailed above, have been analysed with Option 3 – Reduce the municipal charge to 10% and remove the three “Other” splits being the preferred option recommended to Council for endorsement.

#### **ATTACHMENTS:**

1. Draft Rating Strategy 2019-2021

**RECOMMENDATION:**

*That Council:*

1. *Endorse the Draft Rating Strategy 2019-2021*
2. *Endorse Option 3 - Reduce the municipal charge to 10% and remove the three "Other" splits as Council's preferred option*
3. *Propose that the change to the municipal charge be phased in equally over three years*
4. *Propose that the removal of the three "Other" differential rating categories be phased in equally over five years*
5. *Consult with the community on the Draft Rating Strategy 2019-2021 including the phase in timelines.*



# Central Goldfields Shire Council

## Draft Rating Strategy

### February 2019



# Central Goldfields Shire Council

## Draft Rating Strategy

### February 2019

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## Introduction

The purpose of this document is to communicate a strategy for the future rating of properties in the Central Goldfields Shire. The strategy considers issues that exist within the current rating system, studies the options available under existing and proposed legislation and determines a plan to implement changes to achieve a fairer and more equitable outcome for all ratepayers.

Property rates (rates) are Council's single biggest income source, representing 40.9% of income in the 2018-2019 budget. Council's rating strategy articulates to the community how the total rate revenue to be raised is allocated between individual ratepayers.

**Any changes to the rating system is a financial nil sum exercise for Council, in that the total revenue raised by Council remains the same. What any changes to the rating system does do is alters the amount that each individual property contributes in rates. In essence, any changes made that provides a reduction in rates paid by one group of ratepayers must be offset by increases in the rates paid by other groups of ratepayers.**

## Statutory requirements

The objectives of local government in Victoria are set out in the Local Government Act 1989 (The Act) and includes the statutory requirement 'to ensure the equitable imposition of rates and charges'. Some pertinent sections of the Act include the following:

A Council may declare the following rates and charges on rateable land:

- General rates under section 158;
- Municipal charges under section 159;
- Service rates under section 162;
- Service charges under section 162;
- Special rates under section 163;
- Special charges under section 163.

The systems of valuing land a Council:

- May use the site value, net annual value or capital improved value (CIV) system of valuation.
- Must publish public notice of its decision to change its system of valuation.

Municipal charge

- A Council may declare a municipal charge to cover some of the administrative costs of the Council.
- A Council's total revenue from a municipal charge in a financial year must not exceed 20 per cent of the sum total of the Council's total revenue from a municipal charge and total revenue from general rates.





## Rating Framework

### What are rates?

Council collect rates (which are a form of property tax) from property owners to fund community infrastructure and services that benefit the whole community. In Victoria property values are used as the basis for calculating how much each property owner pays.

**Council's annual budget determines how much Council needs to raise from rates. Council's rating strategy then determines how much the owner of each property will contribute towards the total that Council needs to raise from rates. The level of rate increase is capped by State Government legislation and this cap is set by the Minister for Local Government in December each year.**

Council's rating strategy considers the fair and equitable share of rates to be paid by the owner of each type of property (residential, farm, commercial, industrial and vacant land).

### Property valuations

Under Section 11 of the Valuation of Land Act 1960, Council is required, for rating purposes, to undertake a general revaluation of rateable land as at 1 January in each calendar year. This revaluation will then be used to calculate the rates for the financial year commencing on 1 July of that year.

Revaluations result in varying levels of valuation movements across the municipality, which sometimes results in major shifts in the rate burden and significant movement in rates for individual properties.

**There is a common misconception that as property values increase, Council receives a 'windfall gain' of additional revenue. This is not so as the revaluation process simply results in a redistribution of the rate burden across all properties in the municipality.**

Total income from rates is determined by the Council, during the budget process. In order to generate the same amount of rate revenue, in simple terms, as property values increase, the rate in the dollar decreases.



## Revenue and rating principles

The Local Government Victoria Revenue and Rating Strategy Better Practice Guide sets out the following seven revenue and rating principles.

### Wealth tax principle

Wealth can be defined as the total value reflected in property and investments and income directed to day-to-day living. Local government is limited to taxing one component of wealth – real property. Council rates tax the stored “wealth” or unrealised capital gains inherent in land and buildings.

**The “wealth tax” principle implies that the rates paid are dependent upon the value of a ratepayer’s real property and have no correlation to the individual ratepayer’s consumption of services or the perceived benefits derived by individual ratepayers from the expenditures funded from rates.**

One issue associated with the application of the wealth tax principle to property rating is that it takes no account of an individual ratepayer’s net financial equity in a property. Thus the owner of a house with a valuation of \$300,000 and a \$240,000 mortgage on that property pays the same rates as the owner of a house with a valuation of \$300,000 with no mortgage, despite only having 20% of the net equity (wealth) in that property.

This is an inherent shortcoming of the property rating system, in that it taxes the gross “wealth” embedded in a property, even when the bulk of that “wealth” may not be owned by the property owner (ie the majority of the “wealth” is owned by the mortgagee, which in most cases is a bank). **In effect, property rates are a tax on controlled wealth, as opposed to wealth measured by financial equity in a property.**





## Equity

**Equity is a subjective concept that is difficult to define. What is considered fair for one person may be considered unfair for another.** There are two main equity concepts used to guide the development of rating strategies (and taxation more generally):

**Horizontal equity – ratepayers in similar situations should pay similar amounts** (ensured mainly by accurate property valuations, undertaken in a consistent manner, their classification into homogenous property classes and the right of appeal against valuation).

**Vertical equity – those who are better off should pay more than those worse off** (this rationale applies for the use of progressive and proportional income taxation. It implies a “relativity” dimension to the fairness of the tax burden).

Rates are essentially a wealth tax, determined on the value of property. A pure “wealth tax” approach implies that the rates paid relate directly to the value of a ratepayer’s real property. The tests of horizontal and vertical equity are solely based on a property’s value. There is frequent debate surrounding the characteristics of property owners that may impinge on the application of an equity principle. The three main ways in which positions can vary are:

- the benefit or user pays principle – some ratepayers have easier access to, make more use of, or benefit more from the Council services paid for by rates
- the capacity to pay principle – some ratepayers have more ability to pay rates than do others with similarly valued properties
- the incentive or encouragement principle – some ratepayers may be doing more towards achieving Council goals than others (for example, in areas such as employment creation and environmental or heritage protection).

Concepts such as “user pays” and “capacity to pay” often conflict. Depending on your viewpoint the equitable outcome may be the one where individuals pay more, or less, or exactly in proportion to, their level of consumption of services.

## Efficiency

Economic efficiency is measured by the extent to which production and consumption decisions by people are affected by a tax. Setting aside taxes explicitly intended to change behaviour (such as high taxes on cigarettes), a perfectly efficient tax would be one, which did not distort behaviour. Of course, there is no such tax – all taxes affect behaviour to some extent. However, economic efficiency in revenue collection is maximised when the degree of this distortion is minimised.

Price is the major mechanism through which taxation efficiency may be achieved and for services where users are price sensitive, direct charging can influence demand and thus lead to greater efficiency. Conversely, the funding of services through rates (or via subsidies from other services) may result in an inflated demand for services and additional costs for Councils to meet this demand. As a result, a mix of user charges and rates revenue funds a variety of Council services.

The efficiency of a tax is also related to the cost of administration. Administration costs include the issuing of assessments, collection of rates (including maintaining and improving collection systems), monitoring outcomes, educating and informing ratepayers, and enforcement and debt recovery.







### Simplicity

The taxation principle of simplicity revolves around how easily a system can be understood by the public, and in particular ratepayers. This can conflict with the principles of equity and efficiency.

A simple rating scheme would have a limited number of rating classifications, even using a uniform rate. Other features of a simple rating scheme may be practicality and ease of administration. Rates in general are quite simple to administer in that they rely on a clear information source (property values) and they place a levy on something that is impossible to conceal (land). Public understanding is another consideration for a Council in striving for simplicity. A simple system should be easier for the public to understand as should the explanation of it by a Council.

The efficacy of using rates to provide incentive or encouragement for ratepayers to act in a certain way to achieve corporate goals (e.g. environmental) should be evaluated critically against other approaches in terms of likely effectiveness.

### Benefit principle

A popular complaint levelled at Councils is that “the rates I pay have no correlation with the services I consume or the benefits I receive”. This argument is based on the benefit principle (the opposite of the wealth tax principle) that argues there should be a clear nexus between consumption/benefit and the rate burden. A user pays system is closely reflective of the benefit principle.

Application of the benefit principle to rates is difficult in practice because of the impossibility of measuring the relative levels of access and consumption across the full range of Council services. While it might be quite obvious that certain geographic areas may not get access to specific services, for example street lighting, it is the level of benefit across the full range of rates-funded services that is important in determining the amount of rates that should be paid. This exercise is not clear cut – for example, it might be argued that rural ratepayers derive

less benefit from library services than their town counterparts but the reverse argument can apply to the costs of repairing gravel roads in rural areas which are predominantly used by rural ratepayers.

**In some ways the arguing of the benefit principle with respect to Council rates is like trying to do the same for Commonwealth income tax that is used to fund a wide range of universally accessed services.**

The benefits received principle applies to many tax systems, for example stamp duty paid on the purchase of a motor vehicle. However, it is difficult to rationalise a relationship between rates paid and services provided by local government. It is even more tenuous when attempting to draw a relationship with rates against services actually used by ratepayers, of which there is little research or evidence to support a proportional connection.

The analysis of benefit is often reduced to arguments of what services are consumed by town v. country, businesses v. residences and between different towns and suburbs. Such a simplistic determination of rates based on where services are located ignores the facts that:

- many services are not location specific
- access is not synonymous with consumption
- residents can travel or use technology to access some services
- more significantly, services provided in different locations within a municipality have different costs. For example, the actual cost of providing the same or a lesser level of service to a more remote or less central location may be higher due to dis-economies of scale or logistical reasons. Home care and waste collection are two examples where the cost of providing the same service is higher in rural areas than within Maryborough.



## Capacity to pay

The capacity to pay principle stands in contrast to the benefits received principle. Its measurability may be either determined by wealth or income. In the case of local government rating, it is determined on the value of property which reflects wealth, rather than the actual income of the ratepayer. It is acknowledged that over the lifetime of a taxpayer, the relativity between income and wealth may vary significantly.

Councils may decide that capacity to pay is fundamentally reflected by property value or that the application of the wealth tax and benefit principles should be moderated for groups of ratepayers because of capacity to pay considerations.

As rates are levied on unrealised wealth in the form of property, their nexus with ratepayers' capacity to pay may be tenuous – ratepayers may be “asset rich” but “cash poor” or vice versa.

It is an inherent restriction of property taxation that it does not recognise the situation where ratepayers are “asset rich” and “cash poor”. In these cases ratepayers may be assessed as having considerable wealth reflected in the property that they own, but have a low level of cash income. Examples may include pensioners, businesses facing cyclical downturn, households with large families, single parent families, property owners with little equity in their property and farmers dealing with climate variability.

**The use of differential rating categories is a blunt tool that is available to Councils in order to attempt to address the capacity to pay issue to some degree.**

## Diversity

There is no way of getting around the fact that despite the “likeness” of members of property classes, there will also be considerable diversity within each class. There is considerable diversity in the economic circumstances of households related to household income, the number of breadwinners and members, expenditure patterns and debt levels.

Similarly, enormous business diversity exists – businesses range from small businesses with owner operators and few employees to corporations employing many thousands of people. They may take a variety of forms – sole operators, companies, partnerships, cooperatives and trusts. Production may cover a diverse range of goods and services for local, national or overseas markets. They may vary considerably in terms of turnover, net worth, profitability and gearing – just to name a few characteristics. Businesses may be “price takers” with little market power or “price makers” operating in oligopolistic markets.

The taxation effect of property rates for income tax purposes is another point of diversity that challenges the equity principles of property rating. **Businesses that occupy commercial, industrial or farm properties are able to claim property rates as an income tax expense. This allows businesses to pay property rates in after-tax dollars, as opposed to private non-business people who have to pay property rates in pre-tax dollars.** There is a line of thought that incorporating the income taxation effect of property rates into the setting of differential rating category relativities would improve the overall equity of property rating systems.

