











**SUMMARY DRAFT REPORT** 



April 2011 Prepared by CPG

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# ACKNOWLEDGEMENTS AND RECOGNITION

This project has been initiated by the Kinglake Community Building Initiative, with the support of the Helen McPherson Smith Trust and the Murrindindi Shire Council.

This project has been guided by the support and direction of the Kinglake Aquatic Centre Project

Steering Group. The contribution and voluntary efforts of this group are gratefully acknowledged. In addition, the contributions of residents and community organisations that have assisted with the project through interviews and discussions are also gratefully acknowledged.

## **EXECUTIVE SUMMARY**

Kinglake Region Aquatic Feasibility Study DRAFT

The Kinglake Region Aquatic Feasibility Study examines the need for and potential costs to provide an indoor aquatic facility for the Kinglake Region.

This project has long been recognised as a goal for the Kinglake community with a previous feasibility study taking place some 15 years ago in 1996.

The project has focussed on providing an analysis of the existing market place, market opportunities, community needs and ideas for any proposed centre, concept design options, probable costs to build and potential operational outcomes.

The study considers each of these aspects of feasibility and in turn, has considered;

- the mix of infrastructure required to provide for optimal utilisation
- how the proposal can augment local and regional supply of like facilities
- the influence of community aspirations and need
- the capacity for Council and other partners to resource both the capital and operational aspects of the proposal
- the resultant economic, social and environmental benefits of the proposal
- the impact of the proposal to rebuilding a community through provision of assets, services and economic stimulus.

A community survey (452 responses) has provided evidence of demand for an indoor heated pool within the Kinglake region. Key outcomes of consultation included;

- Top three reasons for selecting a pool to visit was that heated water was available, it was close to home and had a good learn to swim program.
- 2. Respondents were less interested in weights or aerobics facilities and were focussed on a heated pool for laps, children' leisure and learn to swim
- 3. Respondents indicated that they would generally attend an indoor pool weekly or a couple of times a week however respondents outside the Kinglake region indicated they would most likely never attend the facility.

A market analysis identified 16 existing aquatic/ leisure facilities within the region. These provided a range of services ranging from dedicated learnt o swim businesses (Yarra Swim School) through to regional leisure facilities such as the Eltham Leisure Centre or the proposed Greensborough Recreation and Leisure Centre (2012 opening).

Based on this and other outcomes of consultation and research, two design options were developed. These were sited at Kinglake Central, with potential for either connection to the existing stadium or as a stand alone facility overlooking bushland and the Kinglake Oval.

The design concepts are briefly summarised;

#### **Design Concept 1**

Provides opportunity for wellbeing activities with consulting rooms and spa suites as well as large public function or activity area.

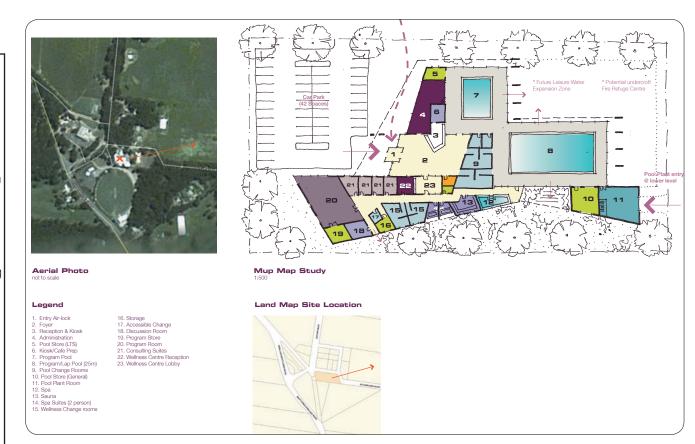
Provides Learn To Swim and 25m lap pool along with space to expand for water play space in the future.

Total cost is estimated at \$11.8 million

This design represents a larger investment, providing a diversity of opportunities for economic activity that supports the operation of the indoor pool and generate economic stimulus for Kinglake

There is an expected \$400,000 per annum subsidy required based on this operational model.

This model meets all key requirements provided by survey respondents.





#### **Design Concept 2**

Staging is achievable with the separation of the 25m pool as part of a Stage 2. Stage 1 is highlighted in green.

Site is partially constrained by fall of ground- the proposed tiered seating next to the 25m pool provides an opportunity to use the slope.

Provides limited opportunity for extra activities and is focussed on providing a pool that can be programmed for economic return

Total cost of Stage 1 only is \$5.1 million

This design represents a smaller investment, providing a dedicated space for programmable water space and more limitation on other activities.

Subsidies under this design and business model are reduced to \$250,000 given the scaling back of activity.

Economic stimulus is reduced to less opportunity for diverse activity.

Based on these designs it is concluded that the most achievable project for the Shire of Murrindindi to pursue is Stage 1 of Design Concept 2 with further ongoing evaluation triggering a Stage 2 involving the development of the 25 metre lap pool.



Significant capital funding opportunities include the following;

Department of Planning and Community Development- up to \$2.5 million (Better Pools) Shire of Murrindindi - \$500,000 (Capital Works Program)

Australian Government - \$3,000,000 (Regional Infrastructure Fund)

Philanthropic Trusts (e.g. Jack Brockhoff Foundation) up to \$50,000

## INTRODUCTION

This study has been undertaken in order to specifically investigate the feasibility of the development of an indoor aquatic facility for the Kinglake region.

This is not a new area of investigation, with a previous feasibility study having been undertaken in 1996.

Indoor aquatic centres have changed dramatically over the last two decades, shifting from traditional, rectangular lap pools that were typically outdoor facilities to centres incorporating leisure pools, beach entries and water play features that are typically indoor facilities.

New technologies impact on many aspects of aquatic centre development and operation and, as a consequence capital, operational and life cycle costs are also very different.

As technologies and new materials provide opportunity to diversify the aquatic experience, consumer's expectations of what will be delivered have also changed.

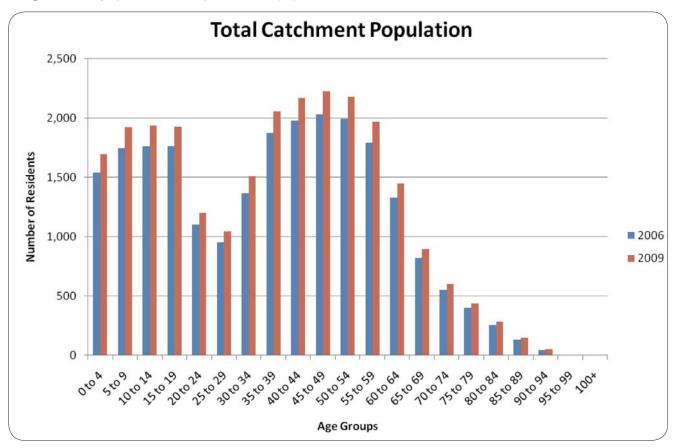
This study provides a detailed feasibility analysis in the context of this modern aquatic environment and considers the following key points;

- Flexibility of infrastructure to provide for optimal utilisation
- Augmentation of local and regional supply of like facilities
- Provision of strategic outcomes related to evidenced community need
- Capacity for Council and other partners to resource both capital and operational aspects of any development
- Triple Bottom Line Assessment considering economic, social and environmental benefit and cost
- Appreciation of technical aspects such as site, topography, service access and new technologies
- Contribution to rebuilding a community through provision of assets, services and economic stimulus.
- Facility design concepts that optimise operational effectiveness
- Management options for any proposed development

## **2 EXISTING CONDITIONS**



**Figure 1 >** Age profile for facility catchment population.



## 2.1 Factors affecting population growth in Kinglake

Population levels and growth are an important factor in building a business case for any development given the need to understand whether a marketplace or customer base, is growing, static or declining. The major factor currently affecting population growth in the short to medium term is the bushfires of 2009. The key changes brought about by the bushfires and likely impacts on population are detailed on the following page.

These factors indicate that the bushfire events of 2009 and subsequent, proposed planning amendments are having a short to medium term, negative impact on population growth. Further impact is difficult to ascertain at this stage.

In relation to this study, a reduced rate of population growth should be assumed in the next 5-10 years. This will impact on any expectations of business growth and new business in the short term based on expansion in the area.

For the purpose of the study, it is assumed that population growth will remain relatively low over the next five years, not increasing past 0 to .5 percent.

#### Factors Affecting Population Growth

#### **Planning Scheme Bushfire Amendment**



The amendment currently being formulated will change the planning regulations for many types of development. The amendment is being drafted in response to the 2009 bushfires and could reduce land available for development with regulations on proximity to vegetation, building materials etc.



Evidence would suggest that this will reduce population growth artificially relative to other areas within the state that will not be affected by this amendment.

#### **Rezoning of land** for development



Rezoning of land for development has been put on hold pending the outcomes of the Bushfire amendment. It is expected that rezoning of land for building development will not occur in land amongst trees.



