

# HYDROTHERAPY POOL HIGH LEVEL REVIEW

## FINAL DRAFT REPORT



NOVEMBER 2018

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## Document History

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## 1. Background and Project Area Overview

### 1.1 Project Background

There has been a range of requests for Bayside City Council to support the development of a hydrotherapy Pool for residents living in the Local Government Area (LGA).

Council is undertaking some targeted research to understand the community's need for hydrotherapy.

Internally research is being undertaken with physiotherapists, doctors, the local Community Health Service and representative community members.

Some residents reported having previously accessed hydrotherapy, which was coordinated by Connect Community Health, at Berendale School in Hampton East. Access was reduced about 12-18 months ago due to the Child Safe Standards requirements.

Council has become aware that the State Government in its recent budget committed \$13 million to St Kilda Football Club to redevelop its Moorabbin site. Part of the State Government's financial commitment includes the construction of a community hydrotherapy pool.

Council will be liaising with the St Kilda Football Club as part of our targeted research, to understand the level of community access that will be available at this facility.

Council has also commissioned this study as a high-level review to consider the need, demand and what such a facility would cost to develop and operate.

Otium Planning Group Pty Ltd has been involved in the development of a large range of hydrotherapy and warm water program pools across Australia and was commissioned in mid-October 2018 (as an aquatics industry expert company) to complete the review.

### 1.2 Project and Report Scope

The report scope was to complete a preliminary high level review to provide a concise report on the following key issues/questions:

- What is Hydrotherapy?
- What are the benefits of it?
- What does a hydrotherapy Pool look like - including size, capital cost and annual running costs?
- Any relevant recent case studies that can be used to demonstrate Hydrotherapy.
- Are there other services that can be offered to offset costs (physio, consulting suites etc.)?

The report has been developed into three sections being:

- Section One: Background and Project Area Overview
- Section Two: Hydrotherapy Pool Overview
- Section Three: Review of Standalone Hydrotherapy Pool in the Bayside City Council area



## 1.3 Project Methodology

The project methodology for the high-level report is summarised in the following table.

**Table 1: Project Methodology Summary**

Text	Text
<b>1. Project Clarification</b>	OPG representatives attended a project clarification meeting to gather all background and any relevant documents and reports and to discuss exact project and report requirements
<b>2. Develop Draft Report</b>	OPG prepared a high-level draft report that cover all agreed project commission review items including: <ul style="list-style-type: none"><li>• Description of Hydrotherapy and warm water program pools.</li><li>• Facility component requirements and specification.</li><li>• Programs, services that can operate and benefits from such facilities</li><li>• Case studies of standalone and integrated hydrotherapy and warm water program pools.</li><li>• Likely capital and operating costs.</li><li>• Other related activity areas.</li></ul> Summary of key findings
<b>3. Draft Report Meeting</b>	The draft report was forwarded to client representatives to review the draft report and agree on any further investigation tasks or amended report items
<b>4. Final Report</b>	OPG representatives updated the draft report based on agreed edits and further work and issued the final report.

## 1.4 Project Area Overview

The City of Bayside is located in Melbourne's middle-southern suburbs, between 8 and 20 kilometres south of the Melbourne CBD. It covers a land area of 3,719ha and has a population density of 28.04 persons per hectare.

The City of Bayside is bounded by the City of Port Phillip and the City of Glen Eira in the north, the City of Kingston in the east, and the Port Phillip Bay foreshore in the south and west. The City of Bayside's boundaries are Head Street, St Kilda Street and Glen Huntly Road in the north, and the Nepean Highway, North Road, Thomas Street, the Frankston railway line and Charman Road in the east.

### 1.4.1 Demographic Review

The following sections summarises the key population and demographic characteristics and trends likely to impact future participation in sport and recreation within the City of Bayside area.

The population and demographic profile are based wherever possible on the 2016 ABS Census data and has been sourced from .id, an online company that analyses ABS Census data.

The following provides a snapshot of the current demographic and population characteristics.

#### 1.4.1.1 Current Population Review

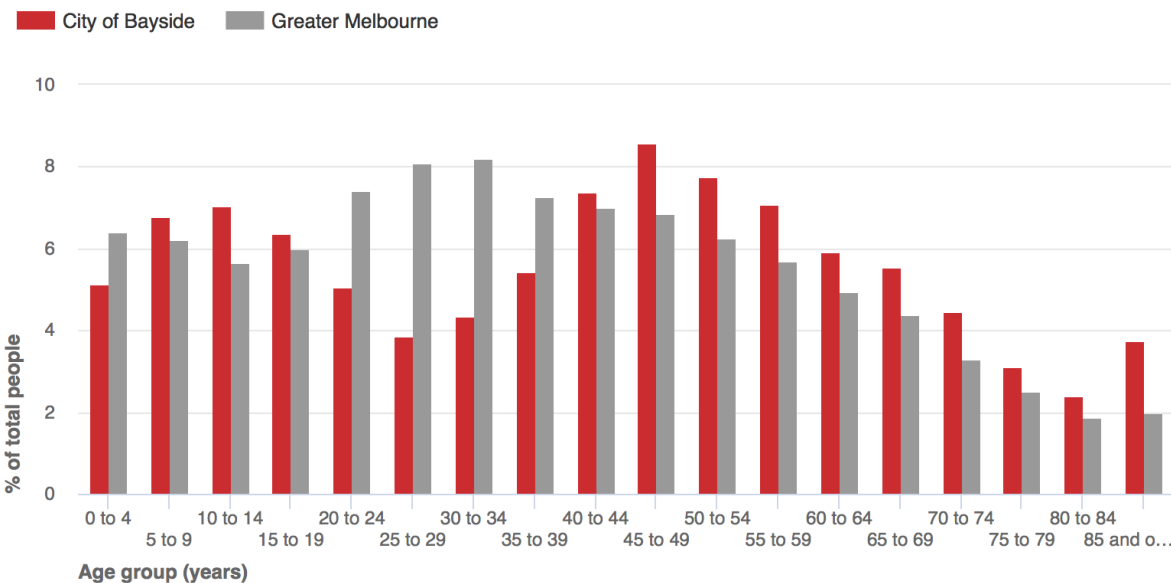
- Bayside City Council (BCC) currently has an Estimated Resident Population for 2018 of 105,566.
- Analysis of the five-year age groups for the BCC area in 2016 when compared to Greater Melbourne (see graph also next page) shows that there are:
  - A greater proportion of persons under the age of 20 within the BCC area.
  - A lower proportion of persons between the ages of 20 to 40 when compared to Greater Melbourne in the BCC.
  - A significantly higher proportion of persons older than 50 living in BCC when compared to the number of persons over the age of 50 in the Greater Melbourne region.
    - Under 20 years of age - BCC: 25.4%; Greater Melbourne: 24.3%
    - 20 to 40 years of age - BCC: 18.7%; Greater Melbourne: 31%
    - 50+ years of age - BCC: 40%; Greater Melbourne: 30.9%



- Of the population in the BCC, it is estimated that 55.0% is of the age that will access and use active recreation facilities.
- This is lower than the proportion of the Greater Melbourne population that can be classed as the active age, which is estimated at 62.8%.

### Age structure - five year age groups, 2016

Total persons



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

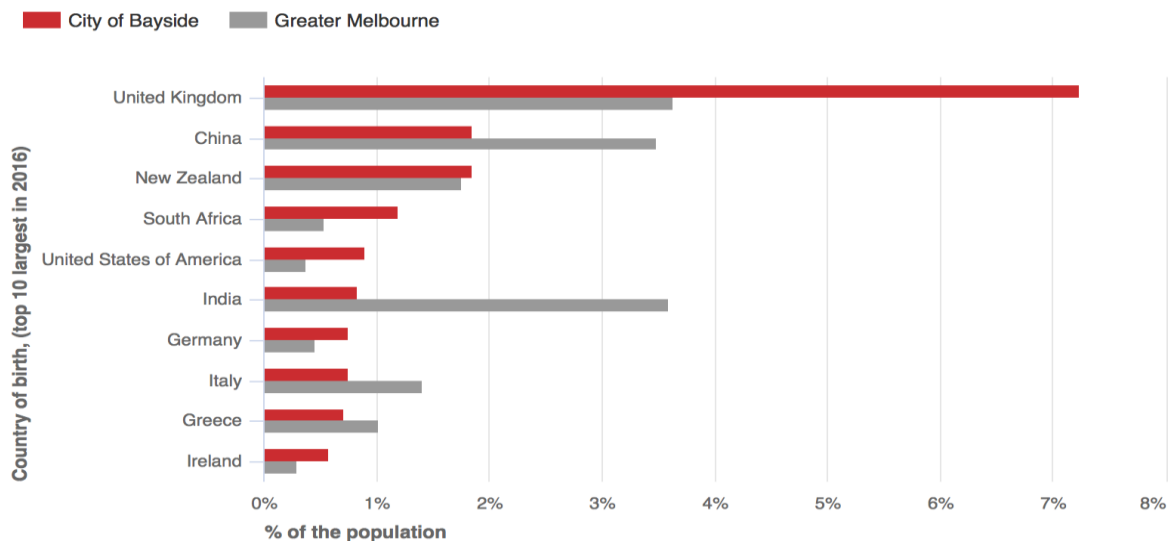
**.id** the population experts

#### 1.4.1.2 Cultural Diversity

- Cultural diversity is relatively low with 25.3% of the population in the BCC area being born in an overseas country compared to 33.8% in Greater Melbourne.
- In addition to this only 14.6% of the population speaks a language other than English at home, which is significantly lower than Greater Melbourne, where 32.3% of the population speaks a language other than English at home.
- The main Countries of birth and main language spoken for the population born overseas are listed in the following birthplace (below) and language spoken at home (next page) graphs.