Council rate setting for different groups may need to have regard to the general capacity of those classes of property to pay rates. There are practical limits to the extent that classes may be differentiated because of impacts on efficiency and simplicity – and the broader a property class, the more general are the assumptions about capacity to pay. Clearly, there is an issue of how well the assumptions made about a large class of ratepayers accurately reflect the circumstances of most of its members.



## Why review the rating strategy?

The Local Government Victoria Revenue and Rating Strategy Better Practice Guide recommends that Councils review their rating strategy every two years. Council's current rating strategy was adopted in June 2014 so a review is well overdue.

The Local Government Act 1989 (the Act) restricts the amount of total rates revenue that Council can be raised via a Municipal Charge to 20%. The Local Government Bill 2018 (the Bill) restricts the amount of total rates revenue that Council can be raised via a Municipal Charge to 10%. Council's Municipal Charge is budgeted to generate 17.7% of total rates revenue in the 2018-2019 budget. If the Bill becomes legislation in its current form, Council's current rating strategy will be non-compliant with the new Act.

## Where do we start?

This paper uses Council's current rating strategy and the property rate base as it applies for the 2018-2019 financial year as the starting point for discussion.

Council's rating strategy currently has five different land categories but eight differential rating categories as follows:

- Residential - Maryborough
- Residential - Other
- Vacant Land - Maryborough
- Vacant Land - Other
- Commercial - Maryborough
- Commercial - Other
- Industrial
- Farm

Council also levies a municipal charge of \$262.65 per property (noting that single farm enterprises are entitled to an exemption for all but one of the municipal charges levied on that single farm enterprise). The municipal charge generates 17.7% of the total revenue raised from property rates. Council has 1,027 properties rated as farms and they pay 472 municipal charges.



## The eight current differentials

Council's current eight differential rating categories are defined as follows:

### Residential - Maryborough

Meaning that rateable land which has an occupiable dwelling able to be issued with a certificate of occupancy, is used solely for residential purposes and is situated within the Maryborough District boundary. To ensure an equitable contribution towards the total rate income, having regard to the location, use and services available to the land by proximity to the major service centre.

### Residential - Other

Meaning that rateable land which has an occupiable dwelling able to be issued with a certificate of occupancy, is used solely for residential purposes, and is situated outside the Maryborough District boundary. To ensure an equitable contribution towards the total rate income, having regard to the location, use and services available to the land where the infrastructure cost and service provision has been affected by reason of its distance from the major service centre - Maryborough.

### Vacant Land - Maryborough

Meaning that rateable land where no occupiable dwelling is erected (an occupiable dwelling has a Certificate of Occupancy issued), and is situated within the Maryborough District boundary. To ensure an equitable contribution towards the total rate income and encourage the development of vacant land within the Maryborough District boundary.

### Vacant Land - Other

Meaning that rateable land where no occupiable dwelling is erected (an occupiable dwelling has a Certificate of Occupancy issued) and is situated outside the Maryborough District boundary. To ensure an equitable contribution towards the total rate income and encourage the development of vacant land outside the Maryborough District boundary.



### Commercial - Maryborough

Meaning that rateable land which is used solely for commercial purposes and is situated within the Maryborough District boundary. To ensure an equitable contribution towards the total rate income which recognises the objective of maintaining an environment which is beneficial to the continuing operation of these properties, as well as the use and services available to the land.

### Commercial - Other

Meaning that rateable land which is used solely for commercial purposes and is situated outside the Maryborough District boundary. To ensure an equitable contribution towards the total rate income, which recognises the objective of maintaining an environment which is beneficial to the continuing operation of these properties where the cost of infrastructure and commercial opportunity differ from Maryborough Commercial, as well as the use and services available to the land.

### Industrial

Meaning that rateable land which is used solely for industrial purposes. To ensure an equitable contribution towards the total rate income which recognises the objective of maintaining an environment which is beneficial to the continuing operation of these properties, reflects the cost of infrastructure and encourages development.

The difference between commercial and industrial land is mainly one of use. In general, commercial areas are used for trading goods and services while industrial areas serve as sites of production. Commercial areas are most valuable when they receive heavy traffic from potential customers.





**Farm**

Meaning that rateable land, in aggregate, which is not less than 16 hectares (40 acres) in area and which is used primarily for carrying on one or more of the following businesses or industries:

Grazing (including agistment) dairying, pig farming, poultry, farming, fish farming, tree farming, bee-keeping, viticulture, horticulture, fruit growing or the growing of crops of any kind.

To ensure an equitable contribution towards the total rate income commensurate with the nature of the land the capital improved value of which has been affected by reason of its abnormally large area and the use to which it is put in comparison to the general land size of the majority of rateable properties within the municipal district.

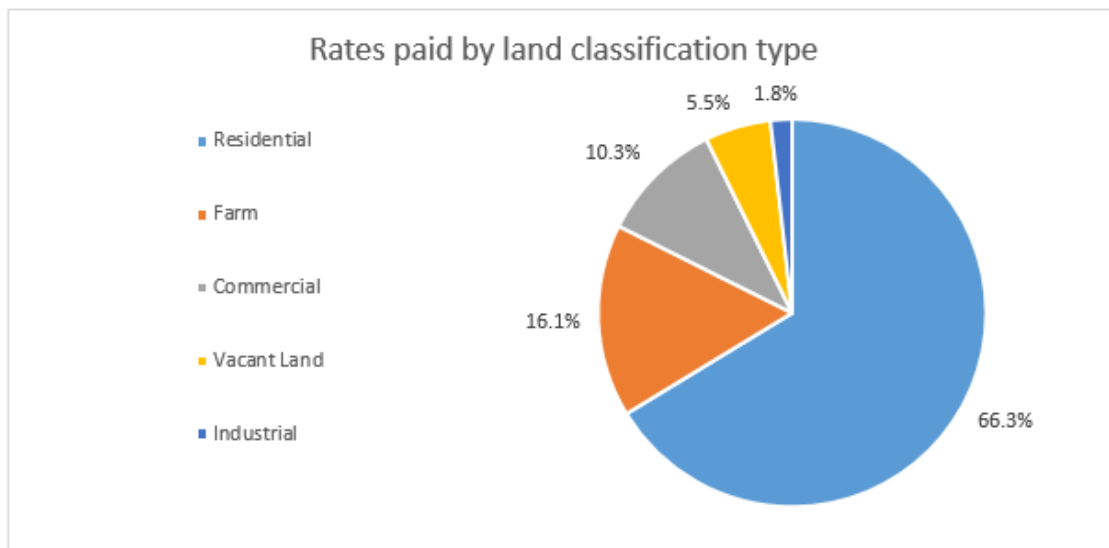
**Rates per assessment**

The following table shows that 7,711 or 91.4% of properties pay less than \$2,000 per year (\$38.46 per week) in rates. The remaining 8.6% of properties paying more than \$2,000 per year account for 24.9% of Council’s total rate revenue.



### Rate revenue by land classification type

Currently residential properties contribute two thirds of Council's rate revenue, with farm properties contributing 16%, commercial properties 10% and industrial and vacant land contributing the remaining 7% of rate revenue.



### Farm rates snapshot

Council has 472 single farm enterprises consisting of 1,027 farm assessments, or 2.2 assessments per single farm enterprise. The total area of farmland is 96,749 hectares and is valued at \$424.121 million at an average of \$4,384 CIV per hectare (\$1,774 per acre). The average single farm enterprise has a CIV of \$898,560, pays total rates of \$3,951 or \$19.27 per hectare (\$7.80 per acre). The most valuable farm land in the municipality is located in the Joyces Creek and Moolort areas and towards Baringhup West. The best farm land in this area is valued at \$7,000 per hectare (\$2,833 per acre) and pays rates of \$34.15 per hectare (\$13.82 per acre).

Farms are businesses and rates are deductible for income tax purposes. Using the marginal tax rate of 32.5 cents in the dollar (for income over \$37,000) Council's average current after-tax farm rate is \$13.01 per hectare (\$5.27 per acre). A farm enterprise pays \$3,293.06 after tax per \$1 million CIV of farm land, in comparison to a \$1 million CIV of Maryborough residential land which pays \$5,393.25 in rates after tax or 64% more.

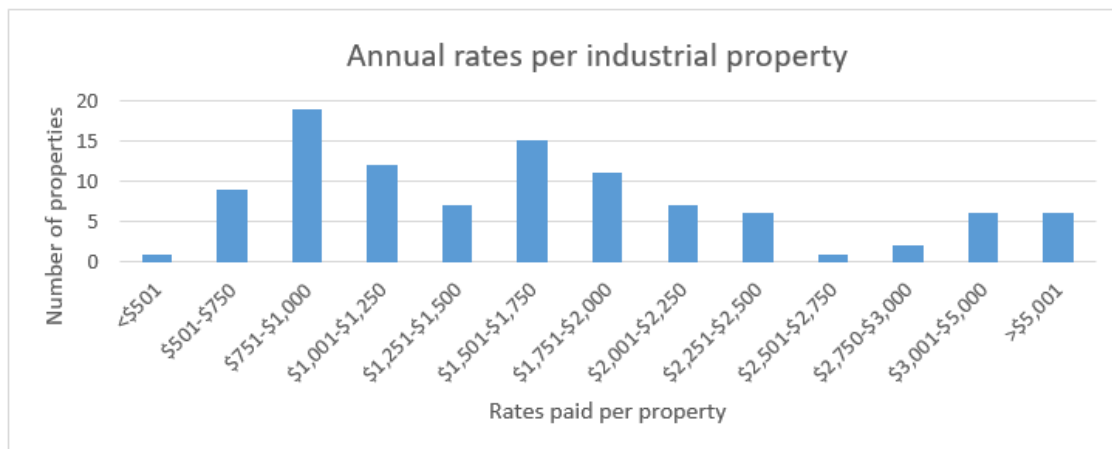
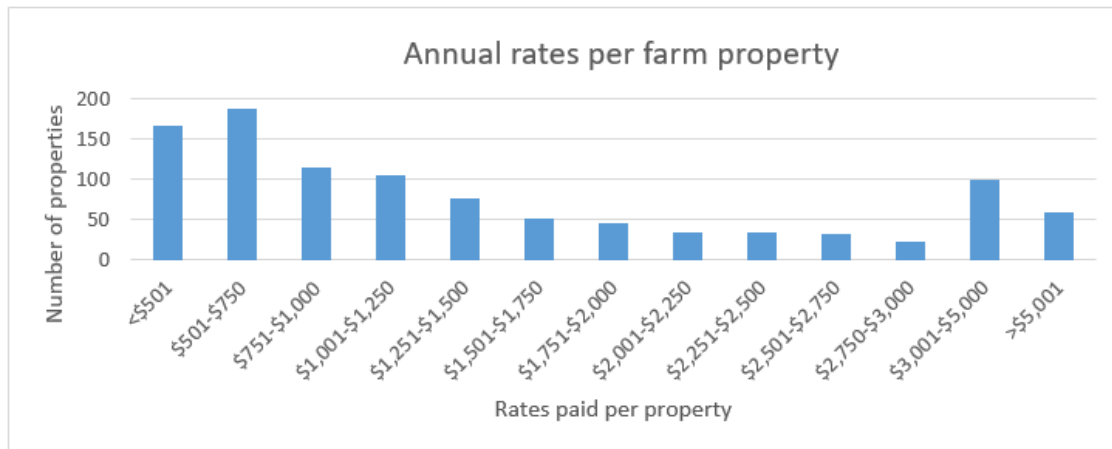
## Current Capital Improved Valuations