This potentially creates a lag in opportunities to bring new land on to the market for residential development again slowing population growth or producing a delay in any increases.

#### **Residential building rates**



Since 2009, Murrindindi Shire has had 300 building permits processed for replacement of homes burned in fire affected areas (as of June 2010) whilst some 1300 buildings were lost during the bushfires. This would indicate a slow return and development uptake in the area.



Evidence indicates that there is a slowing of building development, caused by a number of factors that increase the reluctance and pace of return for those rebuilding or affected by bushfire. Rebuilding with fireproofed materials etc. will also increase the cost and in some cases. the capacity to rebuild. This could impact negatively on growth

#### Accessibility/ Remoteness Index\*



On a scale of 0-12, where 12 is most remote from access to services and assets, Kinglake scores 1.1 indicating that there are good road networks and access to goods, services and opportunities for social interaction. \*www.health.gov.au/aria/ariainpt.cfm



With the area providing excellent access to a wide range of goods and services relatively close by, Kinglake has the opportunity to attract new residents who can also access a range of services locally and in Melbourne with relative ease.

#### **Government Intervention**



Federal, State and Local governments are all contributing toward rebuilding infrastructure in Kinglake and surrounding areas. Much fundraising has also been provided by community to assist in the rebuilding this community.



With significant government and community funding, new developments are being funded and significant investment is being made in Kinglake. Investment is also being made in supporting communities, building resilience and confidence in moving forward.



#### 2.2 MARKET DENSITY

Market density refers to the number of potential customers for a product within an established, geographic area. Market density analyses both the potential customer base and competing facilities within a region to ascertain a density of customers within a defined market place.

The development of an aquatic centre at Kinglake provides an opportunity to deliver a product from a fixed location to a population base that has varying degrees of access to other outdoor and indoor aquatic centre facilities.

There are a number of facilities available in surrounding areas that will impact on the catchment of any facility developed in Kinglake. Not surprisingly, studies show that proximity of facilities to customers is a key factor in customer overlap (with other like facilities) and reduction in market catchment.<sup>14</sup>

The market density for an aquatic centre needs to be analysed, taking into account an increase in customer overlap with competing facilities and a reducing catchment as proximity reduces. A total catchment population has been calculated at 20,359 persons however, further variables must be considered when examining market density. These are;

- 1. The percentage of total population likely to participate in the activities being offered in the facility (participation rate) and,
- 2. The proximity of the facility relative to the location of the customer and relative to other similar facilities (proximity density).

Once these variables are calculated, they can be used to provide a market density calculation for Kinglake using the simple formula below;

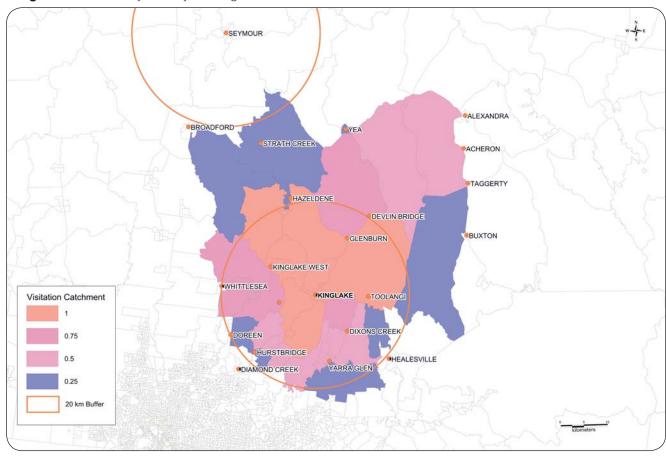
Catchment population x participation rate (as a percentage of population) x proximity density weighting = market density

We can then use this figure to extrapolate an expected level of customer visitation by using a market multiple based on average repeat customer visits.

#### **Proximity Density**

Figure 5 below provides a representation of the proximity density for a proposed aquatic centre in Kinglake. This indicates a differentiation in the likelihood of use for each catchment area based on proximity to Kinglake and proximity to other similar centres. Simply, the further away from Kinglake, and the closer to another similar type of centre, the smaller the expected catchment. The red circle represents a twenty kilometre radius, to provide a reference scale. This weighting of various collector districts provides a market catchment of 10,962 people.<sup>15</sup>

Figure > 2 Proximity Density for Kinglake





#### 2.3 CURRENT MARKET ANALYSIS

Three potential approcahes to development are summarised below.

Private/Public Joint venture



Mainly provide programmable water space in conventional square pool, i.e.

Learn To Swim

Aquarobics

Hydrotherapy

Sporting Club Recovery Sessions

Minimal lap swimming

Small pool spaces- 15-25 metre pools divided into class spaces.

Often connected to gymnasiums (weights/aerobics) areas

Examples include commercial leisure centres, Paul Sadler Swimland Centres, private learn to swim operators.

Public Aquatic Facility (Council owned)



Subsidised operations- Council contributing between \$50-500,000

Accessible- lower entry fees

Contains multiple water spaces

Leisure water features- water play spaces

Age group specific – toddler, intermediate (also hydro) and main pool

Generally linked to other dry activities such as gymnasium etc which cross subsidise pool operation.

Main income source is learn to swim classes and dry facilities.

Examples include Eltham Leisure Centre, Yarra Centre.

Health/Day Spa



Mix of public/private operations

High quality finish- higher initial capital cost (Hepburn Bathhouse \$12 million)

Discounted fee to local users

Visitor/tourists subsidise local population

High visitation from tourists

Linked to operations such as massage, meditation, aromatherapy, spa/sauna etc.

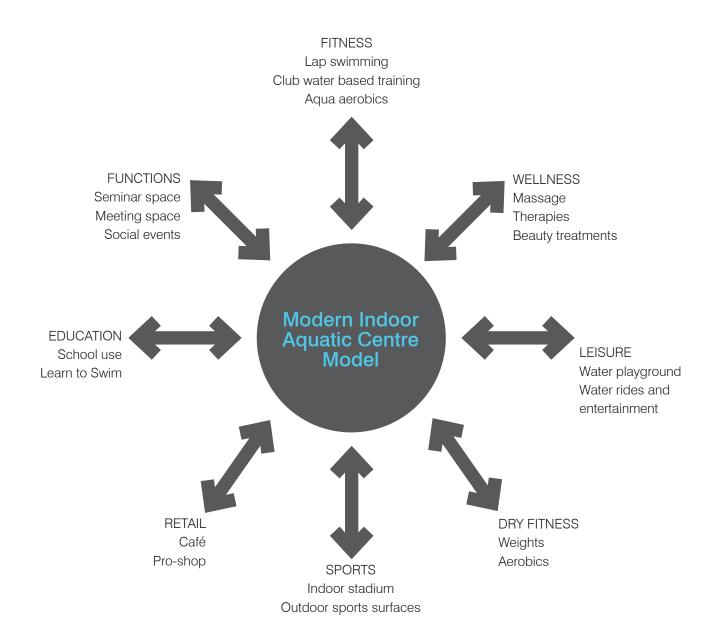
Includes plunge pools, spas, leisure areas and other features

Examples include Hepburn Spa Resort (Hepburn Springs), Onsen Spa Resort (Dinner Plain)

Generally, facilities tend to have a mix of services that are aimed at providing optimal performance in a specifically defined market place.

Following on from these models, it is possible to further describe the various components that should be considered as part of developing a successful service mix for an indoor aquatic facility. These aspects of facility operation represent both traditional, proven aspects of leisure centres as well as emerging trends.

A number of facilities local to the Murrindindi Shire have been assessed against a range of the "service mix" factors detailed above in order to more fully understand the local market place. This assessment is detailed on the following pages





#### Service mix across local market

Pool	Public	Health	Learn To	Gymnasium/	Water Play/	Hydro	School
	Access	Spa	Swim	Aerobics	Leisure	therapy	Access
Healesville Outdoor Pool	Summer Only						V
Healesville Indoor Heated Pool	V		V				V
Whittlesea Swim Centre	Summer Only		V			V	V
Eltham Leisure Centre	V		<b>V</b>	<b>V</b>	<b>✓</b>	~	<b>✓</b>
Diamond Creek Outdoor Pool	Summer Only						V
Kilsyth Centenary Pool	V		V		<b>✓</b>		V
Alexandra Outdoor Pool	Summer Only		V				V
Yarra Swim School	Members Only		V				
Yarra Centre	V		V	V	V	V	V
Eildon Swimming Pool	Summer Only						<b>✓</b>
Seymour Sports and Aquatic Centre	V		V	V		V	V
Marysville Swimming Pool	Summer Only						V
Yea Swimming Pool	Summer Only						V
Kinglake Health and Wellbeing Centre		V					
Pheasant Creek Fitness Centre	V			V			
Greensborough RALC (2012)	V	V	V	V	V	V	V
NECESSARY SERVICES							
FOR PROPOSED FACILITY							
						•	
POINTS OF DIFFERENCE							
IN THE MARKET FOR							
PROPOSED FACILITY							

The Service mix within the local market provides us with some clear indicators regarding what the facility must do (or those things that are common across all or most of the market place) and some areas where market differentiation may be possible (those areas where gaps in emerging trends may provide opportunity).