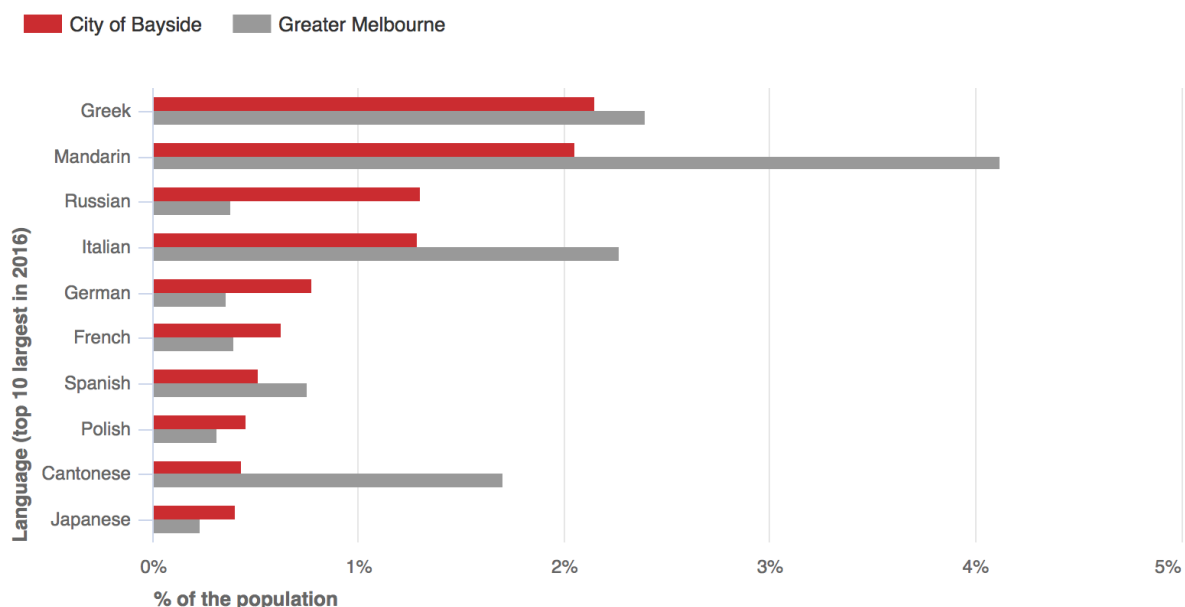
## Birthplace, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

.id the population experts

## Language spoken at home, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

.id the population experts

### 1.4.1.3 Disadvantage and Social Capital

- Individual income levels for residents within the BCC area shows that a greater proportion of the population earns a high income (above \$1,750 per week) and a lower proportion of the population earns a low income (less than \$500 per week).
  - Above \$1,750 per week - BCC: 24.3%; Greater Melbourne: 11.9%
  - Below \$500 per week - BCC: 31.4%; Greater Melbourne: 37.8%
- BCC ranks second in the SEIFA Index of Relative Social-Economic Disadvantage with a score of 1097, indicating that there is a low level of disadvantage within the municipality. The higher the SEIFA Index score the lower the disadvantage.



## Weekly individual income, 2016

Total persons

■ City of Bayside ■ Greater Melbourne



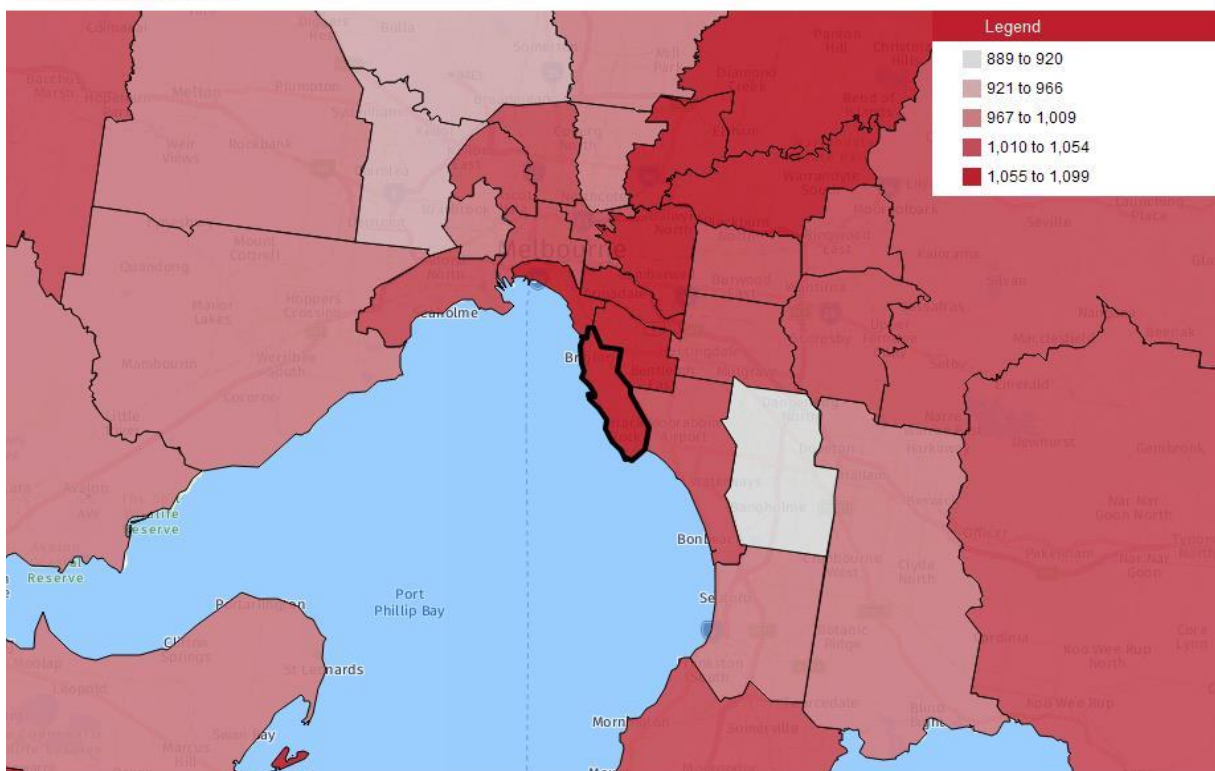
### Weekly gross income

Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data). Compiled and presented in profile.id by .id, the population experts.

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## Index of Relative Socio-economic Disadvantage

2016 Local Government Areas



Source: Australian Bureau of Statistics, Census of Population and Housing 2016. Compiled and presented in profile.id by .id, the population experts.

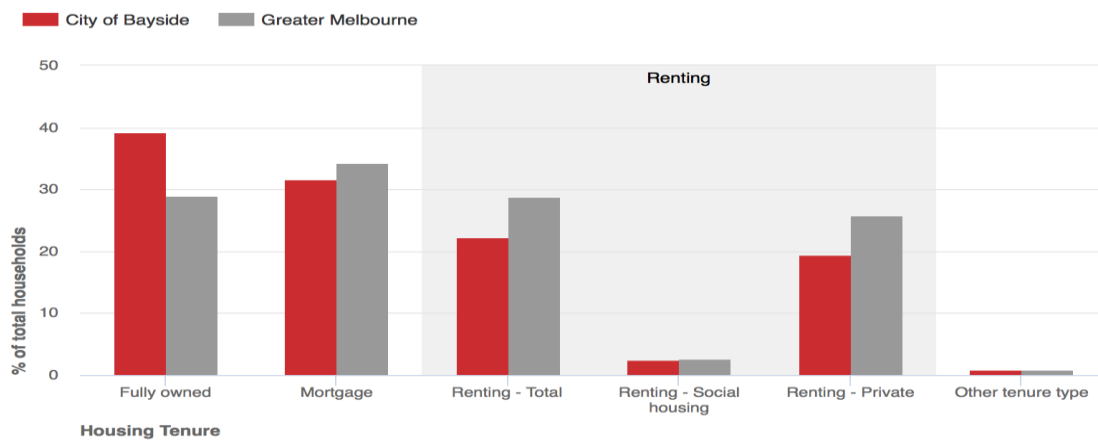
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### 1.4.1.1 Housing and Transport

- Within the BCC area, a greater number of the properties are owned outright when compared to Greater Melbourne. 39.1% of homes in the BCC area are fully owned compared to 29.0% in Greater Melbourne.
- 88.6% of households own one or more vehicles, which is higher than the Greater Melbourne population where 83.9% own one or more vehicles.