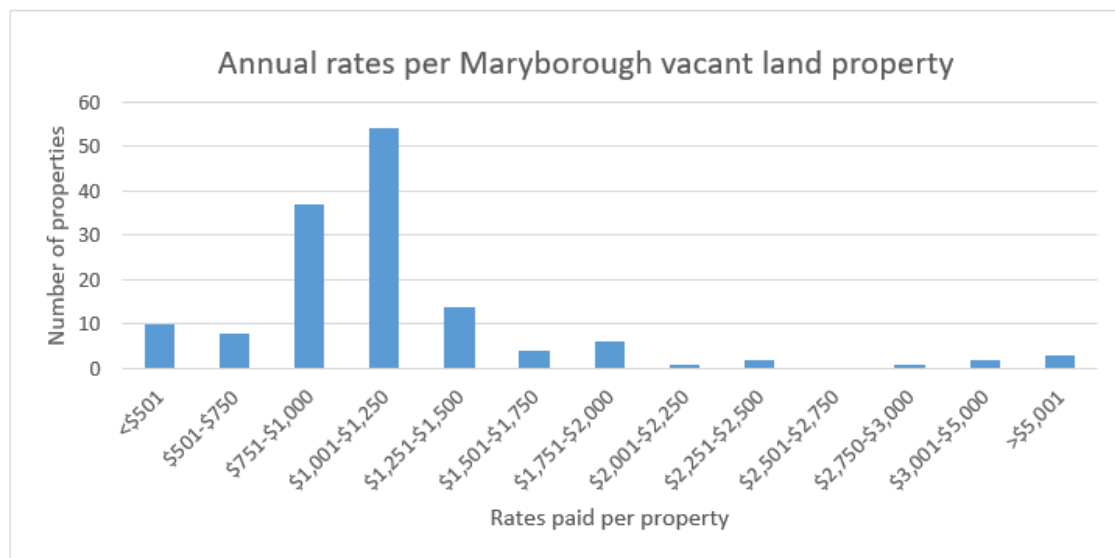
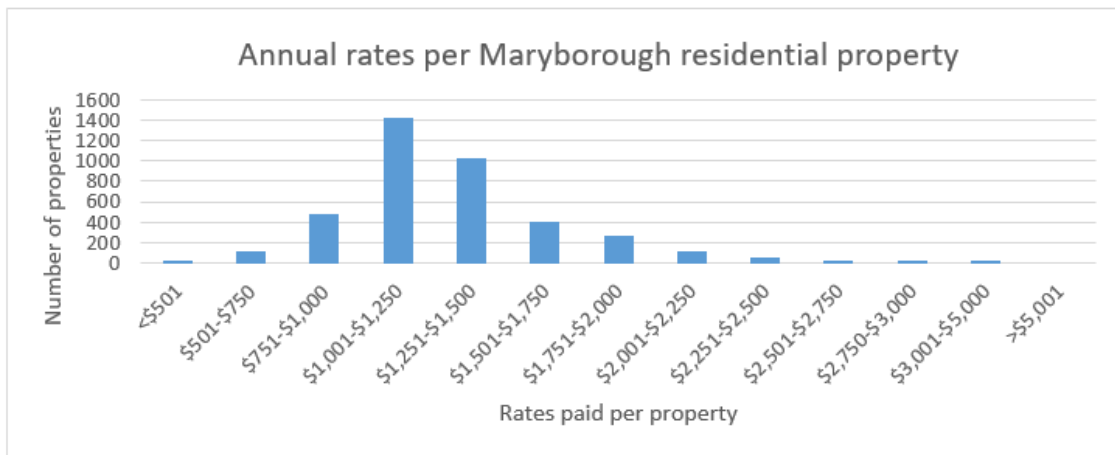
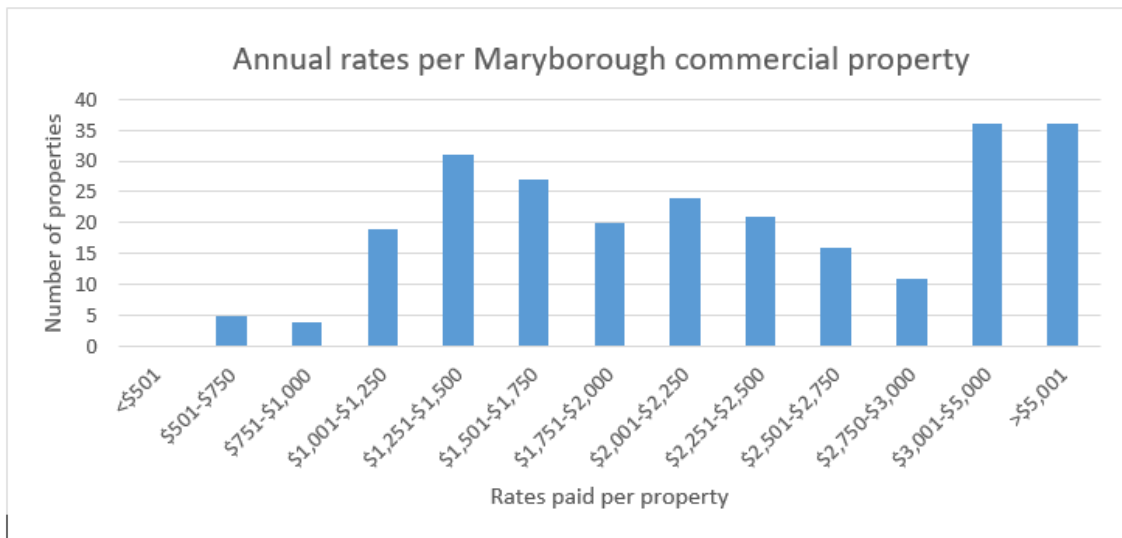
The CIV of each property at the 10<sup>th</sup>, 30<sup>th</sup>, 50<sup>th</sup> (median), 70<sup>th</sup> and 90<sup>th</sup> percentile is as follows:

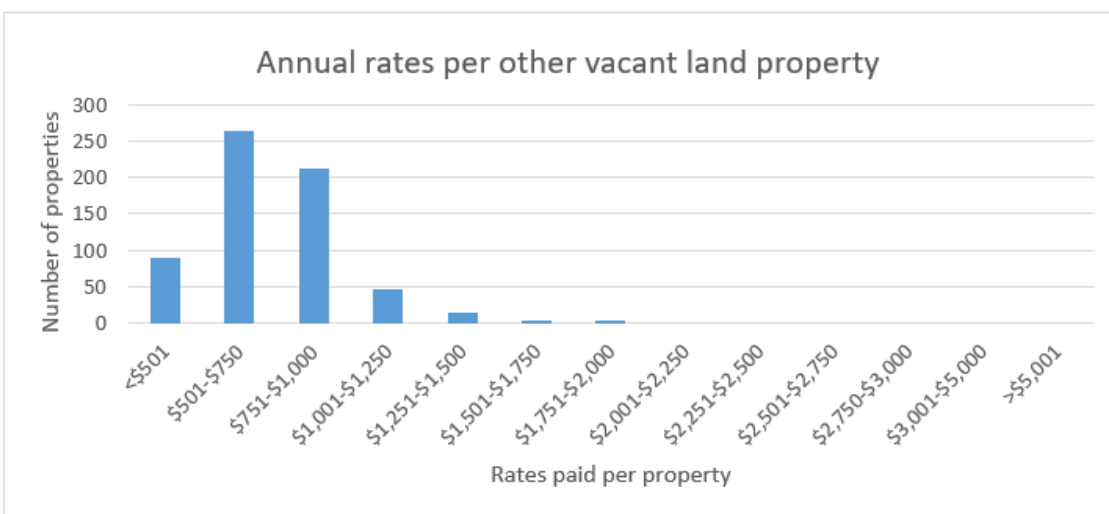
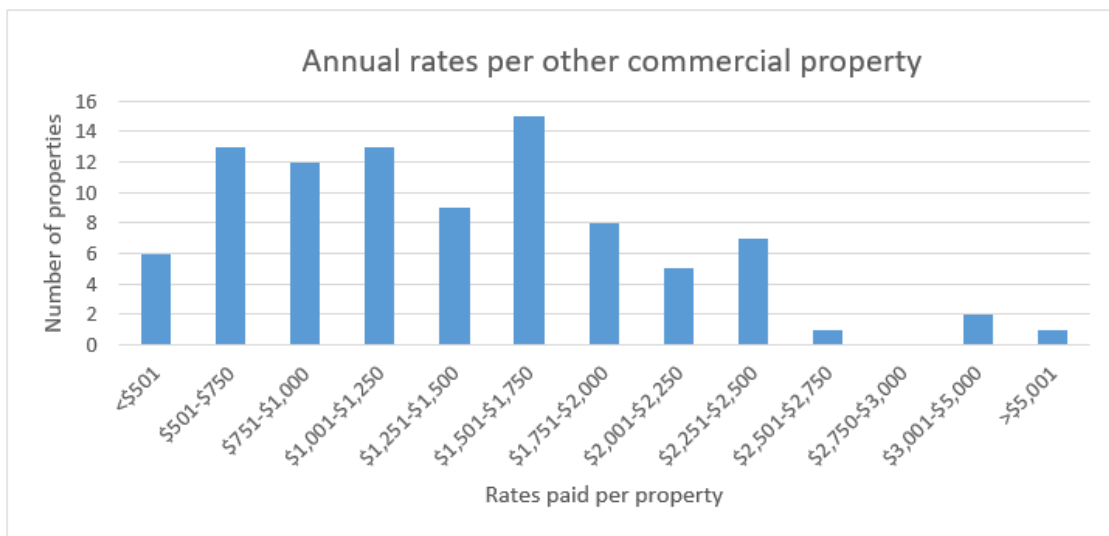
Current System	10th	30th	50th	70th	90th
	Percentile	Percentile	Percentile	Percentile	Percentile
Differential Category	CIV	CIV	CIV	CIV	CIV
Residential - Maryborough	\$130,000	\$165,000	\$190,000	\$220,000	\$300,000
Residential - Other	\$115,000	\$160,000	\$205,000	\$250,000	\$320,000
Vacant Land - Maryborough	\$47,000	\$70,000	\$85,000	\$95,000	\$175,000
Vacant Land - Other	\$23,000	\$44,000	\$55,000	\$75,000	\$100,000
Commercial - Maryborough	\$115,000	\$170,000	\$240,000	\$325,000	\$770,000
Commercial - Other	\$44,000	\$105,000	\$180,000	\$235,000	\$330,000
Industrial	\$85,000	\$135,000	\$240,000	\$300,000	\$570,000
Farm	\$70,000	\$130,000	\$240,000	\$420,000	\$860,000

## Annual rates paid for each differential

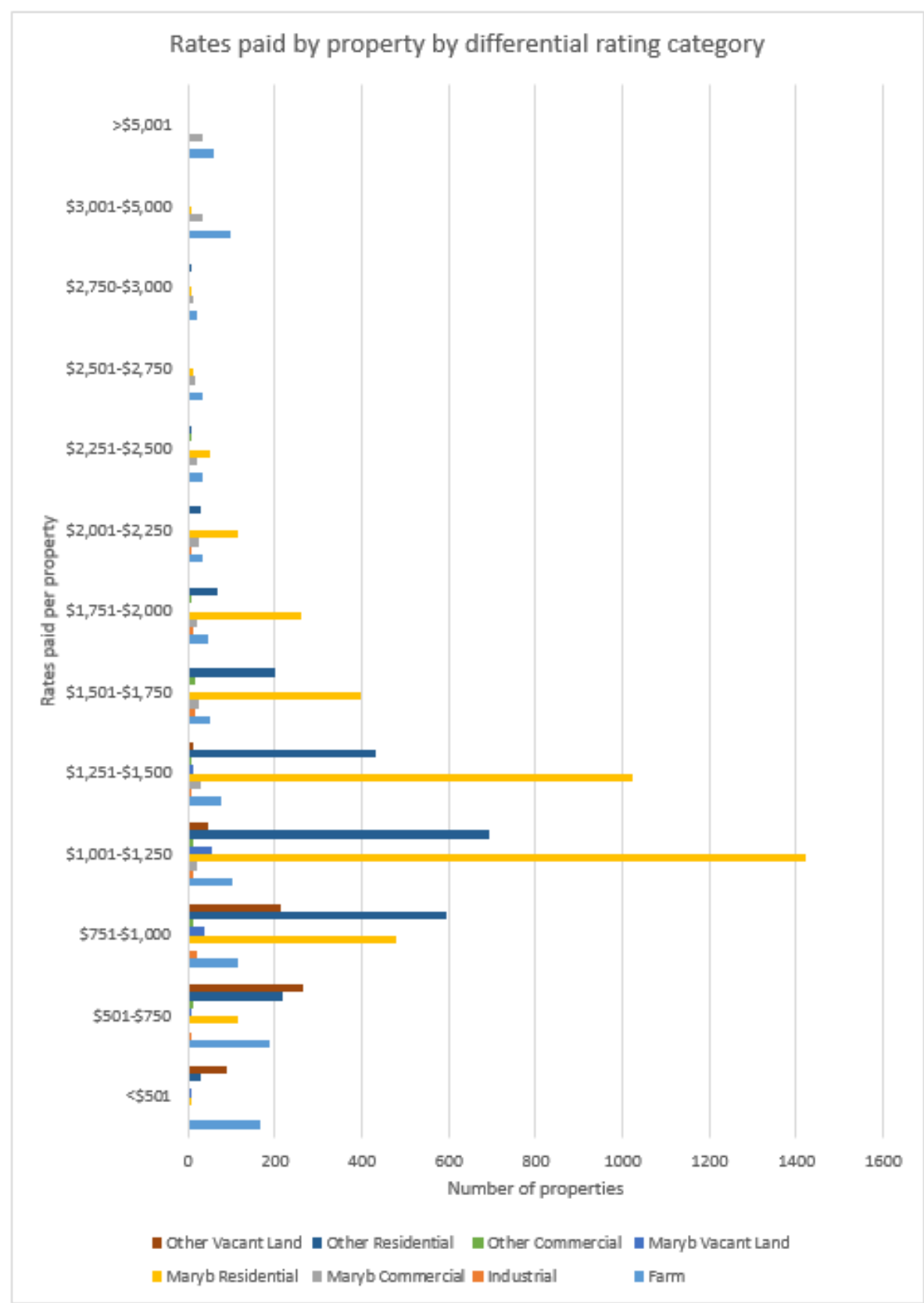
The following graphs show the annual rates paid in bands for each of the eight current differential rates.