The areas that should be catered for within any new facility include;

- Good public access which can equate to a wide range of opening times, competitive pricing, compliance with accessibility codes and adequate facilities to cater for demand.
- Learn to swim classes are a consistent product offered at these types of facilities and can attract high levels of repeat visitation.
- Access for schools needs to be provided, requiring adequately sized circulation spaces, change facilities and water bodies to accommodate group bookings of at least 50 students at any given time.
- Water based fitness in the form of lap swimming and agua aerobics should be provided for as a standard facility provision.

The areas of **market differentiation** that should be considered include:

- **Health Spa** concept providing an area within the facility for a wellness centre that may include consult rooms for massage, aromatherapy, physiotherapy or similar discipline. A high quality finish away from the main recreation aquatic area is important.
- Water play spaces are increasingly popular and represent a powerful marketing tool for families with children. These areas usually consist of a series of sprinkler or fountain features in shallow water or on a rubberised surface.
- Hydrotherapy pool can provide an important asset for addressing market needs of those with chronic or acute injury or an aging population where low impact exercise, in a warm water environment can be beneficial.
- Gymnasium/Aerobics facilities are a crucial area of activity to provide a source of income to offset potential losses in the pool facility. In Kinglake however, a substantial fitness centre is operating in Pheasant Creek. Given this, dry exercise classes offered would need to be complementary to those being offered at Pheasant Creek and not compete directly.

## 3 BENCHMARKING AGAINST INDUSTRY STANDARDS



A number of benchmarked, industry standards are available through the University of South Australia's Centre for Environmental and Recreation Management (CERM) Performance Indicator Report. This report gathers operational performance data from 137 leisure centres across the nation and represents the most widespread collection of data on leisure centre performance indicators in Australia.

Given the variety of leisure centres and the breadth of programs delivered from them, CERM categorises results into groups. The results below are obtained from Group 7, which describes indoor aquatic centres with and without dry facilities. Sub groups exist with regard to square metres of space however, an overall median for all centres has been provided, given this is the most robust figure and removes those centres outside the 75th percentile (i.e. those centres that may unreasonably skew results because of extreme sets of data)

The table below provides some of the key findings averaged from the median results of the 2006 - 2008 analysis and compares those results to some of the known existing conditions for the Kinglake area.

Performance Indicators	CERM <sup>19</sup> Results	Kinglake comments
Visits per square metre	80	Kinglake would need to try and reach this target.
Expense recovery	93 percent	This will be difficult to achieve without profitable dry facility programs to subsidise pool losses. Should be considered in terms of ratio to expenditure
Gross income	\$2,023,460	Should be considered in terms of ratio to expenditure
Gross expenditure	\$2,134,239	Should be considered in terms of ratio to income.
Fees per visit	\$4.77	This should be maintained or increased given the low visitation expected for Kinglake
Total visits	349,158	Based on catchment multiple and population, visitation would be around 80-90,000 in Kinglake
Catchment population within 5 km radius	56,847	Kinglake population within 5 km is approximately 3,500. Using proximity density for other areas, this increases to a catchment population of 14,604
Catchment multiple	6.0	This can be used to calculate the visitation as above.
Labour cost	\$1,378,359 (62%)	Labour costs should be expected to reflect 62% of overall costs.
Energy	\$141,370 (6.9%)	Energy costs may be reduced with strong ESD principles.
Water	\$20,198 (1.0%)	Water costs may be reduced with recycling.

Research undertaken by CPG also indicates that the largest markets for indoor aquatic centres are focussed on recreation and leisure (65-75 percent market share) with a much smaller percentage of customers motivated by personal fitness or specific training needs (15-20 percent market share).

Industry trends (and case studies undertaken as part of this study process) indicate that the majority of stand alone indoor aquatic facilities fail to raise revenue that meets annual operating costs. This is due in part to the high fixed costs in providing a cleansed, heated and supervised body of water before any income is delivered.

Losses for indoor aquatic centres are most commonly between \$100,000-250,000 per annum.

Rurally located centres or centres with lower catchment usually record more substantial losses, commonly reaching more than \$300,000 per annum.

Industry benchmarks for optimal performance therefore include the following key components;

- Large catchment areas (more than 50,000 within a 5 kilometre radius)
- Low operating costs- sustainable and low energy/ emissivity design
- Visitation of 80 or more per square metre of built form
- Varied and changing program range
- High returns from dry fitness programs
- Secondary spends between \$0.60-1.00 per user visit

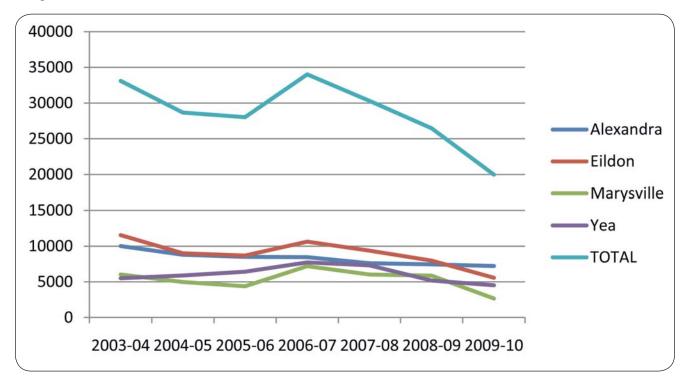
#### 3.1 **CONSIDERATION OF OUTDOOR POOL ATTENDANCES**

The 1996 Heated Pool Feasibility Report indicates that existing outdoor facilities draw catchment multiples of 4.4 compared to an industry average of 1.3 (CERM PI from 1996).20

Current figures provide a slightly different conclusion, as can be seen in the graph on the following page. Attendances have fluctuated over the past seven years with the Black Saturday events in February 2009 potentially influencing the sharp drop in attendances over the previous two swimming seasons.



Figure > 3 Outdoor Pool Attendance



There appears to have been a consistent decline in attendances since Summer 2006-2007 with the average attendance across all Murrindindi Shire outdoor pools for the past five summers (2005-2010) being 27,681 visits. Broadly assuming that the outdoor pools provide a catchment that covers the muncipality (population 13,672) then a catchment multiple of 2.0 is achieved. This compares favourably with the 2008 CERM outdoor pool catchment multiple of 1.4.<sup>21</sup>

This represents a 43 percent increase in catchment multiple compared to the CERM benchmark. If we translate this to an indoor pool catchment multiple we achieve the following figure:

43 percent (increase against benchmark) x 6.0 (CERM benchmark) = 8.57 catchment multiple. This reflects the figures used in the earlier range of 6 to 8.9 as a catchment multiple range for Kinglake.

#### 3.2 **AQUATIC INDUSTRY TRENDS**

The design and operation of aquatic facilities have undergone significant change over the last two decades as focus shifted from producing traditional lap swimming, competition pools to providing more social and leisure based facilities aimed at a much broader market.

These are included in the following table and are considered as part of design and operation analysis in this study.

Industry Trend	Description
Increased accessibility for all	Beach entry or zero depth entry to pools
	Ramped entry
	Family friendly change rooms
	Accessible change rooms
	Shallow water play areas
	Shallow leisure pools with warmer water
	Variety of programming to cater for broad market
Aquatic Centres as part of a community or social hub destination	Link to other community recreation facilities with a mix of indoor and outdoor activities
	Linkage to retail areas, libraries or schools
Large areas of leisure water	Provision of large areas of shallow warm water with water play features to
	attract families and provide space for non structured recreation
Entertainment features such as rides and slides	Water play features, fountains, sprinklers, fixed water cannons, animals, water playground features
	Water slides, water rides, wave pools
	Opportunity for movie nights, music and other events
Health and Wellbeing	Provision of supplementary therapeutic or health profession facilities – provision
	of consulting suites and quieter areas for massage and beauty treatments
Evidence of sustainable design	Use of recycled materials, water harvesting, alternative electrical supply, use of natural light
Indoor and outdoor opportunities	Use of roll up or motorised walls/doors for interaction between indoors and outdoor spaces

# 4 COMMENTS FROM MURRINDINDI SHIRE RESIDENTS



With over 500 written comments provided as part of the survey process, it is important to include a thorough and representative cross section of responses in the body of this study. These do not provide any statistical data that can necessarily be measured but do provide an insight into the expectations of community benefit from any facility development. This community commentary is therefore very important in genuinely analysing the social benefits and triple bottom line of any development.

If there was a pool closer to home I would use it on a daily basis as I have arthritis and have had both hips replaced, so desperately need swimming to help me keep mobile.

While the Shire is short of money, this is a luxury item that should be put on hold.

It would be wonderful. As a mildly handicapped person it would be a great help.