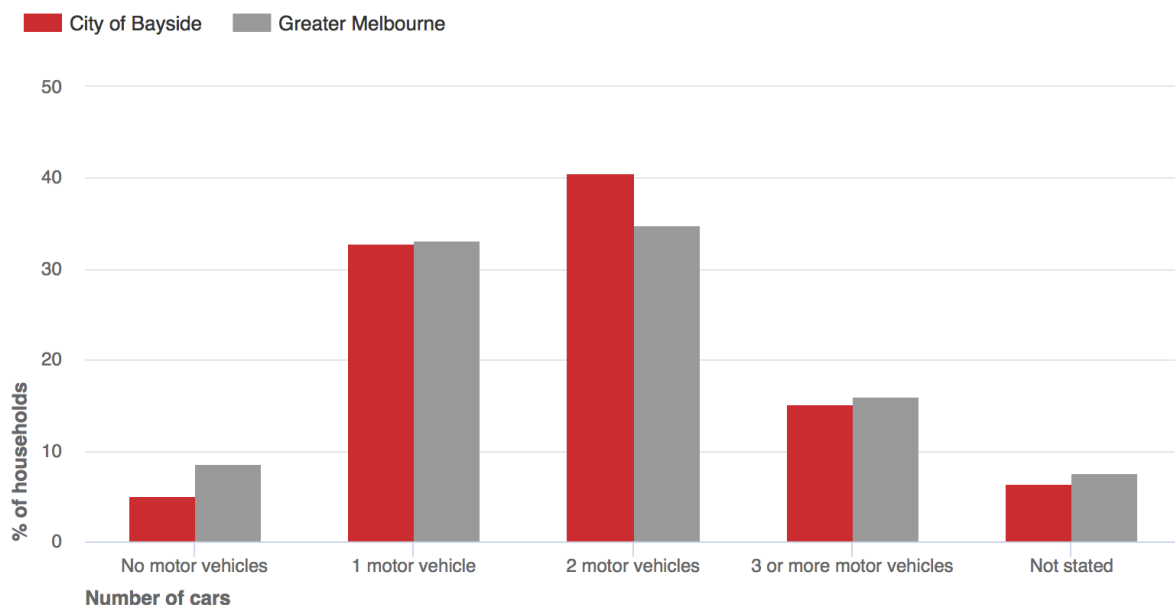
### Housing tenure, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data). Compiled and presented in profile.id by .id, the population experts.

.id the population experts

### Car ownership, 2016



Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Enumerated data). Compiled and presented in profile.id by .id, the population experts.

.id the population experts

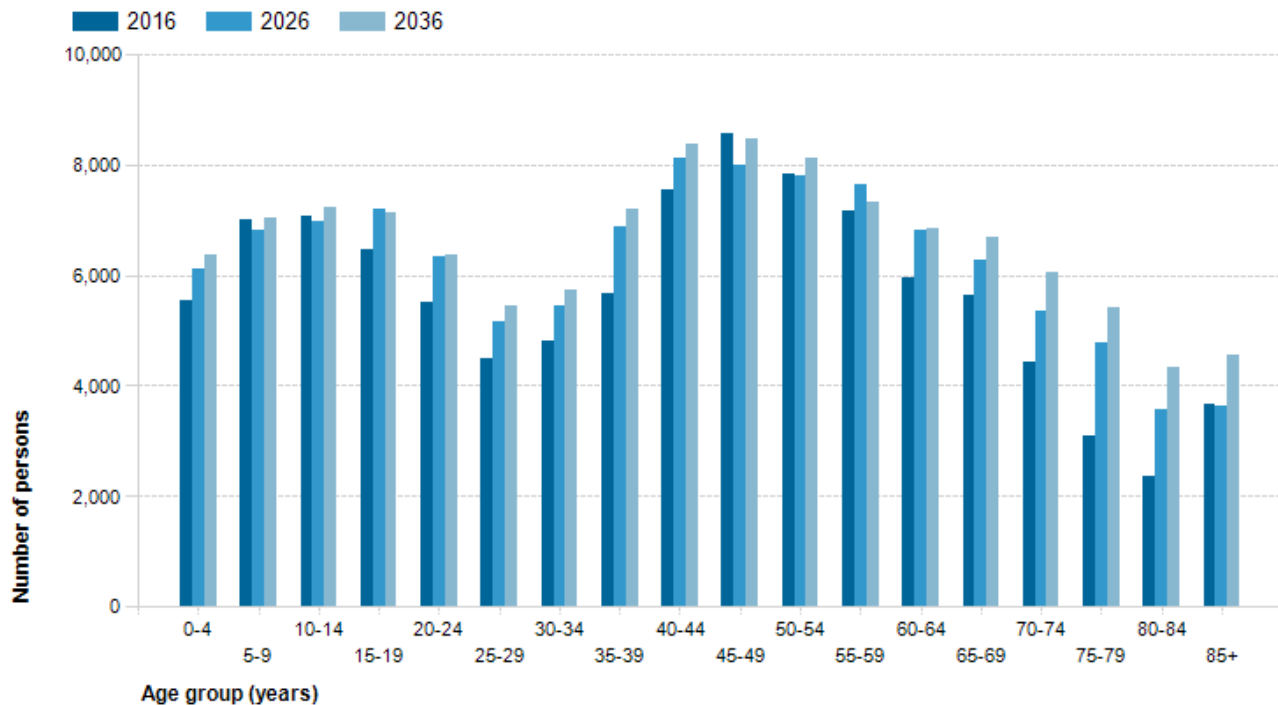
#### 1.4.1.2 Future Population Review

- It is expected that the population of the BCC area will increase by 12.3% from ERP of 105,566 in 2018 to 118,590 in 2036. This is an increase of 13,024 persons.
- Within the population increase of 13,024 additional persons, 70.6% of these are predicted to be above the age of 50. This is an additional 9,197 persons over the age of 50 who will be living within the BCC area by 2036.
- The largest annual average rate of change is predicted to occur within the first 5 years until 2021 before slowing down.
- The proportion of the population that is of an age that is likely to use active leisure and recreational facilities (5-49 years) is predicted to fall slightly from 55.0% in 2016 to 53.1% in 2036. This is consistent with the greater numbers of over 50s moving into the BCC area.



## Forecast age structure - 5 year age groups

City of Bayside - Total persons



Population and household forecasts, 2016 to 2036, prepared by .id the population experts, November 2017.

.id the population experts

### 1.5 Relevant Research \ Review

A review has been completed on relevant documents that identify Council priorities for the surrounding aging population

#### 1.5.1.1 Wellbeing for All Ages and Abilities Strategy

BCC has issued the Wellbeing for all Ages and Abilities Strategy. Within this document the council recognizes that the BCC population contains a high number of retirees and pre-retirees as well as a higher than Greater Melbourne average proportion of frail aged persons (above 85 year old).

The document also states the key future concerns for the council, which are, diabetes, dementia and the aging population.

BCC outlines three goals to help improve the wellbeing of the residents within the City of Bayside. These are:

- An engaged and supportive community
- A healthy and active community
- Safe and sustainable environments

As a way to ensure these goals are achieved the council has also created 4 action plans for various age groups. The Healthy Aging Action Plan outlines the strategies and priorities for the older population within the BCC area.



Goal 1 An Engaged and Supportive Community		
Objective 1.1 Improve mental health and Resilience		
Actions	Measure	Timeline
Reduce social isolation by providing seniors groups and clubs with options to support the continued participation of frail older members in community activities	<ul style="list-style-type: none"> <li>Information and regular support for group and club committees delivered each year</li> <li>Participant feedback</li> <li>Referrals for assistance to Council</li> </ul>	2018-2021
Identify an accredited research partner to develop and implement a resilience survey to measure resilience levels of older people	<ul style="list-style-type: none"> <li>Resilience levels of older people measured across three years</li> </ul>	2018-2021
Develop interventions to improve the resilience of older people	<ul style="list-style-type: none"> <li>Improvement in the resilience level of older people each year</li> </ul>	2018-2021
Objective 1.2 Support opportunities that build social networks and community connections		
Identify and deliver intergenerational programs that respond to community needs and interests	<ul style="list-style-type: none"> <li>1 continuing program established in year 1</li> </ul>	2018-2019
Develop a communication plan to increase awareness of available local services and programs	<ul style="list-style-type: none"> <li>Communication plan developed and delivered</li> <li>Increased community knowledge of available services and programs</li> </ul>	2018-2019
Identify and provide a series of education sessions that respond to the priorities identified by older people	<ul style="list-style-type: none"> <li>6 education sessions delivered each year</li> <li>Participation feedback</li> </ul>	2017-2021
Objective 1.4 Improve access to affordable, appropriate and inclusive services		
Support disability clients in receipt of council service to transition to the National Disability Insurance Scheme (NDIS)	<ul style="list-style-type: none"> <li>100% of eligible clients successfully transitioned</li> </ul>	2018-2019
Advocate to the State Government for suitable levels of funding to support clients aged under 65 years with a disability who are ineligible for the NDIS	<ul style="list-style-type: none"> <li>Council is resourced to deliver an appropriate level of service</li> </ul>	2018-2019