These eight charts have been combined to create the following picture of how much each property pays in rates.





## What are the problems with the current rating system?

Three main issues have been identified with the current rating system:

- The yield from the municipal charge is almost 18%
- The Maryborough/Other split within some differentials
- There is no mechanism for dealing with “rate shock”

Each of these issues are discussed in more detail below.

### The yield from the municipal charge is almost 18%

Council raises rates income from properties by two means:

- Rates levied on capital improved valuation (CIV)
- Municipal charge

The rates levied on capital improved valuation move directly in relation to valuation. Thus a house with a \$400,000 CIV will pay twice the rates on CIV as a house with a \$200,000 CIV. This is consistent with the vertical equity principle in the rating better practice guide.

A municipal charge is a flat amount charged on every<sup>#</sup> rateable property irrespective of the valuation of that property. By its very nature, the municipal charge is a regressive tax, (that is, the rate of taxation is higher on a low valued property than it is on a high valued property), and works in direct conflict to the vertical equity principle.

(<sup>#</sup> Single farm enterprises are entitled to an exemption for all but one of the municipal charges levied on that single farm enterprise.)

The municipal charge is the same for every property levied (\$262.65 in 2018-2019). The municipal charge on a retail building with a CIV of \$100,000 has a taxation effect ten times greater than the same municipal charge on a retail building with a CIV of \$1,000,000.

Part 8 of the Local Government Act 1989 (the Act) deals with “Rates and Charges on Rateable Land”. The Local Government Bill 2018 (the Bill) was brought before parliament by the Andrews Labor government with the intention of it replacing the 1989 Act. However the Bill failed to pass through parliament prior to parliament dissolving ahead of the November 2018 State election.

One significant difference between the Bill and the Act relates to the municipal charge. The Bill proposed to restrict the amount of total rates revenue that can be raised via a municipal charge to 10%, down from the 20% allowed in the Act. This will have a significant impact on Council if the Bill is passed in its current form because Council’s municipal charge is budgeted to generate 17.7% of total rates revenue in the 2018-2019 budget.



With the Andrews Labor government re-elected, it is highly likely that the Local Government Bill 2018 will be reintroduced into parliament in its current form.

The Local Government Bill Exposure Draft Frequently Asked Questions stated that “the 10% limit on the municipal rate (formerly municipal charge), will commence after the 2020 Council general elections.” In practice this would have meant implementation in the 2021-2022 financial year. If the Bill is passed with the same transitional provision, then Council will have a maximum of three budgets to transition this change.

Because the municipal charge is a regressive tax, reducing it provides a benefit to properties with a lower CIV and provides a detrimental impact on properties with a higher CIV. There is a break-even CIV point for rates paid by the owners of individual properties in each differential rating category, and this break-even point is shown in full in the commentary on Option 2 on page 24.

**Any reduction in the total income raised by the municipal charge would need to be offset by an increase in the total income raised by valuation-based rates, and this would impact all properties across all differential rating categories.** Single farm enterprises who currently have municipal charge exemptions for multiple properties would be adversely impacted by a reduction in the municipal charge.

### **The Maryborough/Other split within some differentials**

Council's rating strategy currently has five different land categories but eight differential rating categories as follows:

- Residential - Maryborough
- Residential - Other
- Vacant Land - Maryborough
- Vacant Land - Other
- Commercial - Maryborough
- Commercial - Other
- Industrial
- Farm

Currently within the residential, vacant land and commercial differential rating categories there is a split between “Maryborough” and “Other” properties (“Other” properties are defined as being located outside of the Maryborough District Boundary). This split is not in the current industrial or farm differential rating categories.

The original logic behind the split differential rating categories is that properties situated in Maryborough have closer access to more services therefore they should pay a higher rate than properties situated beyond Maryborough.

However, when assessing the Capital Improved Valuation (CIV) for each property, the valuer takes into account the distance of an individual property from services, including those located in Maryborough. This is why a house in Maryborough has a higher CIV than exactly the same house on the same size block in say Bealiba.

Thus, during the property valuation process, the Valuer gives properties situated beyond Maryborough a reduced valuation to take into account the distance of that property from Maryborough based services. This reduced valuation leads to a direct reduction in rates paid.

Having a separate lower differential rate for properties situated beyond Maryborough, also leads to a direct reduction in rates paid on that property. However, the current combination of both factors leads to a “double dipping” effect for properties situated beyond Maryborough which allows them to pay less rates than they otherwise would. Thus, it appears that the original logic on which the “Other” splits concept was based, is actually flawed.

## There is no mechanism for dealing with “rate shock”

Rate shock is defined as the movement (both up or down) in total rates paid by any one differential rating category in any one year by ten percent or more. This situation occurs when as a result of a revaluation when the movement in the valuation of one particular differential rating category is far greater than the average movement in valuations across the Shire. The current rating strategy does not contain any mechanism to manage rate shock.

Prior to 31 December 2018 municipal revaluations were conducted every two years, and on some occasions the two-yearly movement in valuation for one differential rating category has been significantly above the movement in valuation for the whole Council. The change in State legislation requiring annual property revaluations should significantly reduce the occurrence and impact of such a situation.

History has shown that farm land is particularly susceptible to significant changes in valuation over a short time frame, predominantly in response to factors such as extreme weather events, major changes in international commodity prices and sharp changes in interest rates. One such situation occurred with the 31 December 2017 revaluation where dryland cropping land values in many Shires in the Western part of Victoria rose significantly from their 2015 levels and well above the average valuation increase across those Shires.

This caused “rate shock” in those Shires and a major redistribution of the rate burden from the non-farmland sector to the farmland sector. As most Councils in this situation did not have a mechanism to deal with rate shock in their rating strategy, some Councils chose to make snap changes to their rating system. One such Council was the Northern Grampians Shire which made a last minute decision to lower their farm rate differential to 47% in order to ensure that their farm differential rating category only paid the capped 2.25% rate increase.





## What are the options?

Council has chosen to consider four options when reviewing its rating strategy

- Do nothing
- Reduce the municipal charge to 10% of total property rating income
- Reduce the municipal charge to 10% of total property rating income and remove the three “Maryborough/Other” differential rating splits
- Reduce the municipal charge to 10% of total property rating income and move to a uniform rate

Each of these four options is considered in more detail on the following pages.



## Option 1 – Do nothing

Rationale – the do nothing option is based on the premise that the ratepayer base is currently broadly accepting of the status quo. This is evidenced by there being negligible public commentary or feedback about the current differential rating system.

Council currently has eight differential rating categories plus a municipal charge of \$262.25 per property. The differential rates and their relativities to the Maryborough Residential differential rating category are shown in the table below:

Differential Rating Category	Number of Properties	% of Properties	Differential Relativity
Residential - Maryborough	3,903	46.3%	100.0%
Residential - Other	2,289	27.1%	80.0%
Vacant Land - Maryborough	142	1.7%	180.0%
Vacant Land - Other	631	7.5%	150.0%
Commercial - Maryborough	250	2.9%	160.0%
Commercial - Other	92	1.1%	120.0%
Industrial	102	1.2%	110.0%
Farm	1,027	12.2%	80.0%
<b>Total</b>	<b>8,436</b>		

The total rates paid (rates on CIV plus the municipal charge) in 2018-2019 is as follows:

Current System	10th	30th	50th	70th	90th
	Percentile	Percentile	Percentile	Percentile	Percentile
Differential Category	Rates Paid	Rates Paid	Rates Paid	Rates Paid	Rates Paid
Residential - Maryborough	\$929.28	\$1,108.87	\$1,237.14	\$1,391.07	\$1,801.55
Residential - Other	\$734.33	\$919.05	\$1,103.78	\$1,288.50	\$1,575.85
Vacant Land - Maryborough	\$696.34	\$908.77	\$1,047.31	\$1,139.67	\$1,878.55
Vacant Land - Other	\$439.24	\$600.83	\$685.48	\$839.38	\$1,031.75
Commercial - Maryborough	\$1,206.40	\$1,657.95	\$2,232.65	\$2,930.50	\$6,583.95
Commercial - Other	\$533.16	\$908.74	\$1,370.51	\$1,709.15	\$2,294.06
All Industrial	\$741.99	\$1,024.19	\$1,616.81	\$1,955.45	\$3,479.33
Farm	\$407.88	\$654.18	\$1,105.73	\$1,844.63	\$3,650.83

**Given that the Andrews government has flagged its intention to cap revenue raised by the municipal charge to 10%, the “do nothing” option is not considered a viable option given the high probability that this cap will be enshrined in law within the next year.**

Benefits – the primary benefit of this option is that there is no change to the current system and therefore individual ratepayers do not receive any significant change to the rates that they pay other than as a result of changes in property valuations.

Issues – the primary issue is that should the Local Government Bill 2018 be passed into legislation, this rating system will immediately be non-compliant and requiring change.

## Option 2 - Reduce the municipal charge to 10% of total property rating income

Rationale – that it appears highly likely that the Victorian State government will legislate to cap the total revenue generated by the municipal charge at 10% of total rates revenue (rates on CIV plus the municipal charge). Council currently raises 17.7% of its total rates revenue from the municipal charge.

Under this option the total revenue generated by the municipal charge would be capped at 10% of total rates revenue (rates on CIV plus the municipal charge). If this option was applied for the 2018-2019 year it would result in the municipal charge being reduced from the current \$262.25 to \$147.70 per property.