The health and safety aspects of learn to swim classes would be a huge benefit to the Kinglake Ranges Community. This would be a valuable community asset that would assist in keeping \$\$ in the area as it would reduce travel out of our area.

We desperately need a pool in Kinglake. It is a minimum of 25 mins to any other pool and too far to take my children for swimming lessons. I would use a lot, if it were in the Kinglake area and I believe it would improve the social wellbeing aspects of members of the community.

An indoor pool would be utilised by many groups/individuals in the community and would help fitness and emotional wellbeing for many groups. Meeting place for residents and swim club. Social activities for all ages.

Pools are not as important as other issues that need attention, but maybe if it were big enough it could be used as a safe place in the next bush fire to come through the region.

Not needed. Where are the statistics to support it?

Hopefully a pool could offer physiotherapy and hydrotherapy classes for people with medical conditions, problems etc to help improve health and welling being of the community.

I know we are going to have to travel to Ringwood for lessons and it will take over an hour to get there. We are very excited about the chance to utilise a positive and healthy development for the community. Working in the fitness industry, something as great as this should be a definite for the community's mind, body and soul.

As a family we would love a facility like this on our doorstep for swimming lessons, water aerobics and just family fun and somewhere to take the kids for good healthy fun on holidays etc. I also see a facility like this being of major benefit to the local schools.

This is a wonderful idea! I would definitely use it often as I feel so isolated living up here, it would be a great escape! Catch up with friends, get the kids out of the house!

I believe it's extremely important as its very concerning the amount of children up here that cannot swim. I have spent many dollars and hours taking my kids off the mountain for lessons but they need more. Also its a very important social aspect for the town

I'd really like a pool to help me stay fit, to have fun, visit with friends etc. You build it, I'll use it.

## **5 KEY FINDINGS**

This section summarises the research and consultation findings that have been identified. Collectively they outline the direction and assumptions outlined in the subsequent architects brief and operational forecasts.

#### 5.1 KEY RESEARCH FINDINGS

The market for an indoor aquatic centre at Kinglake is estimated at 12,000 people. The national benchmark for a centre that performs well is approximately 56,000 people.

There is some evidence from outdoor pool patronage statistics, that Kinglake has a higher propensity to visit possible with a higher catchment multiple (the average number of visits per head of population in the market catchment) than the benchmark standard of 6 per annum. A catchment multiple of around 8 may therefore represent a reasonable figure for Kinglake.

Based on a detailed site assessment, the preferred location for an indoor aquatic centre is Kinglake Central, complimenting other community and recreation activities in an identified precinct.

To maximise drawing power and use, the centre should have a mix of programs both deliverable within the aquatic setting and outside this setting. Modern facilities would include at least some of the following;

- Learn to Swim classes
- Regular school classes
- Fitness programs (aerobics, gymnasium)
- Wellness components (massage, spa therapy, physiotherapy)
- Kiosk and retail for secondary spend
- Family activities (water rides and water play features)
- Community meeting or function facilities
- Hydrotherapy

The recent development of the Pheasant Creek Fitness Centre, approximately 2 kilometres from the preferred site, rules out any major fitness centre development as part of the aquatic facility. There is opportunity to work in partnership with the centre.

Contemporary leisure facilities have excellent potential for accessibility and sustainable design outcomes. These features can be costly but upfront investment is necessary and desired by community both from an environmentally ethical perspective as well as providing economic reward through decreased overheads.



Case studies indicate that most local government operated indoor aquatic centres lose money and require subsidy. Rurally located facilities generally require a higher subsidy, with research indicating a range of \$300,000-\$400,000 per year.

The main competitors in the marketplace include Healesville Indoor Pool, Eltham Leisure Centre and the Greensborough Regional Aquatic and Leisure Centre (completed 2012) to the south and Seymour Aquatic and Leisure Centre to the north. Numerous outdoor pools throughout the catchment area would impact on visitation during the summer season (Dec-Mar).

Population data, building permit rates and the devastating impact of the Black Saturday bushfires would appear to provide evidence of a slow rate of population growth over the next decade. This would impact on the capacity to grow the business over time.

#### 5.2 KEY CONSULTATION FINDINGS

- 1. Local schools have indicated they would regularly use an indoor aquatic centre, with some schools indicating they would increase their swimming program significantly
- 2. Local schools would also run family and end of year events at this facility.
- The Pheasant Creek Fitness Centre is supportive of an aquatic centre development and is willing to explore further the opportunity to work in partnership with the facility.
- 4. The Kinglake Football Netball Club would use this facility for recovery sessions on an adhoc, seasonal basis.
- 5. Broadly, 92 percent of survey respondents were supportive of the development.
- The majority of survey respondents (70%) used Whittlesea pool, Eltham Leisure Centre and Healesville Indoor Pool for most current swimming activities.
- 7. Respondents generally attended pools once or twice a week or once or twice a year. That is, attendance was either regular or hardly at all.

- 8. People generally attended for lap swimming or with family and friends for lessons or fun. Indoor venues were generally attractive if they had good facilities and programs for children coupled with a good lap pool.
- Key barriers to use were travel and price, although travel was the overwhelming factor with people not likely to travel more than 15-20 minutes.
- 10. Popular facilities or services that respondents indicated would be used most regularly were; a heated lap pool, learn to swim classes, water play areas for children, water aerobics and café.
- 11. Facilities that people were least likely to use included a crèche, gymnasium/weights area (possibly dues to Pheasant Creek Fitness Centre) and meeting facilities.
- 12. Facilities that people thought they would use every now and again included massage, spa treatments and physiotherapy.
- 13. Price elasticity was moderate in casual entry prices but low in season ticket prices. Generally, residents expected prices at the lower end of the market sector. This would effectively increase the burden on Council to provide a higher subsidy.

Overall, these responses indicate that Kinglake Region residents are highly supportive of the development of a pool facility with an absolute focus on an aquatic centre, little interest in a gymnasium or aerobics space and moderate interest in a therapy or wellness centre adjunct.

Travel distance and the variety of pools in the area makes market catchment highly competitive, particularly with pools to the south such as Eltham and Healesville.

The propensity for residents to travel from other towns to the north of the Shire was minimal again indicating a low level market catchment.

Price elasticity was generally low with an expectation of pricing being positioned in the lower end of the market.

Residents are very positive about the development from a social benefits perspective. Commentary focussed on the positives of social interaction, great for kids, less travel time and health and wellbeing.

Commentary indicating a lack of support for the pool focussed on costs to build and maintain, the impact on rates, other initiatives needing to be higher priorities and the location (Kinglake) being inappropriate.



## 6 DESIGN BRIEF



The potential development of an Indoor Aquatic Centre at Kinglake represents a significant investment decision for Murrindindi Shire and other funding partners.

The facility needs to be specifically designed to accommodate the needs of a broad catchment and look to offset costs of pool operation with other health, fitness and lifestyle opportunities.

Major user groups will include;

- Local residents regularly attending for leisure activities, training etc.
- Tourists visiting the Kinglake Region, possibly looking to use spa/wellbeing facilities or swimming pool facilities.
- Corporate clients providing between 5-40 users at once.
- Schools utilising pool facility- up to 50 students at any given time.

#### 6.1 TWO DESIGN OPTIONS

The scale of capital and potential ongoing operational costs for any indoor aquatic centre are substantial. The capital funding (notionally \$10 million, but tested in subsequent sections of this report) and ongoing operational subsidy which is estimated at between \$250-500,000 describes is the likely financial impact. In light of the scale of financial impact, this report examines two options which assess both this outcome and a smaller, staged version of the proposal. This approach allows some comparative discussion and decision making to occur as the project is further considered.

The two design options are summarised as follows;

#### Design 1- Larger pool and complex service mix.

This design provides a 25 metre lap pool with learn to swim/hydrotherapy pool as well as a suite of consulting rooms and new function/ seminar or activity space. The initial investment is higher with some option for staging however the centre is designed as a standalone facility with features aimed at attracting tourists as well as residents (e.g. personal spa relaxation rooms)

#### Design 2- Smaller pool and standard service mix.

This design would provide a smaller pool design more specifically around programmable space, providing better returns. The centre is designed to be attached to the existing leisure centre and share resources with this centre. Consulting rooms are removed and a space is allocated for expansion (e.g. 25m pool) if required. The initial investment is lower with more emphasis on programmed swim space and shared facilities.

## 7 DESIGN DETAILS

At present the two design concepts provide for a range of facilities and activities. Staging of the development is possible and this is considered further in Section 87.3.

The siting of Design Concept 1 is also subject to a master plan which provides for cricket nets, netball court, two tennis courts and a pavilion. These outdoor sports facilities are currently planned for this site and although there may be advantages in attempting to provide the indoor aquatic centre with surrounding outdoor sports activities, space is limited and further earthworks and levelling would be required.

It may be possible and indeed advantageous to consider positioning the proposed facility with the outdoor courts surrounding and attaching any pavilion to the proposed aquatic centre.