Goal 2 A healthy and active community		
Objective 2.1 Increase physical activity opportunities		
Actions	Measure	Timeline
Develop a community based resource guide for older adults that identifies active and passive recreation opportunities	<ul style="list-style-type: none"> <li>Resource guide developed and distributed</li> </ul>	2017-2018
Investigates access to Hydrotherapy for Bayside residents	<ul style="list-style-type: none"> <li>Reports presented to Council</li> </ul>	2017-2019
Advocated for the increased provision of Living Longer Living Stronger strength based training program	<ul style="list-style-type: none"> <li>Reduced waiting list</li> <li>Programs available in the northern, southern and central areas of Bayside</li> </ul>	2017-2019



Goal 3 Safe and Sustainable Environments		
Objective 3.1 reduce Family Violence		
Actions	Measure	Timeline
Raise awareness of elder abuse by promoting World Elder Abuse Awareness Day and participate in and implement actions from the regional elder abuse network	<ul style="list-style-type: none"><li>• 1 information session provided each year</li><li>• 100+ attendees</li><li>• Network actions implemented</li></ul>	2018-2021
Objective 3.2 Improve Community Safety		
Work with Victoria Police to identify and deliver activities to improve perceptions of safety for older people	<ul style="list-style-type: none"><li>• Improved annual results as measured through the resilience survey for older people</li></ul>	2019-2021
Objective 3.4 Improve environmental sustainability		
Deliver information session to seniors' groups on sustainable practices	<ul style="list-style-type: none"><li>• 1 session delivered each year</li><li>• Participation by 90% seniors groups</li><li>• Pre and post participant evaluation</li></ul>	2018-2021
Objective 3.5 Improve community resilience to extreme weather events		
Support vulnerable clients to manage during extreme heat wave events	<ul style="list-style-type: none"><li>• Community information promoting cool locations and encouraging community members to monitor vulnerable residents available on the website</li><li>• Vulnerable clients in receipt of Council services contacted during extreme events</li></ul>	2017-2021



## 2. Hydrotherapy Pool Overview

### 2.1 What is Hydrotherapy?

Hydrotherapy is a therapeutic whole-body treatment that involves moving and exercising in warm to hot water; essentially exercise in a warm to hot pool. Hydrotherapy pools are usually different from ordinary pools - the temperature, depth, access, filtration system and movement of water is controlled and changed according to who's using the pool, and why.

When set up as a hot or warm water pool and used for activity, hot water causes sweating and relaxes muscles. It is a very effective method of treating poor circulation, arthritis, rheumatism and sore muscles, and is often combined with aromatherapy.

On the other hand, cold-water hydrotherapy (low temperature pools and ice baths) helps to stimulate underlying muscles, as well as blood flow to the skin.

Hydrotherapy involves the use of water to treat various conditions, such as arthritis, rheumatic complaints and other ailments. Although it resembles swimming, it is different because it requires the individual to undertake different exercises in a warm pool of water. The water temperature in the pool is approximately 33-36°C.

This water is much warmer than what you will encounter in a normal swimming pool. The depth is also different as most people using such pools walk or exercise in them but do not swim in them.

Hydrotherapy relies on its mechanical and thermal effects, in order to induce healing. It takes advantage of the body's reaction to cold or hot stimuli, the pressure exerted by water, the protracted application of heat as well as the sensation of the water. These sensations and effects are then carried deeper into the skin by nerves.

When this happens, these sensations stimulate the immune system, thus influencing the release of stress hormones, while improving digestion, circulation and blood flow, as well as reducing the body's sensitivity to pain. In most circumstances, heat is used to soothe and quiet the body, while slowing down the activity of internal organs.

On the other hand, cold is used to invigorate and stimulate, thus increasing the body's internal activity. Therefore, if you are suffering from anxiety and tense muscles, you should bathe with hot water. If you are feeling stressed out and tired, you should shower with hot water, followed by a short cold shower. This stimulates the mind and body.

### 2.2 The Benefits of Hydrotherapy?

When you are submerged in water like a pool or a bath, you experience some kind of weightlessness. During this period, the water relieves the body of gravity's effects. In addition, water induces a hydrostatic effect, as well as a massage-like feeling, as it kneads your body. Moving water stimulates the skin's touch receptors. This effect increases blood circulation while releasing tight muscles.

The benefits of warm to hot hydrotherapy pool use include:

- It is a very effective method of treating long-lasting pain.
- It helps to loosen tense, tight muscles, while encouraging relaxation. It also increases the metabolic rate and the digestion activity. Hydrotherapy hydrates body cells while improving skin and muscle tone.
- Hydrotherapy boosts the immune system, thus enhancing its efficiency.
- It stimulates blood supply to various organs in the body.



- Hydrotherapy has been used for many years to treat various health conditions. One of its main advantages is that it is natural and does not have any major negative side effects.
- Utilising hydrotherapy and other aquatic physical therapies means don't have to swallow pills or go for expensive surgical procedures.

## 2.3 Hydrotherapy Pools in the Health and Medical Sector?

The majority of Hydrotherapy Pools in Australia have been developed for people in the traditional health system at hospitals, rehabilitation centres, aged care facilities and exercise therapy service providers such as sports medicine, physiotherapist and exercise physiology practitioners.

These pools tend to be smaller water areas as they are used for specialist health activities and are usually linked to medical programs. The majority of these pools are not available to the general public due to the high use for health and rehabilitation treatment use.

The design of Hydrotherapy Pools are also governed by Australian Safety Standards AS 3979-2006 and covers design requirements and recommendations, operating requirements and recommendations and safety issues.

The standard is based on the following definition of a Hydrotherapy Pool being: *“A pool containing heated water, especially designed to meet the therapeutic needs of persons of any age with impairment due to illness, injury, disease, intellectual deficiency, congenital abnormality, or any change in normal mobility”*.

So traditionally these pools have been developed in the health sector and usually made up of small water areas located within medical institutions and not set up for community use and preventative and wellness treatments through activity in water. Examples of small water health Hydrotherapy pools are listed below.

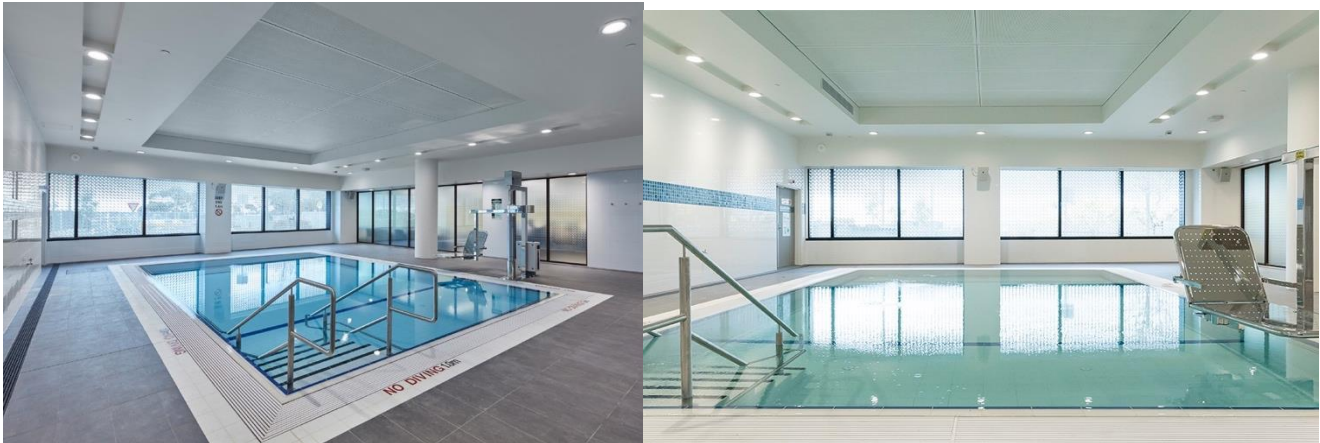


Figure 1: Epworth Hospital Hydrotherapy Pools

### 2.3.1 Hydrotherapy Pools Australian Standards?

The Hydrotherapy Pool Australian Standards AS 3979 -2006 are not prohibitive as they are developed as updated standards that supersede the AS 3979-1993 standards. Their status is as informative standards for information and guidance and not statute.

## 2.4 Hydrotherapy/Warm Water Pools Located at Public Swimming Pools?

In line with all levels of Government in Australia encouraging people to be more active and healthy there has been a major change away from the traditional small hydrotherapy pool located at a health institution to the development of large warm water pools at a large number of public swimming centres.

This trend has also been aided by Australia's continuing aging population that now sees across Australia more people aged 60 years and over than aged under 15 years old. Planning for an older and less mobile population that is living much longer has been a major catalyst to the development of such pools.