The total rates paid by individual properties to generate the same 2018-2019 total rates revenue would be as follows:

<b>Municipal Charge capped at 10%</b>	<b>10th</b>	<b>30th</b>	<b>50th</b>	<b>70th</b>	<b>90th</b>
<b>Differential Category</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>
Residential - Maryborough	\$877.65	\$1,074.18	\$1,214.55	\$1,383.00	\$1,832.20
<b>Change from base</b>	<b>-\$51.63</b>	<b>-\$34.69</b>	<b>-\$22.59</b>	<b>-\$8.07</b>	<b>\$30.65</b>
Residential - Other	\$664.28	\$866.42	\$1,068.56	\$1,270.70	\$1,585.14
<b>Change from base</b>	<b>-\$70.05</b>	<b>-\$52.63</b>	<b>-\$35.22</b>	<b>-\$17.80</b>	<b>\$9.29</b>
Vacant Land - Maryborough	\$622.73	\$855.19	\$1,006.80	\$1,107.87	\$1,916.43
<b>Change from base</b>	<b>-\$73.61</b>	<b>-\$53.58</b>	<b>-\$40.51</b>	<b>-\$31.80</b>	<b>\$37.88</b>
Vacant Land - Other	\$341.43	\$518.31	\$610.97	\$779.43	\$990.00
<b>Change from base</b>	<b>-\$97.81</b>	<b>-\$82.52</b>	<b>-\$74.51</b>	<b>-\$59.95</b>	<b>-\$41.75</b>
Commercial - Maryborough	\$1,180.86	\$1,674.98	\$2,303.86	\$3,067.50	\$7,065.38
<b>Change from base</b>	<b>-\$25.54</b>	<b>\$17.03</b>	<b>\$71.21</b>	<b>\$137.00</b>	<b>\$481.43</b>
Commercial - Other	\$444.17	\$855.19	\$1,360.54	\$1,731.13	\$2,371.24
<b>Change from base</b>	<b>-\$88.99</b>	<b>-\$53.55</b>	<b>-\$9.97</b>	<b>\$21.98</b>	<b>\$77.18</b>
Industrial	\$672.75	\$981.60	\$1,630.18	\$2,000.80	\$3,668.59
<b>Change from base</b>	<b>-\$69.24</b>	<b>-\$42.59</b>	<b>\$13.37</b>	<b>\$45.35</b>	<b>\$189.26</b>
Farm	\$382.32	\$651.84	\$1,145.96	\$1,954.52	\$3,931.00
<b>Change from base</b>	<b>-\$25.56</b>	<b>-\$2.34</b>	<b>\$40.23</b>	<b>\$109.89</b>	<b>\$280.17</b>

The impact of this change is relatively easy to summarise. Because the municipal charge is a regressive tax, reducing it provides a benefit to properties with a lower CIV and provides a detrimental impact on properties with a higher CIV. There is a break-even CIV point for rates paid by the owners of individual properties in each differential rating category, and this point is shown in the following table.

<b>Differential Category</b>	<b>Pay Less</b>	<b>Breakeven CIV</b>	<b>Pay More</b>
Residential - Maryborough	2,893 properties	< \$235,000 >	920 properties
Residential - Other	1,942 properties	< \$295,000 >	347 properties
Vacant Land - Maryborough	123 properties	< \$130,000 >	19 properties
Vacant Land - Other	627 properties	< \$155,000 >	4 properties
Commercial - Maryborough	54 properties	< \$150,000 >	196 properties
Commercial - Other	50 properties	< \$200,000 >	42 properties
All Industrial	47 properties	< \$215,000 >	55 properties
Farm	324 properties	< \$135,000 >	703 properties
<b>TOTAL</b>	<b>6,060 properties</b>		<b>2,286 properties</b>



**Under this option 7,917 of the 8,436 (93.9%) of properties have a change in total rates paid per year (either up or down) by less than \$2.00 per week.**

This option produces a minimal change to the relative total contributed by each of the five land use categories.

Land Use	Base		Option 2		Change	
	Total Rates	Share	Total Rates	Share	Total Rates	Share
Residential	\$7,686,000	66.3%	\$7,550,000	65.1%	-\$136,000	-1.2%
Farm	\$1,865,000	16.1%	\$1,975,000	17.0%	\$110,000	0.9%
Commercial	\$1,200,000	10.3%	\$1,267,000	10.9%	\$67,000	0.6%
Vacant Land	\$643,000	5.5%	\$596,000	5.1%	-\$47,000	-0.4%
Industrial	\$209,000	1.8%	\$215,000	1.9%	\$6,000	0.1%
<b>TOTAL</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$0</b>	<b>0.0%</b>

**Benefits** – this option will make Council's rating system compliant with the 10% cap on revenue generated by the municipal charge proposed in the Local Government Bill 2018. As the municipal charge is a regressive tax (in that it taxes lower valued properties at a higher rate than higher valued properties), this option also addresses the vertical equity principle of rating (i.e. those who are better off should pay more than those worse off) and improves the overall equity of the rating system.

**Issues** – the primary issue is that higher valued properties will pay more rates than they are presently. As most of the higher value properties are predominately commercial, industrial and farm properties, this impact is partially offset by the fact that rates are an income tax deduction and these ratepayers are paying the increased rates in after-tax dollars.



### Option 3 - Reduce the municipal charge to 10% and remove the three “Other” splits

Rationale:

- That it appears highly likely that the Victorian State government will legislate to cap the total revenue generated by the municipal charge at 10% of total rates revenue (rates on CIV plus the municipal charge). Council currently raises 17.7% of its total rates revenue from the municipal charge.
- That the current reduced differential rate for the “Other” differential rating categories creates a “double-dipping” effect that is unfair.

Removing the three “Other” differential rating categories will make Council’s rating strategy both simpler to understand and administer, and more equitable, as it will remove the current “double dipping” effect enjoyed by residential, vacant land and commercial properties located beyond Maryborough.

Under this option the total revenue generated by the municipal charge would be capped at 10% of total rates revenue (rates on CIV plus the municipal charge). If this option was applied for the 2018-2019 year it would result in the municipal charge being reduced from the current \$262.25 to \$147.70 per property.

The total rates paid by individual properties to generate the same 2018-2019 total rates revenue would be as follows:

<b>Municipal Charge capped at 10% and no “Splits”</b>	<b>10th Percentile</b>	<b>30th Percentile</b>	<b>50th Percentile</b>	<b>70th Percentile</b>	<b>90th Percentile</b>
<b>Differential Category</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>
Residential - Maryborough	\$834.75	\$1,019.73	\$1,151.85	\$1,310.40	\$1,733.20
<b>Change from base</b>	<b>-\$94.53</b>	<b>-\$89.14</b>	<b>-\$85.29</b>	<b>-\$80.67</b>	<b>-\$68.35</b>
Residential - Other	\$755.48	\$993.30	\$1,231.13	\$1,468.95	\$1,838.90
<b>Change from base</b>	<b>\$21.15</b>	<b>\$74.25</b>	<b>\$127.35</b>	<b>\$180.45</b>	<b>\$263.05</b>
Vacant Land - Maryborough	\$594.81	\$813.61	\$956.31	\$1,051.44	\$1,812.48
<b>Change from base</b>	<b>-\$101.53</b>	<b>-\$95.16</b>	<b>-\$91.00</b>	<b>-\$88.23</b>	<b>-\$66.07</b>
Vacant Land - Other	\$366.50	\$566.27	\$670.92	\$861.18	\$1,099.00
<b>Change from base</b>	<b>-\$72.74</b>	<b>-\$34.56</b>	<b>-\$14.56</b>	<b>\$21.80</b>	<b>\$67.25</b>
Commercial - Maryborough	\$1,120.14	\$1,585.22	\$2,177.14	\$2,895.90	\$6,658.82
<b>Change from base</b>	<b>-\$86.26</b>	<b>-\$72.73</b>	<b>-\$55.51</b>	<b>-\$34.60</b>	<b>\$74.87</b>
Commercial - Other	\$519.76	\$1,035.58	\$1,669.78	\$2,134.86	\$2,938.18
<b>Change from base</b>	<b>-\$13.40</b>	<b>\$126.84</b>	<b>\$299.27</b>	<b>\$425.71</b>	<b>\$644.12</b>
Industrial	\$641.89	\$932.59	\$1,543.06	\$1,891.90	\$3,461.68
<b>Change from base</b>	<b>-\$100.10</b>	<b>-\$91.60</b>	<b>-\$73.75</b>	<b>-\$63.55</b>	<b>-\$17.65</b>
Farm	\$363.84	\$617.52	\$1,082.60	\$1,843.64	\$3,703.96
<b>Change from base</b>	<b>-\$44.04</b>	<b>-\$36.66</b>	<b>-\$23.13</b>	<b>-\$0.99</b>	<b>\$53.13</b>

The two primary impacts of this option are:

- Because the municipal charge is a regressive tax, reducing it provides a benefit to properties with a lower CIV and provides a detrimental impact on properties with a higher CIV.
- Removing the “Other” categories from the residential, commercial and vacant land rates has a detrimental impact on all properties in these three differential rating categories and provides a benefit to properties in the other five differential rating categories.

When combined, these two impacts have a counter-balancing effect which eliminates some of the change impact. The primary reason for this effect is because many of the properties in the “Other” differential rating categories are properties with a lower than average CIV.

However, there is no denying that the majority (82.9%) of properties currently rated in the three “Other” differential rating categories face an increase in rates. This is entirely consistent with the rationale of this option.

There is a break-even CIV point for rates paid by the owners of individual properties in each differential rating category, and this point is shown in the following table.

Differential Category	Pay Less	Breakeven CIV	Pay More
Residential - Maryborough	3901 properties	< \$730,000 >	2 properties
Residential - Other	152 properties	< \$97,000 >	2,137 properties
Vacant Land - Maryborough	139 properties	< \$415,000 >	3 properties
Vacant Land - Other	353 properties	< \$63,000 >	278 properties
Commercial - Maryborough	204 properties	< \$465,000 >	46 properties
Commercial - Other	9 properties	< \$51,000 >	83 properties
Industrial	95 properties	< \$675,000 >	7 properties
Farm	723 properties	< \$425,000 >	304 properties
<b>TOTAL</b>	<b>5,576 properties</b>		<b>2,860 properties</b>

**Under this option 6,898 of the 8,436 (81.8%) of properties have a change in total rates paid per year (either up or down) by less than \$2.00 per week.**

However, 2,498 properties out of the 3,012 properties (82.9%) in the three “Other” differential rating categories will be faced with a rate rise, and 1,413 properties face a rate rise of greater than \$2.00 per week, at an average of \$4.09 per week or \$212.76 per year. The overall rate rise for these three differential rating categories is an average of 10.7%, which constitutes “Rate Shock” under this strategy. Therefore if this option is adopted, it should be phased in over two or more years.

This option produces a minimal change to the relative total contributed by each of the five land use categories.

Land Use	Base		Option 3		Change	
	Total Rates	Share	Total Rates	Share	Total Rates	Share
Residential	\$7,686,000	66.3%	\$7,802,000	67.3%	\$116,000	1.0%
Farm	\$1,865,000	16.1%	\$1,763,000	15.1%	-\$102,000	-1.0%
Commercial	\$1,200,000	10.3%	\$1,168,000	10.1%	-\$32,000	-0.2%
Vacant Land	\$643,000	5.5%	\$672,000	5.8%	\$29,000	0.3%
Industrial	\$209,000	1.8%	\$198,000	1.7%	-\$11,000	-0.1%
<b>TOTAL</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$0</b>	<b>0.0%</b>

However, when analysed by differential rating category there is a clear transfer of the rating burden from other residential properties to Maryborough residential properties, and a significant increase in the rate burden for the commercial other properties.

Differential Category	Base		Option 3		Change	
	Total Rates	Share	Total Rates	Share	Total Rates	Share
Residential - M	\$5,081,000	43.8%	\$4,757,000	41.0%	-\$324,000	-2.8%
Residential - O	\$2,605,000	22.5%	\$2,920,000	25.2%	\$315,000	2.7%
Farm	\$1,865,000	16.1%	\$1,863,000	16.1%	-\$2,000	0.0%
Commercial - M	\$1,070,000	9.2%	\$1,072,000	9.2%	\$2,000	0.0%
Commercial - O	\$130,000	1.1%	\$160,000	1.4%	\$30,000	0.3%
Vacant Land - M	\$185,000	1.6%	\$173,000	1.5%	-\$12,000	-0.1%
Vacant Land - O	\$458,000	3.9%	\$455,000	3.9%	-\$3,000	0.0%
Industrial	\$209,000	1.8%	\$203,000	1.8%	-\$6,000	-0.1%
<b>TOTAL</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$0</b>	<b>0.0%</b>

Benefits – this option will make Council's rating system compliant with the 10% cap on revenue generated by the municipal charge proposed in the Local Government Bill 2018. As the municipal charge is a regressive tax (in that it taxes lower valued properties at a higher rate than higher valued properties), this option also addresses the vertical equity principle of rating (i.e. those who are better off should pay more than those worse off) and improves the overall equity of the rating system. This option also eliminates the “double-dipping” discount effect that is embedded in the existing differential rating system for those properties in the three “Other” differential rating categories.