Design Concept 2 uses the site of the existing indoor stadium to reduce upfront costs and share some facilities in order to create economies of scale and synergies with existing spaces. This facility also provides a very clear Stage 1 development that is limited to providing a significant Learn To Swim (LTS) pool, associated plant, change rooms and reception space. This staging has been undertaken to ensure a capital investment that may be more achievable in the short to medium term for Council and other funding stakeholders.





Fire Refuge Centre

Pool Plant entry @ lower level

\* Future Leisure Water Expansion Zone

#### 7.1 **DESIGN CONCEPT 1**



#### Aerial Photo

not to scale

#### Legend

- 1. Entry Air-lock
- 2. Foyer
- 3. Reception & Kiosk
- 4. Administration
- 5. Pool Store (LTS)
- 6. Kiosk/Cafe Prep 7. Program Pool
- 8. Program/Lap Pool (25m)
- 9. Pool Change Rooms
- 10. Pool Store (General)
- 11. Pool Plant Room
- 12. Spa
- 13. Sauna
- 14. Spa Suites (2 person)
- 15. Wellness Change rooms

- 16. Storage
- 17. Accessible Change
- 18. Discussion Room
- 19. Program Store
- 20. Program Room
- 21. Consulting Suites
- 22. Wellness Centre Reception
- 23. Wellness Centre Lobby

# Mup Map Study

#### Land Map Site Location



#### **Design Concept 1**

Staging is achievable with the separation of the LTS pool (see red dotted line). Site is constrained by fall of ground Provides ample opportunity to provide additional wellbeing activities with consulting rooms and spa suites as well as large public function or activity area. otal cost is estimated at \$11.8 million This design represents a larger investment, providing a diversity of opportunities for economic activity that supports the operation of the indoor pool.

#### 7.2 **CAPITAL COST ESTIMATES**

ZONE	AREA	RATE	ALLOWANCE
AREA 1	419.00	\$3,200.00	\$1,340,800.00
AREA 2	1,110.00	\$3,000.00	\$3,330,000.00
AREA 3	782.00	\$2,600.00	\$2,033,200.00
AREA 4	176.00	\$2,600.00	\$457,600.00
Wall Grossing	117.00	\$900.00	\$105,300.00
Sub-Total Sub-Total	2,604.00		\$7,266,900.00

POOLS	
25m Pool Lap Pool	\$825,000.00
LTS Pool	\$307,200.00
Spa	\$140,000.00
Spa Suites	\$24,000.00
Sub-Total	\$1,296,200.00
Site Services	\$200,000.00
Car Park Expansion (Say 150 spaces)	\$140,000.00
Furniture & Equipment	\$250,000.00
Professional Fees (10%)	\$933,125.50
Authority charges	\$100,000.00
Design Contingency	\$428,155.00
Construction Contingency	\$428,155.00

Construction Total	\$11,806,825.57
--------------------	-----------------

Probable estimates have been prepared by Mantric Architects and have applied current day estimates, as shown in the following table. It describes a total construction (including contingencies) of approximately \$11,806,900. It is important to note that these estimates have allowed only 12 months escalation (at 3%).

Exclusions include: GST, landscape, hard paving and retaining wall, service upgrades to site, hazardous material removal, contaminated soil, demolition, external works

\$328,276.07

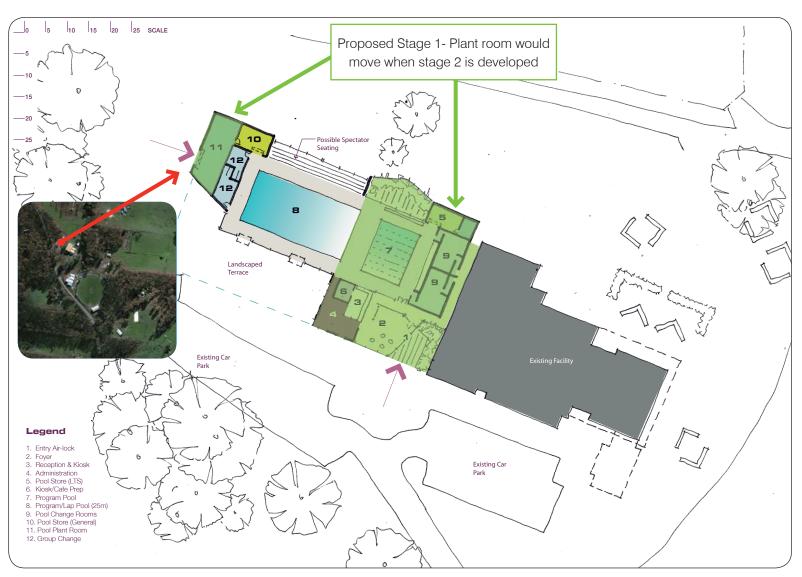
\$436,014.00

Escalation (12 month only 3%)

ESD Allowance (6%)



#### 7.3 DESIGN CONCEPT 2



#### **Design Concept 2**

Staging is achievable with the separation of the 25m pool (see green shaded areas).

Site is partially constrained by fall of ground- the proposed tiered seating next to the 25m pool provides an opportunity to use the slope.

Provides limited opportunity for extra activities and is focussed on providing a pool that can be programmed for economic return

Total cost of Stage 1 only is 5.1 million

This design represents a smaller investment, providing a dedicated space for swimming which provides for smaller subsidies

#### 7.4 **CAPITAL COST ESTIMATES DESIGN CONCEPT 2**

ZONE	AREA	RATE	ALLOWANCE
AREA 1	348.00	\$3,200.00	\$1,113,600.00
AREA 2	1,312.00	\$3,000.00	\$3,936,000.00
AREA 3	0.00	0.00	0.00
AREA 4	124.00	\$2,600.00	\$322,400.00
Wall Grossing	117.00	\$900.00	\$105,300.00
Sub-Total Sub-Total	1,901.00		\$5,477,300.00

POOLS			
25m Pool Lap Pool	275.00	3,000.00	\$966,000.00
LTS Pool	96.00	3,200.00	\$387,200.00
Spa	0.00	4,000.00	\$0.00
Spa Suites	0.00	4,000.00	\$0.00
Sub-Total	412.00		\$1,353,200.00
Site Services			\$180,000.00
Car Park Expansion (Say 150 spaces)			\$140,000.00
Furniture & Equipment			\$200,000.00
Professional Fees (10%)			\$749,202.50
Authority charges			\$100,000.00
Design Contingency			\$314,525.00
Construction Contingency			\$314,525.00
Escalation (12 month only 3%)			\$263,482.58
ESD Allowance (6%)			\$328,638.00

**Construction Total** \$9,474,873.08

Probable estimates have been prepared by Mantric Architects and have applied current day estimates, as shown in the following table. The total scale of work described in Concept 2 outlines a works program to the value of almost \$9,470,900. The design purpose fully sets out a staged approach, minimising capital costs on the onset whilst delivering a usable pool facility as a first stage. The cost breakdown of the first stage is approximately \$5,104,900 and is detailed on the following page.

Exclusions include: GST, landscape, hard paving and retaining wall, service upgrades to site, hazardous material removal, contaminated soil, demolition, external works



#### 7.4.1 Staging of Design Concept 2

ZONE	AREA	RATE	ALLOWANCE
AREA 1	348.00	\$3,200.00	\$1,183,200.00
AREA 2	492.00	\$3,000.00	\$1,599,000.00
AREA 3	0.00	0.00	0.00
AREA 4	124.00	\$2,600.00	\$347,200.00
Wall Grossing	40.00	\$900.00	\$36,000.00
Sub-Total Sub-Total	1,004.00		\$3,165,400.00

Design Concept 2 is purposefully designed to be staged with the smaller Learn To Swim (LTS) pool as the sole water body. This is aimed at providing an achievable delivery in the short to medium term whilst still offering a programmable and usable indoor pool for Kinglake.

POOLS			
25m Pool Lap Pool	275.00	3,000.00	\$0.00
LTS Pool	96.00	3,200.00	\$399,300.00
Spa	0.00	4,000.00	\$0.00
Spa Suites	0.00	4,000.00	\$0.00
Sub-Total Sub-Total	412.00		\$1,353,200.00
Site Services			\$120,000.00
Car Park Expansion (Say 150 spaces)			\$140,000.00
Furniture & Equipment			\$86,000.00
Professional Fees (10%)			\$480,352.20
Authority charges			\$25,000.00
Design Contingency			\$178,235.00
Construction Contingency			\$178,235.00
Escalation (12 month only 3%)			\$142,425.67
ESD Allowance (6%)			\$189,924.00

Construction Total \$5,104,871.87

## 8 FEASIBILITY ANALYSIS DESIGN CONCEPT 1

Based on the proposed design provided, an analysis of operational feasibility has been undertaken. The analysis provides an assessment of financial performance and is based on other operational centres.

Three key features are discussed in detail in this section. These are as follows:

The operational cost analysis details a ten year forward estimate for budgeting with further detail provided on individual activities in the attachments to this report.