As these facilities have moved from just a health model to a preventative health model the water areas have needed to be much larger and this has added extra capital and operating cost issues. Most health related hydrotherapy pools are less than 100m<sup>2</sup> in water area and some of this is taken up with stairs/access ramps.

The high cost of staffing, heating, maintaining and operating such larger water areas has also been the main industry trend factor to collocate facilities at aquatic leisure centres rather than build standalone facilities.

Victoria is leading the way with such facilities due to its high standard provision of indoor aquatic leisure centres that due to weather impacts have had to move facilities indoor. In other parts of Australia this is not such a factor as warm weather has allowed them to keep open their aged outdoor pools.

We have also moved away from calling these pools hydrotherapy pools due to health and disease cogitations and moved to calling them warm water program pools that can be used for group health and activity classes, learn to swim, walking in water and gentle exercise activities as well as for casual use.

#### **2.4.1 Warm Water Program Pool Layouts and Components?**

To maximise use of warm water program pools there have been a number of innovative design and additional component features that now are included in contemporary pools. These include:




- Larger length of pools to cater for more users walking and exercising in the water and to meet the need to provide adequate gradient change (1:20 to 1:30) and ramp access at minimum of 1:14 gradient with a landing of at least 1200mm at its lowest point.
- Pool depths need to be designed for people walking and exercising in the water so need to be within a range of 900mm to 1.5m. The gradient of the floor shall be no more than 1:20 and if the pool is longer then it is recommended to design for a gradient of up to 1:30
- To provide accessible spas many pools are now designed to have a spa and seating area off the end of the ramp, so all people can access the spa. To ensure there is also a hotter spa a separate concourse entry spa is usually provided. These also link well to adjoining steam and dry sauna areas and concourse shower and relaxation areas.
- To meet Environmentally Sustainable Design (ESD) features most facilities are being developed in their own pool hall - at same concourse level with clear glass walling and large entry doors so the hotter water area can reduce its energy losses. This reduces energy costs but increases staffing and operational costs.
- Development of close by change and amenities allow users to move from reception and control to activity areas quickly and change and shower etc close-by to the activity area.
- Universal design features also place this pool close to pool hall entry with full accessibility and concourses all at the same level.
- Development of adjacent wellness treatment areas for allied health activities as well as massage, beauty therapy, preventative health services and classes etc.

#### **2.4.2 Examples of Successful Warm Water Program Pools Recently Built?**


The following table provides a range of successfully developed warm water program pools at major aquatic leisure and wellbeing centres across Melbourne and Regional Victoria.



**Table 2: Examples of Warm Water Program Pools**

Facility and Location	Image	Details
Peninsula Aquatic Recreation Centre (PARC) Frankston		<ul style="list-style-type: none"> <li>• Located as part of major regional aquatic leisure centre.</li> <li>• 20m x 11.5m warm water program pool.</li> <li>• Located in own low roof pool hall.</li> <li>• Includes ramp and accessible spa.</li> <li>• Concourse spa and steam and dry sauna.</li> <li>• Male and female change and amenities located off pool deck.</li> <li>• DAB change and changing places unit.</li> </ul>
Glen Eira Sports and Aquatic Centre (GESAC) East Bentleigh		<ul style="list-style-type: none"> <li>• Located as part of major regional aquatic leisure centre.</li> <li>• 20m x 11.5m warm water program pool.</li> <li>• Located in own low roof pool hall.</li> <li>• Includes ramp access.</li> <li>• Concourse entry separate spa and steam and dry saunas.</li> <li>• Male and female change and amenities located off pool deck.</li> <li>• chair relaxation.</li> <li>• DAB change and changing places unit.</li> </ul>
Splash Aqua Park and Leisure Centre Craigieburn		<ul style="list-style-type: none"> <li>• Located as part of major regional aquatic leisure centre.</li> <li>• 20m x 11.5m warm water program pool.</li> <li>• Located in own low roof pool hall.</li> <li>• Includes ramp and accessible spa.</li> <li>• Concourse spa and steam and dry sauna.</li> <li>• Male and female change and amenities located off pool deck.</li> <li>• Large concourses for seating and lounge chair relaxation.</li> <li>• DAB change and changing places unit.</li> <li>• Direct access from wellness centre</li> </ul>



Facility and Location	Image	Details
<p>Gurri Wanyarra Wellbeing Centre - Kangaroo Flat Bendigo</p>	 A photograph of an indoor swimming pool. The pool has a large, rectangular main section and a smaller, lower section on the left. The pool is surrounded by a tiled deck. In the background, there are large windows and a high ceiling with structural beams. A ramp is visible on the right side of the pool.	<ul style="list-style-type: none"><li>• Located as part of major regional aquatic leisure centre.</li><li>• 20m x 11.5m warm water program pool.</li><li>• Located in low roof but part of pool hall.</li><li>• Includes ramp and accessible spa.</li><li>• Concourse spa and steam and dry sauna.</li><li>• Male and female change and amenities located off pool deck.</li><li>• Large concourses for seating and lounge chair relaxation.</li><li>• DAB change and changing places unit.</li></ul>



### 3. Standalone Hydrotherapy Pool in Bayside City Council Area Review

#### 3.1 Introduction

The report scope was to complete a preliminary high level review to provide a concise report on the following key issues/questions:

- What is Hydrotherapy? - covered in section 2.1 of this report
- What are the benefits of Hydrotherapy? Covered in section 2.2 of this report.


This section of the report covers:

- High level review of close by Hydrotherapy Pools
- What would a successful hydrotherapy Pool look like - size, capital cost and annual running costs?
- Any relevant recent case studies that can be used to demonstrate Hydrotherapy.
- Other services that can be offered to offset costs (physio, consulting suites etc.)?

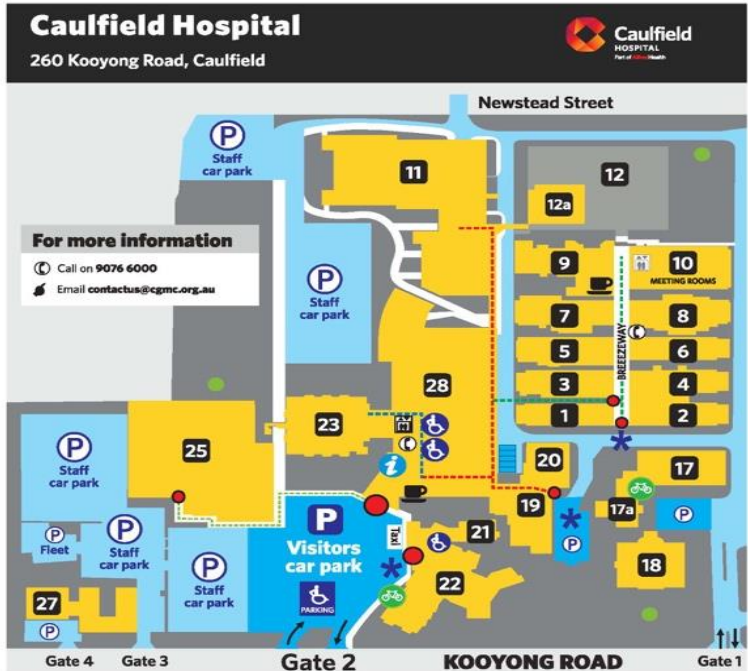


#### 3.2 High Level Review of Local Hydrotherapy Pools

OPG has conducted a desktop website search to identify any Hydrotherapy Pools that are within the city or close by to the City of Bayside that residents may be able to access. The results of the desktop research are detailed in the following table.

**Table 3: Hydrotherapy Pool Location Review**

Facility and Location	Image	Details
<b>Brighton Hydrotherapy Pool - 3 Brewer Street Brighton</b>		<ul style="list-style-type: none"><li>• Community classes and programs operated by Platinum Physio.</li><li>• Offering 24 x 1 hour classes/week -Monday to Saturday between 9am and 8pm weekdays and 9am to 12 noon Saturdays.</li><li>• Purpose built hydrotherapy pool located as part of physiotherapy clinic.</li></ul>



Facility and Location	Image	Details
<p><b>Caulfield Hospital Hydrotherapy Pool - 260 Kooyong Road Caulfield</b></p>	 <p><b>Caulfield Hospital</b> 260 Kooyong Road, Caulfield</p> <p>For more information Call on 9076 6000 Email <a href="mailto:contactus@cgmc.org.au">contactus@cgmc.org.au</a></p>	<ul style="list-style-type: none"> <li>• Operated by Caulfield Hospital with most timeslots taken up with patient treatment use.</li> <li>• 14m x 8m Hydrotherapy pool.</li> <li>• Located (on adjoining map) in building 20.</li> <li>• Has adjoining parking to the pool building.</li> <li>• Community classes and programs operated by Platinum Physio.</li> <li>• Offering 3 x 1 hour classes/week - Tuesdays 6.30pm to 8.30pm and Thursdays 10am to 11am.</li> <li>• Learn to swim classes also offered by commercial company.</li> </ul>
<p><b>Bentleigh Bayside Community Health Centre 2A Gardner's Road East Bentleigh</b></p>		<ul style="list-style-type: none"> <li>• Operated by Bentleigh Bayside Community Health.</li> <li>• Southern Suburbs Physio Centre operate 3 community classes a week at the centre's pool.</li> <li>• Pool size not able to be identified from desktop review information.</li> </ul>
<p><b>Epworth Brighton Hospital 85 Wilson Street Brighton</b></p>		<ul style="list-style-type: none"> <li>• Onsite hydrotherapy pool used for rehabilitation patients and programs.</li> <li>• No community use available.</li> </ul>



### 3.3 Review of Standalone Public Hydrotherapy Pools

The only standalone public hydrotherapy pool we were able to identify from a desktop search was at Ripples Leisure Centre (RLC) located off Charles Hackett Drive in the suburb of St Mary's which is located in the local government area of Penrith City Council.