Issues – the primary issues are that higher valued properties will pay more rates than they are presently, and that four out of five properties in the three “Other” differential rating categories will be faced with a rate rise. (Notwithstanding that the increase in rates paid by properties in the “Other” differential rating categories is a logical and positive consequence of removing the “double-dipping” benefit that they currently enjoy).





## Option 4 - Reduce the municipal charge to 10% and move to a uniform rate

Rationale:

- That it appears highly likely that the Victorian State government will legislate to cap the total revenue generated by the municipal charge at 10% of total rates revenue (rates on CIV plus the municipal charge). Council currently raises 17.7% of its total rates revenue from the municipal charge.
- That the current rating strategy contains eight differential rating categories which increases the complexity and subjectivity of the rating system. Moving to a uniform rate is based on the premise that the capital improved valuation of a property is the sole measure of all of the attributes of that property and removes the need to treat various groups of properties differently.

Removing all of the differential rating categories would make Council's rating strategy both simpler to understand and administer, and more equitable, as it will remove all of the subjectivity of the existing taxing discounts and penalties in the current differential rating categories.

Under this option the total revenue generated by the municipal charge would be capped at 10% of total rates revenue (rates on CIV plus the municipal charge). If this option was applied for the 2018-2019 year it would result in the municipal charge being reduced from the current \$262.25 to \$147.70 per property.

The total rates paid by individual properties to generate the same 2018-2019 total rates revenue would be as follows:

<b>Municipal Charge capped at 10% and a uniform rate</b>	<b>10th Percentile</b>	<b>30th Percentile</b>	<b>50th Percentile</b>	<b>70th Percentile</b>	<b>90th Percentile</b>
<b>Differential Category</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>	<b>Rates Paid</b>
Residential - Maryborough	\$851.00	\$1,040.35	\$1,175.60	\$1,337.90	\$1,770.70
<b>Change from base</b>	<b>-\$78.28</b>	<b>-\$68.52</b>	<b>-\$61.54</b>	<b>-\$53.17</b>	<b>-\$30.85</b>
Residential - Other	\$769.85	\$1,013.30	\$1,256.75	\$1,500.20	\$1,878.90
<b>Change from base</b>	<b>\$35.52</b>	<b>\$94.25</b>	<b>\$152.97</b>	<b>\$211.70</b>	<b>\$303.05</b>
Vacant Land - Maryborough	\$401.97	\$526.40	\$607.55	\$661.65	\$1,094.45
<b>Change from base</b>	<b>-\$294.37</b>	<b>-\$382.37</b>	<b>-\$439.76</b>	<b>-\$478.02</b>	<b>-\$784.10</b>
Vacant Land - Other	\$272.13	\$385.74	\$445.25	\$553.45	\$688.70
<b>Change from base</b>	<b>-\$167.11</b>	<b>-\$215.09</b>	<b>-\$240.23</b>	<b>-\$285.93</b>	<b>-\$343.05</b>
Commercial - Maryborough	\$769.85	\$1,067.40	\$1,446.10	\$1,905.95	\$4,313.40
<b>Change from base</b>	<b>-\$436.55</b>	<b>-\$590.55</b>	<b>-\$786.55</b>	<b>-\$1,024.55</b>	<b>-\$2,270.55</b>
Commercial - Other	\$385.74	\$715.75	\$1,121.50	\$1,419.05	\$1,933.00
<b>Change from base</b>	<b>-\$147.42</b>	<b>-\$192.99</b>	<b>-\$249.01</b>	<b>-\$290.10</b>	<b>-\$361.06</b>
Industrial	\$607.55	\$878.05	\$1,446.10	\$1,770.70	\$3,231.40
<b>Change from base</b>	<b>-\$134.44</b>	<b>-\$146.14</b>	<b>-\$170.71</b>	<b>-\$184.75</b>	<b>-\$247.93</b>
Farm	\$446.58	\$771.18	\$1,366.28	\$2,340.08	\$4,720.48
<b>Change from base</b>	<b>\$38.70</b>	<b>\$117.00</b>	<b>\$260.55</b>	<b>\$495.45</b>	<b>\$1,069.65</b>

The two primary impacts of this option are:

- Removing all of the differential rating categories provides a benefit to all properties currently rated above the Maryborough Residential rate (ie vacant land, commercial and industrial properties) and provides a detrimental impact on all properties currently rated below the Maryborough Residential rate (ie other residential and farm land properties).
- Because the municipal charge is a regressive tax, reducing it provides a benefit to properties with a lower CIV and provides a detrimental impact on properties with a higher CIV.

**This option creates a quantum change in the imposition of rates across the whole rate base, creating stark groups who benefit and groups who receive a detrimental impact.**

Under this option there is only a break-even CIV point for rates paid by the owners of individual properties in the two residential differential rating categories, and this point is shown in the following table. For the farm differential rating category every property pays more, whilst for all the remaining differential rating categories every property pays less.

Differential Category	Pay Less	Breakeven CIV	Pay More
Residential - Maryborough	3,861 properties	< \$411,000 >	42 properties
Residential - Other	112 properties	< \$88,000 >	2,177 properties
Vacant Land - Maryborough	142 properties	nil	0 properties
Vacant Land - Other	631 properties	nil	0 properties
Commercial - Maryborough	250 properties	nil	0 properties
Commercial - Other	92 properties	nil	0 properties
Industrial	102 properties	nil	0 properties
Farm	0 properties	nil	1, 027 properties
<b>TOTAL</b>	<b>5,190 properties</b>		<b>3,246 properties</b>

Under this option 4,933 of the 8,436 (58.5%) of properties have a change in total rates paid per year (either up or down) by less than \$2.00 per week.

**Six of the eight differential rating categories face rate shock with this option**, with residential other and farm properties experiencing large rate rises and vacant land and commercial properties experiencing large rate reductions. In total 3,973 or 47.1% of properties face rate shock ranging from a 42.9% rate decrease to a 31.6% rate increase. The average rate change for each of the differential rating categories is:

• Residential Maryborough – 3,903 properties with an average rate decrease of 4.4%
• Residential Other – 2,289 properties with an average rate increase of 14.4%
• Vacant Land Maryborough – 142 properties with an average rate decrease of 41.9%
• Vacant Land Other – 631 properties with an average rate decrease of 34.7%
• Commercial Maryborough – 250 properties with an average rate decrease of 34.7%
• Commercial Other – 92 properties with an average rate decrease of 17.7%
• Industrial – 102 properties with an average rate decrease of 9.1%
• Farm – 1,027 properties with an average rate increase of 26.8%

If this option is to be implemented it should be phased in over a number of years, in order to manage the rate shock.



This option produces a significant change to the relative total contributed by each of the five land use categories.

Land Use	Base		Option 2		Change	
	Total Rates	Share	Total Rates	Share	Total Rates	Share
Residential	\$7,686,000	66.3%	\$7,550,000	65.1%	-\$136,000	-1.2%
Farm	\$1,865,000	16.1%	\$1,975,000	17.0%	\$110,000	0.9%
Commercial	\$1,200,000	10.3%	\$1,267,000	10.9%	\$67,000	0.6%
Vacant Land	\$643,000	5.5%	\$596,000	5.1%	-\$47,000	-0.4%
Industrial	\$209,000	1.8%	\$215,000	1.9%	\$6,000	0.1%
<b>TOTAL</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$11,603,000</b>	<b>100.0%</b>	<b>\$0</b>	<b>0.0%</b>

Benefits – this option will make Council's rating system compliant with the 10% cap on revenue generated by the municipal charge proposed in the Local Government Bill 2018. As the municipal charge is a regressive tax (in that it taxes lower valued properties at a higher rate than higher valued properties), this option also addresses the vertical equity principle of rating (i.e. those who are better off should pay more than those worse off) and improves the overall equity of the rating system. This option would make Council's rating strategy both simpler to understand and administer.

Issues – the primary issue is that there is a significant transfer of the rating burden from the commercial, industrial and vacant land properties to farm properties and to a lesser extent residential properties. Six of the eight differential rating categories face rate shock under this option, therefore if this option is to be implemented it should be phased in over a number of years, in order to manage the rate shock.



## Dealing with “Rate Shock”

Rate shock is defined by Council as the movement (both up or down) in total rates paid by any one differential rating category in any one year by ten percent or more.

Where rate shock occurs for one or more particular differential rating category in any particular year, it is recommended that Council cap the movement in total rates raised for that differential rating category at 10% by changing the level of the rate in the dollar CIV.

For example, with the current rating system this would then have the effect of moving the relativities between the eight differential rating categories away from the base of:

- Residential - Maryborough 100%
- Residential - Other 80%
- Vacant Land - Maryborough 180%
- Vacant Land - Other 150%
- Commercial - Maryborough 160%
- Commercial - Other 120%
- Industrial 120%
- Farm 80%

Capping should then continue until such time as the relativities between the eight differential rating categories returns to the base levels.

A review of the past three Council revaluations provides the following information:

	CIV	CIV	CIV
Differential Rating Category	31.12.2013	31.12.2015	31.12.2017
Residential - Maryborough	\$725,565,530	\$700,935,000	\$791,124,000
Residential - Other	\$429,836,872	\$414,577,000	\$488,700,000
Vacant Land – All #	\$54,506,538		
Vacant Land - Maryborough		\$16,024,000	\$16,010,000
Vacant Land - Other		\$35,547,000	\$38,075,000
Commercial - Maryborough	\$101,388,270	\$100,789,000	\$122,501,000
Commercial - Other	\$16,496,600	\$16,005,000	\$17,337,000
All Industrial	\$28,675,476	\$28,406,000	\$32,369,000
Farm	\$320,496,429	\$317,349,000	\$424,121,000
<b>TOTAL</b>	<b>\$1,676,965,715</b>	<b>\$1,629,632,000</b>	<b>\$1,930,237,000</b>

# noting that Vacant Land was not split into Maryborough/Other at this valuation

An analysis of the change in CIV by differential rating category reveals only relatively minor movements in the 2015 revaluation but some more significant movements in 2017 revaluation, with four of the differential rating categories receiving rate shock as defined by this strategy.

	<b>CIV % Increase or Decrease</b>	<b>CIV % Increase or Decrease</b>	<b>CIV Increase or Decrease v average CIV Increase</b>
<b>Differential Rating Category</b>	<b>31.12.2015</b>	<b>31.12.2017</b>	<b>31.12.2017</b>
Residential - Maryborough	-3.4%	12.9%	-5.6%
Residential - Other	-3.6%	17.9%	-0.6%
Vacant Land - All	-5.4%		
Vacant Land - Maryborough		-0.1%	-18.5%
Vacant Land - Other		7.1%	-11.3%
Commercial - Maryborough	-0.6%	21.5%	3.1%
Commercial - Other	-3.0%	8.3%	-10.1%
All Industrial	-0.9%	14.0%	-4.5%
Farm	-1.0%	33.6%	15.2%
<b>TOTAL</b>	<b>-2.8%</b>	<b>18.4%</b>	



## 8.10 DECEMBER 2018 FINANCIAL REPORT

**Author:** Manager Finance

**Responsible General Manager:** General Manager Corporate Performance

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### SUMMARY/PURPOSE:

Monthly financial reports are presented to Council to show Council's financial performance and how it is tracking against the adopted (original) budget.

### POLICY CONTEXT:

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Organisation

Outcome: Central Goldfields Shire is a proactive, well governed, professional and financially sustainable organisation.

4.1 Objective: Ensure the financial sustainability of Council through efficient and effective delivery of services

### BACKGROUND INFORMATION:

This finance report is provided for the year to 31 December 2018 and does not include results for Council's Section 86 Committees such as the Tullaroop Leisure Centre which are consolidated within the annual financial report at year end.

### FINANCIAL REPORT

The monthly financial report comprises the following:

- Operating Statement;
- Balance Sheet;
- Statement of Changes in Equity;
- Cash Flow Statement;
- Statement of Capital Works
- Rate and General Debtor Information;
- Investment Schedule.

### Operating Statement

The operating result, incorporating approved carry forwards, for the year to date as at 31 December was a surplus of \$7.15 million. Income is at \$21.41 million compared to a budgeted income of \$21.02 million, a variance of (1.8%).