A whole of life cost analysis investigates the cumulative cost to Council over time, including capital costs to create a ten year cost analysis for Council.

**A triple bottom line assessment** is provided to fully articulate the costs and benefits to Council including social and environmental factors.

#### 8.1 OPERATIONAL COST ANALYSIS

The operational cost analysis provides budgeted profit and loss statements with analysis over a ten year period.

Several assumptions have been made in order to develop the analysis and these are explained below.

#### **Basis for the Financial Model**

The basis for the financial model has been operating statements, budgets and profit and loss statements from existing centres, with refinement of figures guided by reviews undertaken with current centre managers.

#### **Use of Variables to Indicate Business Sensitivity**

Given the assumptions used in this financial analysis, the ability to vary visitation and price by 1 percent increments has been built into the financial model. Thus, Council has the capacity to look at a range of scenarios extrapolated from the 'base model' by varying percentages up or down. (e.g. Council can consider what happens to the financial model if visitation is 5 percent lower than expected but pricing remains static.) The mix of variables allows an enormous range of scenarios to be considered.

#### **Customer Numbers and User Fees**

The number of customers is based upon several data sets. General customer levels are based on CERM visitation rates as discussed in Section 2.3 and visitation for 'Learn to Swim' and school visits are separately calculated using estimates based on other centres figures and population catchments. Spa Centre activity levels are based on per day customer numbers and extrapolated to provide annual results. Overall visitation is designed to reflect the more optimistic CERM benchmarked figure of approximately 97,000 per annum. Actual user fees and estimated sales and visitation are provided in the table below.



Fee Description	Amount	Sales	Visitation
Casual Adult Swim	\$5.60	5000	5000
Casual Child Swim	\$3.60	5000	5000
Casual Concession Swim	\$3.50	5000	5000
Casual Family Swim	\$10.00	2000	8000
Adult Season Ticket	\$600	100	15000
Child Season Ticket	\$360	50	5200
Family Season Ticket	\$999	120	24960
Pool events	\$600 per event	10	2400
Massage	\$30 per session	2000	2000
Spa Therapy	\$30 per session	1650	1650
Pilates	\$8 per session	500	500
Yoga	\$8 per session	500	500
Aerobics	\$8 per session	500	500
Aqua Aerobics	\$8 per session	500	500
Schools	\$2 per student	6300	6300
Instructor levy for schools	\$20 per session	630 sessions	na
Learn to Swim	\$105 per semester	880	7,920
Crèche/Child care	\$5 per hour	2880	2880
Room hire	\$100 per booking	96	3000
TOTAL VISITATION			96,310

Growth in customer numbers is assumed with an expectation that within the first two years, growth in usage would broadly be higher (5%) and would then level out over the following 7-8 years (1%).

#### **Consumer Price Index (CPI)**

The CPI provides a measure of price fluctuations based upon a group of goods and services across 11 sectors. It is useful in providing a predicted price increase, in goods or services over time. The 2010 CPI figure (June 2009-June 2010) for all sectors is plus 3.1 percent. Within this, "Recreation" is listed at plus 1.8 percent. For the purpose of this report, a figure averaged between recreation and the overall CPI of plus 2.4 percent has been assumed for most annual increases in materials, labour and utilities.

#### Official Cash Rate (OCR)

The OCR is also an important measure used in 'discounting' losses or profits back to a present day value. The OCR represents the current cost of buying money on credit. The current figure is 4.5 percent although this is expected to rise in the medium term. For the purposes of this financial analysis a rate of 4.5 percent has been used.

Forecast 10 year budget: Design Concpet 1

	Year 1 \$	Year 2 \$	Year 3 \$	Year 4 \$	Year 5 \$	Year 6 \$	Year 7 \$	Year 8 \$	Year 9 \$	Year 10 \$
Revenue										
Aquatics	358,407	379,937	402,921	414,294	425,999	438,048	450,449	463,019	475,951	489,255
Wellbeing Centre	46,233	48,180	50,248	56,328	57,849	59,413	61,019	62,669	64,364	66,107
Fitness Programs	4,049	4,290	4,541	4,801	5,072	5,354	5,646	5,950	6,266	6,594
Non Core Programs	10,545	11,147	11,779	12,176	12,585	13,006	13,440	13,887	14,347	14,820
TOTAL REVENUE	419,223	443,553	469,488	487,599	501,505	515,820	530,554	545,525	560,928	576,776
Expenditure										
Administration Staff	274,904	281,502	288,258	295,176	302,260	309,514	316,943	324,549	332,339	340,315
Centre Staff	259,546	264,737	270,032	275,432	280,941	286,560	292,291	298,137	304,100	310,181
Water	20,000	20,480	20,972	21,475	21,990	22,518	23,058	23,612	24,179	24,759
Electricity	75,000	77,625	80,342	83,154	86,064	89,076	92,194	95,421	98,761	102,217
Pool Chemicals	30,000	30,720	31,457	32,212	32,985	33,777	34,588	35,418	36,268	37,138
Long term asset maintenance	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other	130,500	134,012	137,201	140,459	143,870	147,377	152,983	156,692	160,507	164,431
TOTAL EXPENDITURE	839,950	859,076	878,261	897,909	918,111	938,822	962,057	983,828	1,006,152	1,029,042
Net Profit/Loss	-420,727	-415,522	-408,774	-410,310	-416,605	-423,002	-431,503	-438,304	-445,224	-452,266
Present Value of Profit/Loss (adjusted by CPI- 2.4%)	- 420,727	- 405,550	-389,152	-380,768	-376,611	-372,242	-369,367	-364,669	-359,741	-354,576
Present Value of Profit/Loss (adjusted by OCR- 4.5%)	-420,727	- 396,824	-371,984	-354,918	-341,616	-327,827	-314,997	-300,238	-284,943	-269,098



#### 8.2 TRIPLE BOTTOM LINE ASSESSMENT

#### 8.2.1 Economic Assessment

The proposed indoor aquatic centre represents a very significant financial investment by Council. Over a ten year period, life cycle costs (all construction and net profit/loss results) are estimated at \$14.3 million in present value terms.

#### **Employment Activity**

This relates to an estimate of the employment contribution of the capital works in terms of direct and indirect construction employment generated by the project. These employment estimates are based on an industry standard of one (1) job per year created per \$160,000 of capital investment.

This equates to an approximate total of 74 jobs during the construction period. Through the employment multiplier the project would also generate an additional 190 jobs in indirect employment for the wider economy during the construction period based on a multiplier of 2.6 jobs. These jobs include those located in the local area, throughout Victoria, and further, as the economic effects of the capital investment flow through the economy.

It is estimated that the centre would employ 16 full time equivalent (FTE) staff based on calculations of staff employed and hours of operation as detailed in the appendices provided.

#### **Operational costs**

Ongoing operational subsidies are expected at approximately \$400,000 per annum. This reflects the general level of reliance Council would have on rates revenue to provide all ongoing services.

Currently Council has a rate revenue reliance compared to underlying revenue of around 54 percent, that is, Council is reliant on rates to fund 54 percent of ongoing services over and above other sources (e.g. fees or grants).

The proposed facility meets this financial indicator by providing a rate revenue reliance of 50 percent or less of operating costs. This is however an extra subsidy and would potentially require a rate rise which would come in addition to the 6.5 percent increase already in place. This could be as high as an extra 4 to 5 percent on current rate charges.

#### **Capital funding**

The level of capital funding is also very significant and, with Council providing a new asset budget of between \$1.7 million to \$2.9 million annually from 2007-2010, there is an estimated \$7-9 million shortfall in funding for the proposed facility.

This would most probably be funded either through grants or loans. It is expected that funding could be raised through state and federal government with smaller amounts through philanthropic trusts however loans or funding also require further rate increases from Council and create further impost.

The financial performance as modelled in the previous section provides an economically optimistic approach, implementing high user fees relative to the price elasticity testing undertaken as part of the community survey, whilst assuming a high visitation rate at the optimistic end of the CERM benchmarking.

Thus the financial result which provides for a \$400,000 loss is a relatively optimistic one which could increase by 10-20 percent if specific variables around pricing or visitation do not follow modelled patterns.

#### **General Economic Activity**

On a broader economic scale, the facility could well assist in generating tourist activity as part of a suite of tourist value adding facilities. The development of a modest conference or seminar facility as an addition to the centre may attract small to medium sized businesses or teams to undertake one or two day business or training events. The potential for this type of activity would deliver an economic multiplier effect for other local businesses in the area.

#### 8.2.2 **Environmental Assessment**

The development of the facility has been budgeted to allow for state of the art, environmentally sustainable design features. The facility is a complex one involving a number of operations that consume water, power and chemicals in the delivery of services. In this sense, the building and the activities occurring within it provide ample opportunity for a range of environmentally sustainable design initiatives. Indeed the building should stand as a showcase for the practical application of a series of design innovations as described below.