The centre was originally built in 1993 and the Hydrotherapy Pool was built in 2001 at a cost of approximately \$2M.

The following site and facility plan show the main aquatic leisure facilities to the east of Charles Hackett Drive and the standalone Hydrotherapy Pool and change facilities and consult rooms to the west of the main facilities and north of the main car park.

The hydrotherapy pool is a small water area facility 16m x 8m with stair access to water areas plus a fixed chair lift. There are also changerooms and consulting rooms and plantroom linked to the building. As it is a standalone facility it also has a separate reception and entry/exit foyer

The aerial photo on the shows the satellite image of the facilities and surrounding area.



The facilities are owned by Penrith City Council and they are managed by Council's company limited by guarantee management group. They manage and operate this centre plus the Penrith Swimming Pool.

The pool is open 83 hours a week being Monday to Friday 5.30am to 7.00pm, Saturday 7.00am to 1.00pm and 7.30am to 1.00pm. People can join as platinum centre members and have access to all facilities for \$62/month. Details of centre charges and program fees are listed as appendix one of this report.

Photos of the water area are detailed on the next page.



The Hydrotherapy Pool is set up as a separate profit centre and the annual 2017/18 income and expenditure plus management services cost details are listed in the following table on the next page.



**Table 4: Ripples Leisure Centre Hydrotherapy Pool Financials 2017/18**

ACTIVITY	ITEM	2017/2018 \$
INCOME	CASUAL ENTRY	29,818
	LEARN TO SWIM	24,000
	LEARN TO SWIM SPEC NEEDS	16,667
	MEDICARE	159,127
	HYDRO CLASSES	420
	REHAB PROGRAMMES	89,827
	PROFESSIONAL FEES	43,030
	ROOM HIRE	14,470
	MEMBERSHIPS	67,384
	REHABILITATION Insurers	96,993
	CONCESSIONS	1,986
	COMMUNITY GROUPS	2,300
	BLUE PHONE	0
	<b>TOTAL INCOME</b>	<b>\$546,022</b>
EXPENDITURE	ADVERTISING	11,588
	CHEMICALS	9,224
	ELECTRICITY	34,218
	GAS	13,646
	PRINTING & STATIONERY	2,884
	PURCHASES	3,041
	REPAIRS & MAINTENANCE	12,712
	DEPRECIATION EXPENSES	3,362
	TELEPHONE	3,441
	UNIFORMS	472
	STAFF TRAINING AND WELFARE/OTHER	5,870
	<b>TOTAL NON SALARY EXPENSES</b>	<b>\$100,458</b>
	DIRECT WAGES-RECEPTION	72,769
	DIRECT WAGES-AQUATICS	85,264
	DIRECT WAGES-THERAPISTS	148,968
	DIRECT WAGES-LTS SPECIAL NEEDS	31,628
	SUPERANNUATION, HYDRO	19,345
	PROVISION FOR LEAVE	1,033
	PROVISION FOR LONG SERVICE LEAVE	3,718
	<b>TOTAL SALARY EXPENSES</b>	<b>362,725</b>
	MANAGEMENT SERVICES FROM RLC	<b>\$105,000</b>
	<b>TOTAL EXPENSES</b>	<b>\$568,183</b>
	<b>HYDRO POOL PROFIT/(LOSS)</b>	<b>(\$22,161)</b>



The review of RLC Hydrotherapy Pool 2017/18 financials indicates though the centre has a lot of double up costs with reception and management services it currently operates at close to a break-even operating result.

The main income sources Medicare subsidy programs (\$159,127), Rehabilitation insurance programs (\$96,993), Rehabilitation programs (\$89,827) and centre memberships (\$67,384) which account for \$413,331 or 75% of total income. As can be deducted from these income trends that specialist hydrotherapy water if well managed and programmed can attract a much higher income per visit than traditional aquatic areas.

The main expenditure costs were staffing (\$362,725), management services (\$105,000) and services (\$57,088) which account for \$524,813 or 92% of operating expenditure.

The net operating cost after income was deducted was \$22,161.

It should be noted that if the facility was built as an integrated aquatic leisure facility linked to the main reception and service areas such as cafe and retail spaces then there would be a saving of approximately \$100,000 in reception, administration and management wages. There also would be greater opportunity for cross selling and promotion to all centre users and this would increase visitations and income generation.

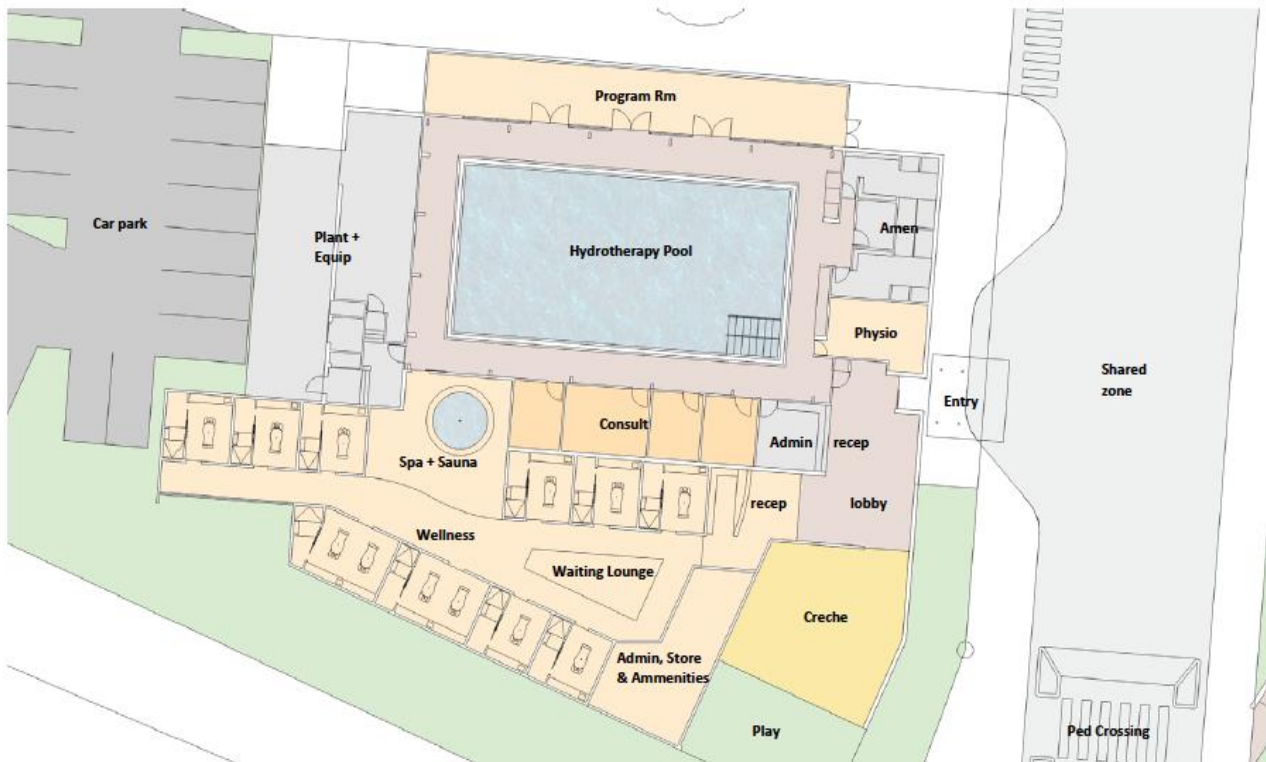
These duplicated operating cost examples plus new visits and increased income would see such a facility operate at a \$100,000 plus operating surplus. This is a consistent result with the latest facilities built at major aquatic leisure centres in Melbourne (as detailed in section 2.3.2 table 2).

### 3.3.1 RLC Hydrotherapy Pool Redevelopment

OPG were commissioned in 2016 to develop a future master plan for Ripples Leisure Centre that includes developing new activity areas with high user attraction and income potential for the standalone Hydrotherapy Pool. The **Hydrotherapy facility** has a current total under roof area of 672m<sup>2</sup>.