Expenditure is at \$14.26 million compared to budgeted expenditure of \$15.18 million, a variance of 6.1% for the year to date. The variation is primarily attributable to the timing waste related expenditure.

## **Statement of Financial Position**

Council's equity position has increased from 30 June 2018, due to the levying of rates and charges during August. Refer to the receivables summary for an explanation for the movement in current receivables.

The creditors balance includes the Fire Services Property Levy (FSPL) which totalled \$0.96 million as at 31 December 2018. This balance includes arrears, however, excludes the FSPL Concession (which effectively reduces the payable amount). Council's next instalment for 2018-2019 is to be paid by 28 March 2019.

## **Statement of Changes in Equity**

Council has not budgeted to make any transfers to reserve during the 2018-2019 year, with the movement within the statement of changes in equity equating to the operating result.

## **Cash Flow Statement**

The balance of cash and investments as at 31 December 2018 is \$6.90 million, which includes \$5.75 million in short-term deposits.

Council's cash position is higher than budget, due to the cash at the beginning of the period being \$4.04 million more than budget. This was primarily due to the early payment of 50% of Council's 2018/2019 Financial Assistance Grant funding in June 2018 (\$1.98 million), and deferred capital works.

Future cash flows are being monitored closely to enable completion of scheduled works and meeting recurrent obligations, as well as ensuring surplus funds are invested to generate maximum interest revenue.

## **Capital Works Statement**

The 2018-2019 budget included a capital works budget of \$6.21 million, and with the addition of \$0.46 million in approved carried forward projects, the budget now totals \$6.67 million across property, plant and equipment and infrastructure asset classes.

As at 31 December, Council had expended \$1.45 million on capital works. The contract for Reseal works has now been awarded, with various infrastructure works scheduled for completion by the end of March.

## **Receivables Summary**

The Rate Debtor balance at 31 December is \$9.94 million (excluding FSPL), which is \$410,852 or 4% higher than this time last year, primarily due to the 2.25% increase in rates and increase in garbage service charges.

This level of arrears is consistent with the same time last year at 6.4% (6.2% as at 31 December 2017). Those ratepayers with arrears are currently being progressed for additional debt collection action in accordance with Council's Debt Collection Policy.

The Other Debtors balance totals \$795,039 which is \$180,284 or 29% higher than this time last year. This is primarily due to an invoice of \$308,000 being raised at the end of November for Fixing Country Roads funding (not yet paid).

**Operating and Cash Flow Budget Amounts**

Council's budget forecast for 2018-2019 has been divided into monthly amounts. While every attempt is made to accurately predict when income and expenditure will occur and phase budgets appropriately, Council should make allowances for variations in these monthly budget allocations throughout the year. This is especially true for receipt of non-recurrent Government grants and completion of capital and large maintenance works which can be planned but not proceed due to a variety of issues including variable weather.

The monthly year-to-date (YTD) operating budget forecast amounts should be used to indicate budget position rather than an absolute result for each month.

**CONSULTATION/COMMUNICATION:**

Nil required to this report.

**FINANCIAL & RESOURCE IMPLICATIONS:**

Nil.

**CONCLUSION:**

The financial position to the end of December 2018 does not highlight any issues for concern, however is impacted by the following:

- The timing of waste related expenditure.

Rate Debtor balances will continue to be monitored with debt collection action to be undertaken in accordance with Council's Debt Collection Policy.

Surplus funds have been invested to ensure interest earnings are maximised, and cash flows are to be monitored closely.

There will be a Council Report presented to Council for noting the Financial Report at the February Council Meeting.

**ATTACHMENTS:**

1. 31 December 2018 Financial Report

**RECOMMENDATION:**

*That Council receives and notes the attached December 2018 Financial Report showing progress against the budget, as presented.*



# CENTRAL GOLDFIELDS SHIRE

## Operating Statement

For Period 1 July 2018 to 31 December 2018

	Actual Year to Date \$	* Budget Year to Date \$	Variation on Budget	% Variation	* Annual Budget \$
<b>Revenues</b>					
Community	703,519	1,175,400	(471,881)	(40.1%)	1,330,223
Health & Human Services	2,388,891	2,036,508	352,383	17.3%	4,024,892
Economic Development	597,768	402,085	195,683	48.7%	754,247
Culture & Heritage	161,744	145,303	16,441	11.3%	153,062
Recreation & Leisure	16,721	187,213	(170,492)	(91.1%)	221,057
Transport	1,500,887	1,127,924	372,963	33.1%	2,652,930
Waste & Environment	3,153,746	3,114,346	39,400	1.3%	3,294,203
Administration	218,048	133,739	84,309	63.0%	298,017
Rates	11,627,277	11,637,488	(10,211)	(0.1%)	11,632,488
Financial Assistance Grants	976,849	958,411	18,438	1.9%	1,916,807
Profit/(Loss) on sale of Fixed Assets	62,265	100,829	(38,564)	(38.2%)	100,829
	<b>21,407,715</b>	<b>21,019,246</b>	<b>388,469</b>	<b>1.8%</b>	<b>26,378,757</b>
<b>Expenditures</b>					
Community	854,201	929,375	(75,174)	(8.1%)	1,659,167
Health & Human Services	2,066,113	2,028,061	38,052	1.9%	4,047,918
Economic Development	1,395,960	1,116,802	279,158	25.0%	1,975,129
Culture & Heritage	417,369	439,411	(22,042)	(5.0%)	832,825
Recreation & Leisure	1,439,264	1,719,235	(279,971)	(16.3%)	3,232,287
Transport	4,510,714	4,723,267	(212,553)	(4.5%)	9,190,373
Waste & Environment	1,110,774	1,672,102	(561,328)	(33.6%)	3,283,541
Administration	2,461,999	2,549,930	(87,931)	(3.4%)	4,888,368
	<b>14,256,394</b>	<b>15,178,183</b>	<b>(921,789)</b>	<b>(6.1%)</b>	<b>29,109,608</b>
Surplus/(Deficit) on operations	7,151,321	5,841,063	1,310,258	22.4%	(2,730,851)

\* Including carry forwards adopted at October 2018 Council meeting

# CENTRAL GOLDFIELDS SHIRE

## Balance Sheet

	30-Jun-18	31-Dec-18
	\$	\$
<b>Current Assets</b>		
Cash	8,718,243	6,900,149
Receivables	2,212,535	12,076,188
Other	381,081	135,697
Non-current assets held for resale	573,394	245,223
<b>Total Current Assets</b>	<b>11,885,253</b>	<b>19,357,257</b>
<b>Current Liabilities</b>		
Creditors	3,245,044	1,666,296
Borrowings	574,803	542,481
Provisions	2,432,694	2,432,694
<b>Total Current Liabilities</b>	<b>6,252,541</b>	<b>4,641,471</b>
<b>NET CURRENT ASSETS</b>	<b>5,632,713</b>	<b>14,715,785</b>
<b>Non-Current Assets</b>		
Land Under Roads	381,486	381,486
Land & Buildings	46,010,465	45,380,018
Plant & Machinery	3,919,461	3,689,310
Furniture & Equipment	207,917	102,329
Infrastructure	266,524,875	264,031,033
Artwork Collection	210,990	210,990
Library Bookstock	349,277	349,277
Works in Progress	390,181	1,843,772
<b>Total Non-Current Assets</b>	<b>317,994,653</b>	<b>315,988,216</b>
<b>Non-Current Liabilities</b>		
Other Liabilities	69,115	69,115
Borrowings	3,885,313	3,885,313
Provisions	599,357	524,672
<b>Total Non-Current Liabilities</b>	<b>4,553,785</b>	<b>4,479,100</b>
<b>NET ASSETS</b>	<b>319,073,580</b>	<b>326,224,901</b>
<b>Equity</b>		
Accumulated Surplus	122,225,443	129,376,764
Reserves	196,848,137	196,848,137
<b>TOTAL EQUITY</b>	<b>319,073,580</b>	<b>326,224,901</b>

# CENTRAL GOLDFIELDS SHIRE

## Statement of Changes in Equity

For the period ended 31/12/18

	Accumulated Surplus	Reserves	Total
Balance at beginning of period	122,225,443	196,848,137	319,073,580
Adjustments due to changes in accounting policies	0	0	0
	<hr/> 122,225,443	<hr/> 196,848,137	<hr/> 319,073,580
Increase/(Decrease) in net assets resulting from operations	7,151,321	0	7,151,321
Transfers to reserves	0	0	0
Transfers from Reserves	0	0	0
Balance at end of period	<hr/> <b>129,376,764</b>	<hr/> <b>196,848,137</b>	<hr/> <b>326,224,901</b>

# CENTRAL GOLDFIELDS SHIRE

## Cash Flow Statement

For the period ended 31/12/18

	Actual Year to Date Inflows/ (Outflows)	Budget Year to Date Inflows/ (Outflows)
<b>Cash flows from operating activities</b>		
<b>Payments</b>		
Community	(834,970)	(910,145)
Health & Human Services	(2,050,831)	(2,012,779)
Economic Development	(1,349,265)	(1,070,107)
Culture & Heritage	(358,161)	(380,203)
Recreation	(1,090,199)	(1,370,170)
Transport	(4,008,562)	(2,032,762)
Waste & Environ	(1,043,655)	(1,604,983)
Administration	(2,352,376)	(2,406,911)
	<u>(13,088,019)</u>	<u>(11,788,060)</u>
<b>Receipts</b>		
Community	721,634	1,175,400
Health & Human Services	2,388,891	2,036,508
Economic Development	597,768	402,085
Culture & Heritage	161,744	145,303
Recreation	16,721	187,213
Transport	1,500,888	1,127,924
Waste & Environ	1,478,623	927,805
Administration	359,753	133,739
Debtors/Rates	4,130,324	3,506,400
FSPL collected/paid	26,321	0
Grants Commission	976,849	958,411
	<u>12,359,517</u>	<u>10,600,788</u>
<b>Net cash inflow/(outflow) from operating activities</b>	<u>(728,501)</u>	<u>(1,187,272)</u>
<b>Cash flows from investing activities</b>		
Proceeds from Sale Fixed Assets	460,340	553,750
Payments for Capital Works	(1,453,592)	(2,637,916)
	<u>(993,252)</u>	<u>(2,084,166)</u>
<b>Net cash inflow/(outflow) from investing activities</b>		
<b>Cash flows from financing activities</b>		
Financing costs	(64,019)	(85,180)
Repayment of loan borrowings	(32,322)	(36,469)
	<u>(96,341)</u>	<u>(121,649)</u>
<b>Net cash inflow/(outflow) from financing activities</b>		
<b>Net increase (decrease) in cash</b>	<u>(1,818,094)</u>	<u>(3,393,087)</u>
Cash at beginning of the financial period	8,718,243	4,678,219
<b>Cash at the end of December</b>	<u>6,900,149</u>	<u>1,285,132</u>

# CENTRAL GOLDFIELDS SHIRE COUNCIL

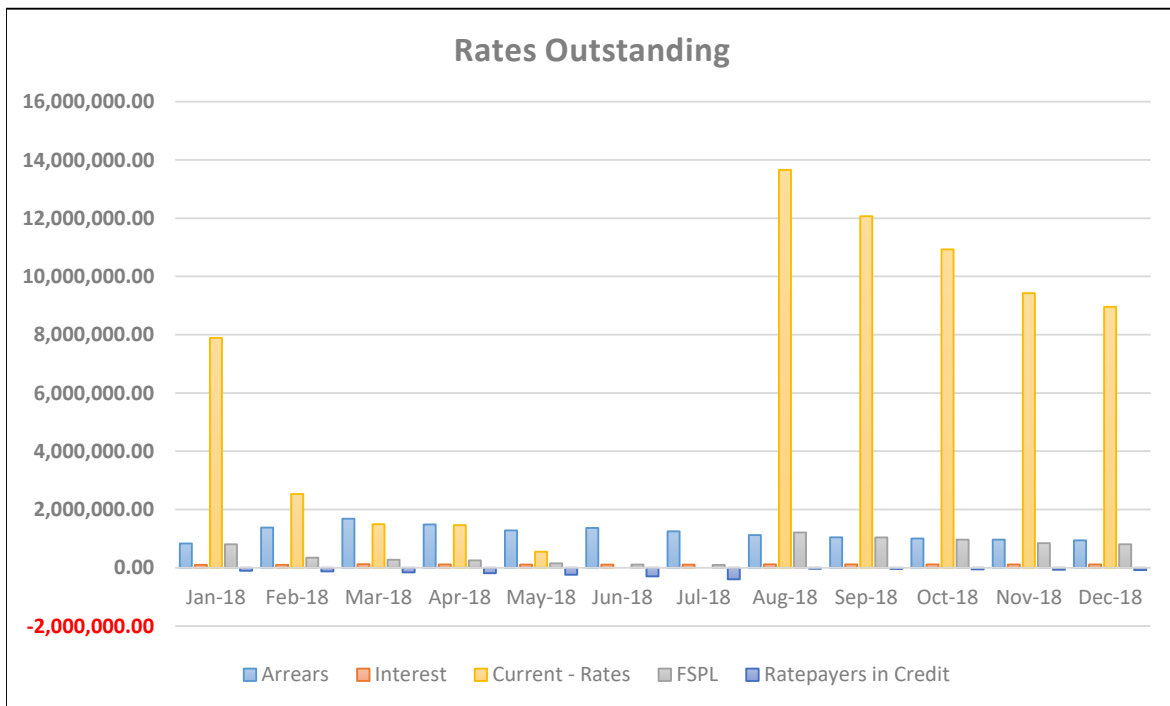
## Statement of Capital Works For the period ended 31/12/18