ESD initiatives included in the design and budgeted for in the cost plan include;

Water harvesting for drip irrigation & toilet flushing Installation of water tanks and associated pumps and plumbing to allow for storm water collection to be recycled and used for drip irrigation on garden beds and flushing of toilets inside the building.

#### Advanced Façade Systems (Low-E glazing, automated ventilation)

Low-emittance (Low-E) coatings are microscopically thin, virtually invisible, metal or metallic oxide layers deposited on a window or skylight glazing surface primarily to reduce the U-factor by suppressing radiative heat flow. The principal mechanism of heat transfer in multilayer glazing is thermal radiation from a warm pane of glass to a cooler pane. Coating a glass surface with a low-emittance material and facing that coating into the gap between the glass layers blocks a significant amount of this radiant heat transfer, thus lowering the total heat flow through the window. Low-E coatings are transparent to visible light. Different types of Low-E coatings have been designed to allow for high solar gain, moderate solar gain, or low solar gain.

Automated, heat activated ventilation systems can help draw cooler air into a building and expel hot air, reducing the needs for more expensive refrigerated air conditioning options.



#### Advanced sun shading solutions

Shading from the sun would provide variable amounts of passive heat into the facility throughout the year, effectively reducing heat and providing protection in summer months whilst being able to be varied to ensure sunlight is allowed to enter the centre during winter months. Shading to the north and west of the centre would provide summer shading whilst operable walls to the south may well provide opportunity to circulate cooler, shaded air within the facility.

#### Mixed-mode air handling systems (possible heat exchange systems)

A mixed mode ventilation system combines the best aspects of natural ventilation and mechanical ventilation / air conditioning. The basic philosophy is to open the windows and switch off the air conditioning to avoid the energy penalty and consequential environmental effects of year round air conditioning. There is also evidence of significant psychological and health benefits associated with naturally ventilating public facilities. Utilising mixed mode with natural ventilation systems in lieu of continuous air conditioning can save up to 30% of the energy costs associated with heating, cooling and ventilating.

#### Advanced thermal mass inclusion (use of internal masonry wall, floor and ceiling elements)

Thermal mass is a term used to describe the ability of building materials to store heat (thermal storage capacity). The basic characteristic of materials with thermal mass is their ability to absorb heat, store it, and at a later time release it. Adding thermal mass within the insulated building envelope helps reduce the extremes in temperature experienced inside the facility, making the average internal temperature more moderate year-round and the facility more comfortable to live in. Building materials that are heavyweight store a lot of heat so are said to have high thermal mass. Materials that are lightweight do not store much heat and have low thermal mass. The use of heavyweight construction materials with high thermal mass (concrete slab on ground and insulated brick cavity walls) can reduce total heating and cooling energy requirements by up to 25% compared to a facility built of lightweight construction materials with a low thermal mass

#### Solar boosted water heating

With substantial roof surface, the opportunity exists to provide solar boosted hot water for showers in change rooms and also provide a solar heating system for pool water, supplementing the already efficient heat pumps planned to be used in the heating of the pool water

#### **Energy efficient heat pumps**

The use of heat pumps for heating pool water is now a more common approach and is far more efficient in appropriate environments than gas heating. A heat pump operates like a reverse refrigerator. It transfers the heat in the air outside of the unit to the water stored inside the heater through a heat exchange system. In the case of heat pumps, "heat" is a relative term as they operate in very low temperature conditions (at least -10 degrees Celsius), therefore will generate hot water consistently throughout the year.

#### 8.2.3 Social Assessment

There are a series of key indicators relating to facilities and activities and the social benefit they bring to a community. It is important to recognise these and assess them in the context of the financial cost of delivering the proposed indoor aquatic centre.

The health benefits of recreation and physical activity are numerous however, recreation centres also provide a valuable community gathering place where people can socialise, enjoy events and be with family.

Benefits that users most strongly identify with the use of indoor pools and recreation centres include the following;<sup>23</sup>

- Physical fitness
- Keeping active and mobile
- Being with family
- Setting yourself a challenge
- Reinforcing self confidence
- Reducing tension
- Escaping mental stress

Responses from Kinglake residents strongly reflect these benefits which include a number of intangible, intrinsic outcomes. A number of these comments have been noted, right.

"As grandparents it would be lovely to see a facility like this available to the local primary school to use all year round. It would also be nice to take them swimming for fun and leisure..."

"If there was a pool closer to home I would use it on a daily basis as I have arthritis and have had both hips replaced, so desperately need swimming to help me keep mobile..."

"Our whole family enjoys swimming and it is a pity that we aren't able to go regularly but would use it often if it were local..."

"Not having to travel off the mountain for lessons, school sports would be great. Using the pool to unwind would be the best medicine for everyone..."

"We will be looking to start swimming lessons next year for our 18month old child. It is important that kids up here know how to swim due to all the dams, creeks etc..."

"As a family we would love a facility like this on our doorstep for swimming lessons, water aerobics and just family fun and somewhere to take the kids for good healthy fun on holidays etc..."

"The pool would be a great meeting place and encourage a positive sense of community. Our family would support this facility on a daily basis....

What did Kinglake residents say?

<sup>&</sup>lt;sup>23</sup>Benefits of Aquatic and Indoor Recreation Facilities (Sport and Recreation Victoria, 2002)

## 9 FEASIBLITY ANALYSIS DESIGN CONCEPT 2

The underlying principles for the feasibility analysis of Design Concept 2 stay constant with those used in Design Concept 1.

The key variations to this include;

## 1. Operational Budget and scope of programming and attendance

It is expected that, with the reduction in the scope of works, the opportunity for high attendances is diminished therefore sales of casual and season tickets would be reduced. Along with this, it is understood that the wellness centre activities would be removed from the operational budget and that the centre would operate on lower level of staffing.

#### 2. Whole of Life Cost Analysis

With a very clear staging of the project proposed under this design concept, the initial capital investment is far less and, given the reduced scope and net benefit to community provided by this design, operational subsidies are also reduced.

#### 3. Triple Bottom Line Assessment

Economically, the scale of the project is reduced and therefore the opportunity to increase economic activity through employment, other business activities and construction multiplier effects is also reduced. Environmentally, the benefits are very similar with most of those sustainable design features discussed in the previous chapter being achievable under this reduced design.

Social or Community benefits are scaled back with less opportunity to fully meet identified community need for a larger pool catering for family activity. The proposed design and staging provides limited space in the initial phase with a focus on income generating programmable space.

These key aspects are discussed in the following pages.



#### 9.1 OPERATIONAL COST ANALYSIS

Operational Analysis Summary of Findings

The operational financial analysis undertaken is presented as a 10 year budget on the following page and has provided the following broad outcomes.

- A net annual operating subsidy required from Council of \$250,000 – \$275,000 (not taking into account present value variation)
- Staffing costs as a percentage of income equates to 118% of income in Year 1 in comparison to the CERM benchmark of 66%.
- Staffing costs as a percentage of costs equates to 60% of costs in Year 1 in comparison to the CERM benchmark of 62%.
- Expense recovery is 51 percent in Year 1 in comparison to the CERM benchmark of 93 percent.
- Electricity costs are 6 percent of overall costs compared to the CERM benchmark of 6.9 percent.
- Entrance fees are set at high levels relative to the price elasticity test undertaken as part of the community survey. This is undertaken in order to reduce the subsidy levels to Council. This means the model takes an optimistic approach to the setting of fees and the propensity for users to pay these fees.
- Generally this model provides a lower level of subsidy due to the smaller scale of operations. The expected subsidy is approximately \$150,000 less than Design Option 1.

#### Forecast 10 year budget: Design Concpet 2

	Year 1 \$	Year 2 \$	Year 3 \$	Year 4 \$	Year 5 \$	Year 6 \$	Year 7 \$	Year 8 \$	Year 9 \$	Year 10 \$
Revenue										
Aquatics	254,177	268,306	283,365	291,127	299,113	307,330	315,783	324,286	333,028	342,016
Wellbeing Centre										
Fitness Programs										
Non Core Programs	7,973	8,169	8,370	8,576	8,787	9,004	9,226	9,453	9,686	9,924
TOTAL REVENUE	262,149	276,475	291,735	299,703	307,901	316,333	325,009	333,739	342,714	351,940
Expenditure										
Administration Staff	142,665	146,089	149,595	153,185	156,862	160,627	164,482	168,429	172,471	176,611
Centre Staff	145,908	148,826	151,802	154,838	157,935	161,094	164,316	167,602	170,954	174,373
Water	8,000	8,192	8,389	8,590	8,796	9,007	9,223	9,445	9,671	9,904
Electricity	30,000	31,050	32,137	33,262	34,426	35,631	36,878	38,168	39,504	40,887
Pool Chemicals	12,000	12,288	12,583	12,885	13,194	13,511	13,835	14,167	14,507	14,855
Long term asset maintenance	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Other	105,500	110,430	113,053	115,732	118,549	121,448	126,432	129,504	132,666	135,922
TOTAL EXPENDITURE	514,808	528,024	539,132	550,496	562,206	574,210	588,516	601,133	614,069	627,332
Net Profit/Loss	-252,568	-251,549	-247,396	-250,793	-254,305	-257,876	-263,507	-267,394	-271,355	-275,392
Present Value of Profit/Loss (adjusted by CPI- 2.4%)	-252,658	-245,512	-235,521	-232,736	- 229,892	-226,931	-225,562	-222,472	-219,255	-215,907
Present Value of Profit/Loss (adjusted by OCR- 4.5%)	-252,658	- 240,230	-225,131	-216,936	-208,530	-199,854	-192,360	-183,165	- 173,667	-163,858



## 9.2 TRIPLE BOTTOM LINE ASSESSMENT DESIGN CONCEPT 2

The triple bottom line assessment for Design Concept 2 is provided however it does take into account that whilst outcomes for the economic and social assessment have changed, the environmental benefits will either stay the same or increase given the smaller building footprint and less use of resources to construct and consistently heat etc.