The combined facilities site plan (listed below) and hydrotherapy pool concept plan (listed on next page) were developed to meet these requirements.





The redevelopment included:

- New facilities would see a new internal floor space of 1,255m<sup>2</sup>, which is an increase of 583m<sup>2</sup>.
- The main changes for the **Hydrotherapy facility building** included:
  - Relocate childcare area to building 90m<sup>2</sup>
  - New outdoor childcare play zone (60m<sup>2</sup>).
  - New wellness and spa area 430m<sup>2</sup>
  - Extension to the reception and lobby area of 30m<sup>2</sup>
  - Remodelled amenities and change (no area allowance change).

The estimated cost for the Hydrotherapy pool improvements was estimated in 2016 at \$2.560M

Council has not proceeded with the redevelopment of the centre due to funding limitations to date.

### 3.4 Potential Future Warm Water Program Pool Facilities for Residents

The project brief requires OPG to advise on the likely best future Hydrotherapy Pool facilities and estimated associated capital and operating costs of such a facility. We note that it is not possible to compete accurate operational costings without a feasibility study as it is also not possible to develop accurate capital costs without scaled plans and construction details.

The study's findings to date clearly indicate the health sector hydrotherapy model is a restrictive facility use model and the community warm water program pool model is what is attracting higher usage and is likely to be more operational viable.

This impacts on capital cost as water areas need to be larger and support facilities also sized to meet higher user numbers. From an operational efficiency and successful business point of view it is also essential that these pools are not built as standalone facilities but as part of an integrated mix of water, leisure, health, fitness and wellness facilities.

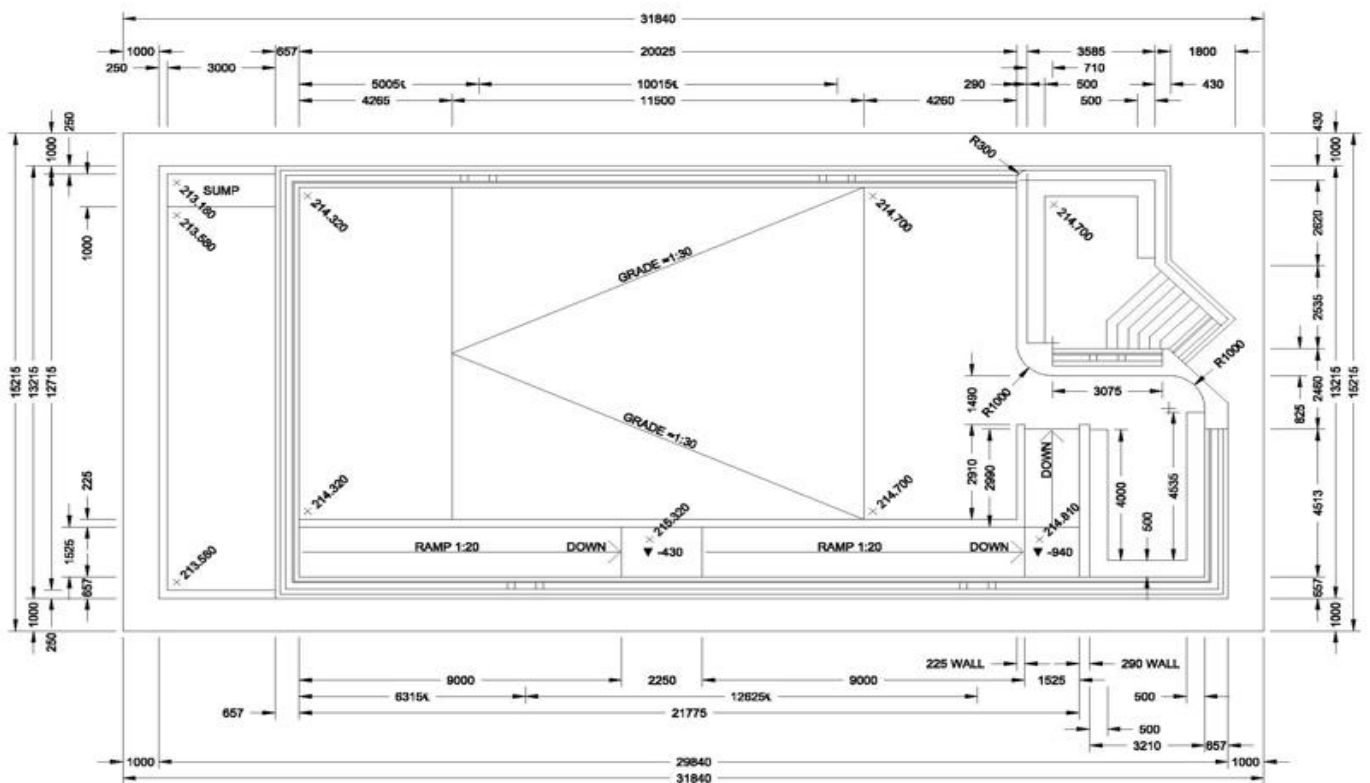


To provide a likely project guide to what should/could be built, how should it operate and what is the likely capital and operational costs we have utilized relevant project work completed on similar successful projects. The findings are summarized in the following sections of the report.

### 3.4.1 Potential Warm Water Program Pool Facilities for Bayside

To provide a concept of a well utilized the warm water program pool we have used the layout plan of a warm water program pool that is part of an integrated range of water areas at a major aquatic leisure centre.

The plans and photos are from one of the most recent successful warm water program pools developed in 2017 at the high use Splash Aqua Park and Leisure Centre at Craigieburn in the City of Hume. The photo below provides some visual images of the warm water accessible spa pool and access via ramp and the plan shows the main water area dimensions.





The photo below provides a visual layout of the warm water program pool plus ramp access ramp and adjoining concourse dry and steam saunas and change and amenity areas. The picture below provides a view of the concourse access spa.



The warm water program pool at Splash is located adjacent to the main pool hall but is enclosed in its own pool hall and separated by a glass wall with automatic opening door to the pool hall. It has its own air handling, heating and ventilation plant to minimise energy loss and cost.

It is ideal for aquatic programs, classes and treatments, including exercise and rehabilitation.

The warm water program pool is heated to 33C/-34C and is warm enough to help to relieve muscle aches and pain, assist in rehabilitation, increase blood flow to the joints and improve flexibility.



Warm water sessions are also ideal for people suffering from an injury or those with a disability. Management also hold more than 20 Warm Water Aqua classes in this pool a week and more than 10 gentle exercise classes.

#### Warm Water Program Pool information

- Available for gentle exercise and relaxation and users need to be 15 years or over to use this pool
- Average temperature of 33 to 34 degrees Celsius
- Minimum depth - 1.1 metres
- Maximum depth - 1.4 metres
- Ramp access to accessible spa and pool area 1:15 gradient

#### Hours of operation per week (100 hours+/week)

- Monday-Friday: 5.30am-10pm
- Saturday-Sunday: 8am-5pm

#### Fees and Charges

There are packaged charges for the area as well as casual use charges.

### Swim + Spas + Sauna + Steam room

You need to be 15 years or over to use our spas, sauna and steam room.

Adult Swim + Spas + Sauna + Steam room	\$13.40
Student Swim + Spas + Sauna + Steam room	\$10.70
Concession Swim + Spas + Sauna + Steam room	\$9.50

### Swim

Adult Swim	\$7.70
Child Swim	\$5.00
Student Swim	\$5.00
Concession Swim	\$3.80

Council does not keep separate financials and usage data for this facility, but management have indicated it is the second highest profitable aquatic area with the Learn to Swim area with more than 2,500 enrolments the most profitable. This confirms the key findings from the review of the Ripples Leisure Centre Hydrotherapy Pool that if collocated with other pools would also be a high use and profitable water area.

#### 3.4.2 Indicative Capital Cost Estimates

The total building and pool area of the Splash Warm Water Program pool including concourses and amenities and pant room is 1,120m<sup>2</sup>. Average facility construction rates were around \$5,000/m<sup>2</sup> in 2017 so this area was estimated to cost \$5.6M to \$5.7M.

Based on construction costs increasing to say \$5,500/m<sup>2</sup> the current cost to develop a similar area would be in the order of \$6.160M to \$6.2M



Please note a standalone facility will be a much more capital intensive project as there will be a need to build extra internal areas including entry, reception, administration offices and refreshment areas. There will also be the extra costs of providing car parking, access roads, site services.

Developing a new warm water program pool at an existing aquatic leisure centre such as at the Sandringham Leisure Centre for example would see a saving on all these extra capital costs as well as share operational costs.