	Budget 2018-2019	Budget Year to Date	Actual Year to Date
<b>Property</b>			
Land	104,665	6,665	16,026
Land Improvements	15,500	3,000	2,174
Buildings	492,000	48,000	60,361
<b>Total property</b>	<b>612,165</b>	<b>57,665</b>	<b>78,561</b>
<b>Plant and equipment</b>			
Plant, machinery and equipment	619,000	619,000	129,552
Fixtures, fittings and furniture	329,945	182,945	83,167
<b>Total plant and equipment</b>	<b>948,945</b>	<b>801,945</b>	<b>212,719</b>
<b>Infrastructure</b>			
Roads	2,620,288	1,486,821	660,636
Bridges and major culverts	954,837	-	146,298
Pathways	156,000	50,000	58,347
Drainage	678,160	42,000	100,159
Parks, Open Space & Streetscapes	203,000	78,000	5,644
Car Parks	35,000	20,000	-
Other Infrastructure	467,980	101,485	191,228
<b>Total infrastructure</b>	<b>5,115,265</b>	<b>1,778,306</b>	<b>1,162,312</b>
<b>Total capital works expenditure</b>	<b>6,676,375</b>	<b>2,637,916</b>	<b>1,453,592</b>
<b>Represented by:</b>			
New asset expenditure	1,098,485	838,485	282,634
Asset renewal expenditure	3,324,053	1,523,431	782,835
Asset upgrade expenditure	2,253,837	276,000	388,123
<b>Total capital works expenditure</b>	<b>6,676,375</b>	<b>2,637,916</b>	<b>1,453,592</b>

# CENTRAL GOLDFIELDS SHIRE

## Receivables - Rates

	31 December 2017		31 December 2018	
	Amount \$	% (Rate Income)	Amount \$	% (Rate Income)
Arrears	869,998.98	6.2%	941,930.85	6.4%
Interest	102,720.49	0.7%	114,262.50	0.8%
Current - Rates	8,555,139.22	61.0%	8,882,517.62	60.7%
Total (excluding FSPL)	9,527,858.69	67.9%	9,938,710.97	67.9%
Annual Rate Movement			410,852.28	4%
Fire Services Property Levy (FSPL)	879,286.01		806,539.88	
Total Rates (including FSPL)	10,407,144.70		10,745,250.85	

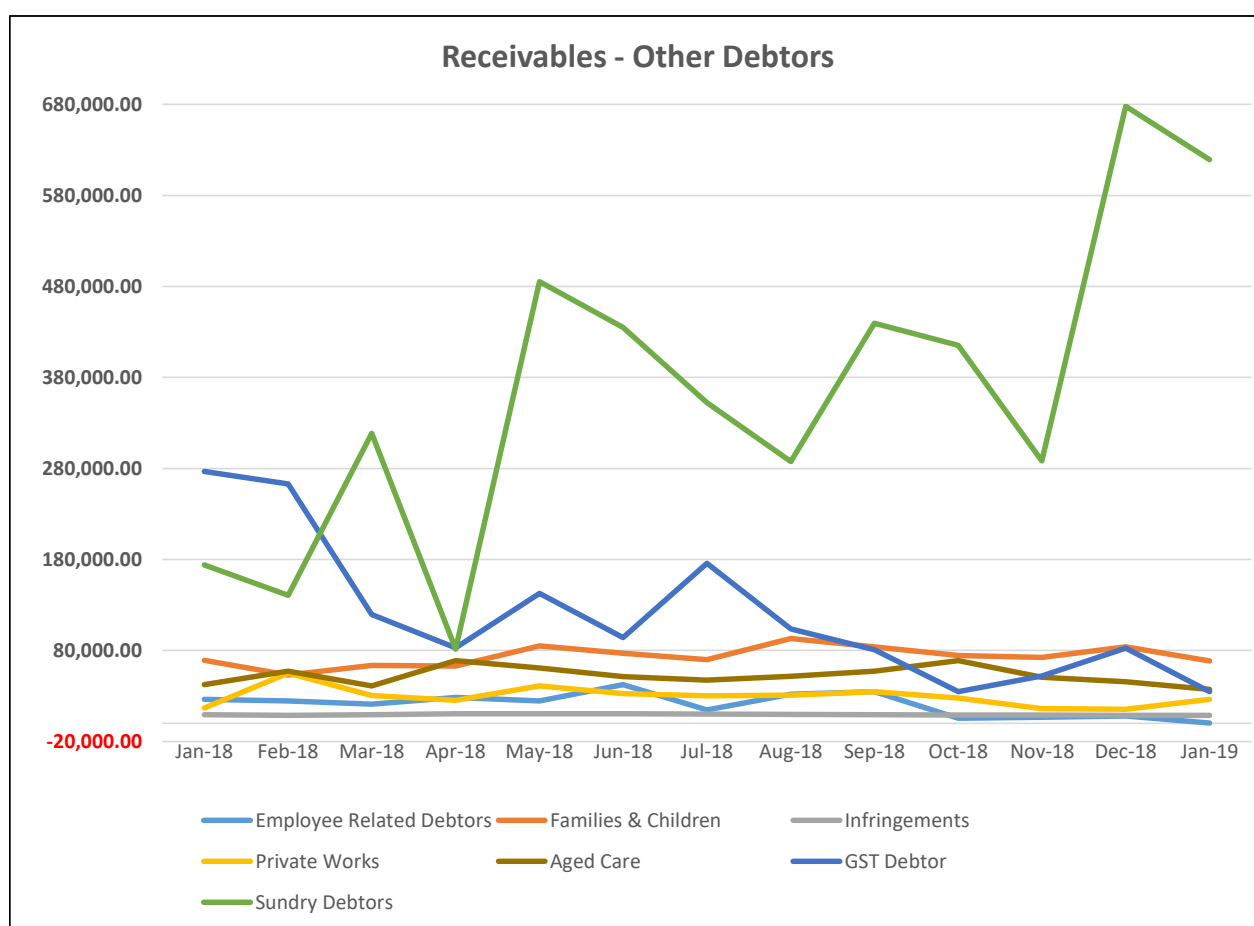




# CENTRAL GOLDFIELDS SHIRE

## Receivables - Other Debtors

	31 December 2017		31 December 2018	
	Amount \$	% (Budget Income)	Amount \$	% (Budget Income)
Employee Related Debtors	26,223.99	0.2%	247.07	0.0%
Families & Children	69,270.53	0.4%	68,599.40	0.7%
Infringements	9,477.21	0.1%	8,541.55	0.1%
Private Works	16,826.76	0.1%	26,178.46	0.3%
Aged Care	42,398.75	0.3%	37,334.66	0.4%
GST Debtor	276,526.28	1.8%	34,830.65	0.4%
Sundry Debtors	174,032.18	1.1%	619,307.53	6.3%
	<u>614,755.70</u>	<u>1.1%</u>	<u>795,039.32</u>	<u>1.5%</u>
Annual Movement			180,283.62	29%



## 8.11 COMMUNITY ENGAGEMENT – COMMUNITY VOICE PANEL

**Author:** General Manager Community Wellbeing

**Responsible General Manager:** General Manager Community Wellbeing

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

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### SUMMARY/PURPOSE:

The purpose of this report is to endorse the membership of the Community Voice Panel.

### POLICY CONTEXT:

Central Goldfields Shire Council's Council Plan 2017-2021 (2018 Refresh) – Our Organisation

Outcome: Central Goldfields Shire is a proactive, well governed, professional and financially sustainable organisation.

4.2 Objective: Provide effective and accessible community information and opportunities community contributions to policy and program development

Initiative: Implement the Community Engagement Framework

### BACKGROUND INFORMATION:

In May, 2018 Council adopted *the Engaging Central Goldfields: A Community Engagement Framework* as part of the Central Goldfields Organisation and Governance Reform Program.

The Framework reinforces Council's commitment to strengthening and broadening its community consultation processes to improve decision-making and community inclusion and participation.

It outlines a more open and authentic community engagement approach and aims for effective and inclusive participation in the decisions that affect the local community.

The establishment of the Central Goldfields Shire Community Voice Panel is one of the key outcomes of the Framework.

The Community Voice Panel will complement a series of new and improved methods of engagement that have been introduced by Council over recent months:

- Administrators available every Tuesday between 10 and 11am at the Community Hub for residents to access (by appointment)
- Quarterly listening posts in townships
- Administrators and Council staff available immediately following every Council Meeting for residents to access
- Following each Council Meeting a video summary of the meeting will be recorded and posted on Council's facebook page
- New Council website

- Live broadcasting of Council Meetings will be investigated

The establishment of the Community Voice Panel was endorsed at the December meeting of Council.

#### **REPORT:**

The Central Goldfields Community Voice Panel will be made up of a group of community members with an interest in Council activities, projects and issues.

As a member of the Panel, community members will have the opportunity to have ongoing, regular input into Council-decision making.

The Community Voice Panel will:

- Improve the way Council consults and listens to the community
- Extend and broaden Council's community engagement reach within the community

Following the endorsement of the establishment of the Community Voice Panel at the December Council meeting an expression of interest process was held.

Council received a strong field of applications from a range of ages and demographics.

In summary, the Community Voice Panel membership will consist of the following:

- Representation from every age group
- Broadly equal gender representation
- Membership from the following locations Bet Bet, Bromley Daisy Hill, Dunolly, Maryborough and Talbot
- People with disability
- Representatives with a range of different interests

At this stage no nominations have been received from anyone from Aboriginal and Torres Strait Island background. Also a limited number of applications were received from young people.

Once endorsed by Council it is proposed that the membership and deliberations of the Community Voice Panel would remain confidential. The list of recommended panellists has been provided to the Administrators at a Briefing Session for their consideration.

Given some groups are under represented on the Community Voice Panel Council should consider further expressions of interest targeting these demographic gaps throughout the year.

#### **CONSULTATION/COMMUNICATION:**

Following the endorsement of the establishment of the Community Voice Panel at the Council Meeting on 18 December 2018 an expression of interest process was held. Advertisements calling for Expressions of Interest were advertised on social media, via media releases and related media coverage and advertised in Council's Weekly Update. The closing date for Expressions of Interest was 1 February 2019, although late EOI's were accepted.

**FINANCIAL & RESOURCE IMPLICATIONS:**

Engaging with the Community Voice Panel will be undertaken through existing resources

**CONCLUSION:**

The Community Voice Panel is a further tool for Council to engage with the community to support decision making on a range of key council issues.

**ATTACHMENTS:**

Nil

**RECOMMENDATION:**

1. *That Council endorse the Community Voice Panel membership as proposed.*
2. *That Council keep open nominations for the Community Voice Panel for young people in the 16 – 24 age bracket and for people with an Aboriginal or Torres Strait Island background.*
3. *That Council review the operations of the Community Voice Panel and the membership in 12 months.*