#### 9.2.1 Economic Assessment

The proposed indoor aquatic centre represents a significant financial investment for Council and other funding partners. Over a ten year period, life cycle costs (all construction and net profit/loss results) are estimated at \$7.4 million in present value terms.

#### **Employment Activity**

Employment activity is considered with regard to construction and operations. These employment estimates are based on an industry standard of one (1) job per year created per \$160,000 of capital investment.

This equates to an approximate total of 31 jobs during the construction period. Through the employment multiplier the project would also generate an additional 80 jobs in indirect employment for the wider economy during the construction period based on a multiplier of 2.6 jobs. These jobs include those located in the local area, throughout Victoria, and further, as the economic effects of the capital investment flow through the economy.

It is estimated that the centre would employ 6 full time equivalent (FTE) staff based on calculations of staff employed and hours of operation.

#### **Operational costs**

Ongoing operational subsidies are expected at approximately \$250,000 per annum. This reflects the general level of reliance Council would have on rates revenue to provide on going services.

Currently Council has a rate revenue reliance compared to underlying revenue of around 54 percent, that is, Council is reliant on rates to fund 54 percent of ongoing services over and above other sources (e.g. fees or grants).

The proposed facility does meet this financial indicator by providing a rate revenue reliance of 50 percent or less of operating costs. This is however an extra subsidy and would potentially require a rate rise which would come in addition to the 6.5 percent increase already in place.

#### **Capital funding**

The level of capital funding is also very significant and, with Council providing a new asset budget of between \$1.7 million to \$2.9 million annually from 2007-2010, there is an estimated \$2 million shortfall in funding for the proposed facility.

It is expected that the majority of the facility would need to be funded either through grants or loans. It is expected that funding could be raised through state and federal government with smaller amounts through philanthropic trusts however loans or funding also require further rate increases from Council and create further impost.

The financial performance as modelled in the previous section provides an economically optimistic approach, implementing high user fees relative to the price elasticity testing undertaken as part of the community survey, whilst assuming a high visitation rate at the optimistic end of the CERM benchmarking.

Thus the financial result which provides for a \$250,000 loss is a relatively optimistic one which could increase by 10-20 percent if specific variables around pricing or visitation do not follow modelled patterns.

#### **General Economic Activity**

On a broader economic scale, the facility is unlikely to generate tourism benefits given it's proposed staging and design. It is designed to specifically meet local needs and would not provide scope in the first instance to accommodate further opportunities for economic activity.

#### 9.2.2 Environmental Assessment

The environmental benefits remain the same as those for Design Concept 1, however the impact could be seen as being magnified given the expected scale of stage 1 is much smaller, resulting in a much lighter footprint and reduced energy consumption to provide construction.

#### 9.2.3 Social Assessment

Again, the principles of community and social benefit derived from aquatic and leisure centres remain the same as those described for Design Concept 1, however the lack of a second, larger pool and other opportunities for secondary activities could be judged to reduce their impact.

It should however, be noted that the aquatic centre will be attached to existing leisure and community facilities which will provide for a diversity of activity. In this sense, the genuine integration of the aquatic centre into the precinct as a whole will be paramount in deriving optimal social benefits.

Opportunities for children to learn to swim should not be compromised and this was seen as a crucial outcome based on survey responses.

## 10 COMPARING DESIGN CONCEPT 1 AND 2



At this point, a detailed analysis of both design options has provided a mixture of benefits and disadvantages, as well as highlighting a series of different outcomes. This section summarises all aspects of the two designs and leads to a conclusion based on these factors.

Factor for Consideration	Design Concept 1	Design Concept 2				
Capital Investment	Capital investment is high at a total \$11.8 million.	Capital Investment is less at \$9.4 million with a clearly delineated staging of the project to reduce a Stage 1 development to \$5.1 million				
Facility Components	25 m pool LTS pool Consulting rooms (4) Spa suites (2) Program Room (for 150) Café Extensive reception and foyer area	25m pool (future stage) LTS pool (Stage 1) Small café Small reception/foyer Total area: 1901m2				
Capacity to deliver programs	Total area: 2604 m2  Learn to Swim  Lap Swimming  Water based leisure activities  Health and Wellness (massage. Physiotherapy etc.)  Seminars, fitness programs, community meetings	Learn to Swim Limited water based leisure activity Fitness programs could potentially be delivered from Leisure Centre.				
Environmental benefit	Environmentally Sustainable Design features as noted in body of report	Significantly smaller footprint, with proportionally similar investment in ESD could result in more significant environmental benefit.				

Factor for Consideration	Design Concept 1	Design Concept 2
	This design provides for far greater	This design provides for lower capital costs and lower annual subsidies:
	levels of economic activity:	\$5.1 million in construction activity stage 1
	\$11.8million in construction activity	9 FTE positions once operational
	16 FTE positions once operational	60,000 visits per annum
Expected financial performance	\$500,000 in wages locally	\$262,000 income
	96,000 visits per annum	\$250,000 subsidy required
	\$420,000 income	10 year life cycle cost \$7.4 million
	\$400,000 subsidy required	
	10 year life cycle cost \$15.6 million	
	High drain on Council resources- substantial	Significant drain on Council resources- Stage 1 is more achievable with
Within Council Resources	capital funds required from state and federal	lower capital costs however ongoing subsidy is still substantial for Council.
	government to achieve construction.	

The two designs offer very different outcomes based on substantially different designs.

Design Concept 1 provides opportunity to realise some of the expressed interest in the community in delivering health and wellness services from a single location as well as generating potential for good management to result in a tourist attraction that may generate corporate use for seminars etc.

Investing in these extra activities however is costly and the extent of capital investment required (\$11.8 million) may mean the project is not achievable, event with state or federal funding.

The issue of an ongoing operational subsidy by Council is also substantial given an estimate of \$400,000 per annum to deliver the facility. A significant expense for the centre is staffing, given long hours of operation and this can also be seen as beneficial given employment will be generated and more disposable income will be available in the economy as a result.

Design Concept 2 provides a more modest and purposefully staged approach to the development in order to minimise initial investment requirements (\$5.1 million for Stage 1) and reduce the scale of subsidy required. The facility is still expected to operate at a loss however the subsidy required by Council is reduced to the realms of \$250,000 per annum.

Subsequently, many of the benefits of the larger facility are lost, less employment and economic activity is generated and any tourism potential is severely reduced.

Design Concept 2 does however offer some potentially unique community benefits through integration with the existing stadium and community centre at Kinglake Central.

## 11 CONCLUSION



This report has tested the feasibility of developing an indoor aquatic centre and associated facilities for the Kinglake Region in the Shire of Murrindindi.

Two designs have been investigated with the outcomes for both reflecting the expressed need of the Kinglake community for provision of aquatic facilities mainly for family use and learn to swim classes.

Design Concept 1 provides a facility that meets a number of expressed needs and also delivers opportunity for further positive community and economic outcomes with the development of a health and wellness centre focussed on providing local, small business with an opportunity to be involved as well as generating potential tourism interest through spa suites and seminar facilities.

At \$11.8 million to build and an estimated \$400,000 per annum subsidy, this facility represents a substantial investment and may be at a scale that is simply not achievable or practical for Kinglake.

Design Concept 2 scales back development and provides a more economically focussed outcome, reducing both capital investment and operational subsidy. The design is purposefully staged to provide a "no frills" approach in order to gain an understanding of a baseline cost for provision of this type of infrastructure.

The facility is integrated with the existing Kinglake Central Stadium and Community Centre and provides opportunity for synergies in staffing and delivery of diversified programs.

The total cost for Stage 1 of Design Concept 2 has been estimated at \$5.1 million with an operational subsidy of approximately \$250,000 per annum.

Based on available funding streams, this is the most achievable first step toward an indoor aquatic facility for the Kinglake region. Further expansion can then be considered based on evaluation of usage, financial performance, community need and population growth.