### 3.5 Summary of Key Findings

Based on the high level review completed and the high level key findings this leads OPG to advising:

- Development of warm water aquatic facilities are now being well utilised by a large range of user's across Australia.
- As our communities age the need and demand for such facilities will continue to increase.
- The largest user market for these facilities are older adults and the City of Bayside currently has a significant higher proportion of persons older than 50 years (40%) compared to the Greater Melbourne area average (30%).
- As the city's population ages this large group of potential users of warm water facilities will increase.
- Traditionally the provision of Hydrotherapy Pools has been the responsibility of the health and medical sector, but this has changed greatly in the past 10 years where many LGA's are actively developing such facilities as part of integrated high use aquatic leisure and wellness centres.
- To appeal to all ages and interests there has been a move away from developing small Hydrotherapy Pools to building larger warm water program pools
- Due to the high capital and operational costs of such facilities it is critical that the water areas and support areas are large enough to cater for high use programs, classes and treatment sessions whilst also meeting the needs of individual users wanting to exercise in warm water.
- Developing facilities at a site that has a range of water areas and other attractions (clustering and connecting activity areas under the one roof) is the number one success factor for aquatic leisure facilities. Adding high yield and commercial wellness and allied medical facilities also assist in creating a successful operational result
- Case studies of such facilities indicate they can meet their operational costs but cannot contribute to capital cost or major renewal/replacement costs.
- Building standalone warm water program pools will be a high risk project as it duplicates significant high cost capital areas and also duplicates high cost operational areas such as labour and services.

As indicated this project has been completed in a short timeframe and at a high level review status. It is clear from the demographic profiling that such facilities are of high need and demand and we would recommend that Council commissions a detailed feasibility and business plan study to ensure the above findings are backed up by detailed research and analysis.



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## 4. Warranties and Disclaimers

The information contained in this report is provided in good faith. While Otium Planning Group has applied their own experience to the task, they have relied upon information supplied to them by other persons and organisations.

We have not conducted an audit of the information provided by others but have accepted it in good faith. Some of the information may have been provided 'commercial in confidence' and as such these venues or sources of information are not specifically identified. Readers should be aware that the preparation of this report may have necessitated projections of the future that are inherently uncertain and that our opinion is based on the underlying representations, assumptions and projections detailed in this report.

There will be differences between projected and actual results, because events and circumstances frequently do not occur as expected and those differences may be material. We do not express an opinion as to whether actual results will approximate projected results, nor can we confirm, underwrite or guarantee the achievability of the projections as it is not possible to substantiate assumptions which are based on future events.

Accordingly, neither Otium Planning Group, nor any member or employee of Otium Planning Group, undertakes responsibility arising in any way whatsoever to any persons other than client in respect of this report, for any errors or omissions herein, arising through negligence or otherwise however caused.



## Appendix 1 - Ripples Leisure Centre Fees and Charges

**\*\$49 Joining fee**  
applies to all direct debit memberships

**Flexi  
(non contract)  
Gym Membership**

**\$18.00**

per week, based on fortnightly direct debit payments  
\*conditions apply

**12 month Full Facility Gym Membership**

**\$20.00**

per week, based on fortnightly direct debit payments  
\*conditions apply

**12 month Full Facility Family Gym Membership**

**\$43.50**

per week, based on fortnightly direct debit payments  
\*conditions apply

Operating Hours		St Marys	Penrith	Hydrotherapy
		<b>Mon - Fri</b> 5.30am - 9.00pm 5.30am - 7.00pm 5.30am - 9.00am 9.00am - 12.00pm 12.00pm - 3.00pm 3.00pm - 7.00pm (Note: *6pm Friday)	<b>Saturday</b> 6.30am - 6.00pm 8.00am - 6.00pm 7.00am - 1.00pm 7.30am - 1.00pm	<b>Sunday</b> 7.30am - 6.00pm 8.00am - 6.00pm 7.00am - 1.00pm 7.30am - 1.00pm

\*Conditions apply  
 \$49 Joining Fee: applies to all direct debit memberships, excluding corporate, student, pensioner & senior memberships.  
 Family Membership: up to 2 adults and 3 children. All family members must live at the same residence. Student ID must be provided for children over 16 years old.  
 Direct Debit Payment: all direct debit memberships include a \$2 transaction fee. A fee applies to any card declined.  
 Full Facility Membership includes: gym, group fitness classes, aqua classes, heated pools, spa, sauna, crèche and access to Penrith Ripples (not valid for visit passes & rehab).  
 Gym Membership includes: gym and group fitness classes only. This membership does not include: crèche, aqua, pool/spa/sauna, access to Penrith Ripples, fitness assessment and program updates or the Hydrotherapy pool.  
 Prices valid from 1st September 2018: prices subject to change without notice.

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### General Entry & Membership Prices

Prices valid from 1st September 2018. Prices subject to change without notice.

**6 month Upfront Off Peak Full Facility Gym Membership**  
Includes: Gym, Group Fitness Classes, Aqua Classes, Heated Pools, Spa, Sauna, Crèche, 1 x Initial Fitness Assessment & 1 x Initial Program

**\$14.81**

per week, based on one upfront payment  
\*conditions apply

**12 month Gym Membership**  
Includes: Gym & Group Fitness Classes

**\$16.00**

per week, based on fortnightly direct debit payments  
\*conditions apply

**12 month Off Peak Full Facility Gym Membership**

**\$17.50**

per week, based on fortnightly direct debit payments  
\*conditions apply

\*\$49 Joining fee applies to all direct debit memberships

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CASUAL POOL ENTRY (children under 5 FREE if accompanied by a full paying Adult)				
	St Marys	Penrith	Hydrotherapy	
Adult Swim	\$6.50	\$6	\$11	
Adult Swim/Sauna/Spa	\$10.00			
Child/Student/Pensioner Swim	\$5	\$4.50	\$8.50	
Pensioner Swim/Sauna/Spa	\$8			
Family Swim (max 2 adults, 3 children)	\$23	\$21.50		
Spectator Fee	\$3	\$3		
1st Carer (carer card must be shown)			Free	
Extra Carer (carer card must be shown)			\$3	
NSW Police Swim Test Assessment	\$10	\$10		

CASUAL GYM/FITNESS PASSES/FITNESS ENTRY/PRIVATE REHABILITATION				
	St Marys	Penrith	Hydrotherapy	
			Adult	Pensioner
Gym/Aerobics/Aquarobics Casual including Swim/Sauna/Spa	\$18.50			
Gym/Aerobics/Aquarobics Casual Off Peak (9am - 4pm) including Swim/Sauna/Spa	\$13.50			
Aerobics/Aqua/Gym x 10 Visit Pass	\$166.50			
Young At Heart Classes (over 40's)	\$9			
Young At Heart Classes x 10 Visit Pass	\$81			
Penrith Aquarobics Casual - Penrith		\$13.50		
Penrith Aquarobics x 10 Visit Pass		\$121.50		
Kids Class Casual	\$7			
Kids Class x 10 Visit Pass	\$63			
Dietitian Initial - Adult	\$75			
Dietitian Initial - Pensioner	\$55			
Dietitian Follow-up - Adult	\$57			
Dietitian Follow-up - Pensioner	\$40			
Exercise Physiology Class Casual			\$10.50	
Exercise Physiology Class x 10 Visit Pass			\$94.50	
Exercise Physiologist Private Initial Consultation			\$90	\$70
Exercise Physiologist Private Follow-up Consultation			\$65	\$50

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Pool Only Passes/Memberships (All Passes have a 12 month expiry from the date of purchase)							
	St Marys		Penrith		Hydrotherapy		
	Adult	Child/Pensioner	Adult	Child/Pensioner	Family	Adult	Child/Pensioner
10 Visit Pass	\$58.50	\$45	\$54	\$40.50		\$99	\$76.50
10 Visit Pass - Swim/Spa/Sauna	\$90	\$72					
1 month Membership			\$70	\$55		\$120	\$85
3 month Membership					Penrith Season Passes September - April	\$290	\$200
6 month Membership	\$360	\$310					
6 month Membership Swim/Spa/Sauna	\$400	\$350 pensioner only	\$280	\$230	\$350		
12 month Membership						\$730	\$470

Gym Membership - St Marys		
Please note: all direct debit memberships include a \$2 transaction fee. \$49 Joining Fee applies to direct debit only.		
	Direct Debit (fortnightly payments)	Upfront
12 month	\$32	\$800
12 month Corporate (no joining fee)	\$22	
Flexi (no contract)	\$36	
Student/Concession Flexi (no contract, no joining fee)	\$22	

Full Facility Memberships - St Marys (for relatives to fortnightly payments)			
Please note: all direct debit memberships include a \$2 transaction fee. \$49 Joining Fee applies to direct debit only. *1 x Initial Fitness Assessment & Program included. **Platinum membership includes: Full facility access, Hydrotherapy pool & Pilates classes.			
	Full Facility Individual		Full Facility Family
	Upfront	Direct Debit (ftn)	Direct Debit (ftn)
1 month*	\$149		
6 month*	\$599		
6 month off peak* (9am - 4pm)	\$365		
12 month*	\$940	\$40	\$87
12 month off peak* (9am - 4pm)		\$35	
12 month Corporate* (no joining fee)		\$27	
Flexi* (no contract)		\$52	
Student/Concession Flexi* (no contract, no joining fee)		\$27	
12 month Platinum**		\$62	

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