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DENMARK AQUATIC CENTRE

INTERIM REPORT
of the
PROJECT TEAM

12 April 2011

Executive Summary

In late 2008 Council established a joint Council/Denmark Aquatic Centre Committee Inc (DAACI) Project Team to examine the possibility of building a sustainable heated aquatic centre in Denmark. Initially, the Project Team comprised two Councillors, two Council Officers and two DACCI representatives.

Over the past few years the Team has carried out its task in accordance with the *Guidelines* established by the Department of Sport and Recreation Council for the provision of major public facilities. The *Guidelines* are structured into five phases. The first of these, the Needs Assessment Phase, culminated in the Council's decision to proceed to the current Phase Two - the Feasibility Study Phase. At this point the Team was strengthened by the addition of the Regional Director of the Department of Sport and Recreation.

The task of the Project Team is to provide Council with the best possible information platform upon which a decision on how to proceed may be based. Specifically this would be a decision to ***implement, amend, postpone, stage development*** *or* ***abandon the proposal***.

After consideration of the responses to the Council's call for submissions from consultancies interested in undertaking the Feasibility Study, the Team recommended the appointment of Coffey Commercial Advisory [CCA]. CCA received the commission and has reported its findings to the PT.

In order to fulfil its responsibilities to Council, the Project Team has studied the CCA Final Report in great detail, and welcomes it as a significant contribution to the work needed to provide Council with the information necessary to enable it to make an informed decision. However, the Team believes that while the Report provides a foundation on which it can complete its task, it also gives rise to a number of significant issues that require resolution before the Team can be satisfied that it has discharged its responsibilities to Council. Further work is required to resolve these issues.

In order to inform Council of its concerns, the Project Team has created a version of the CCA Report marked up with its concerns, the most significant being shown in red. An Appendix (G) details the Team's concerns on specific issues.

In general terms, the Team is looking for a much sharper focus on environmental sustainability, and refined estimates of both capital and recurrent funding, including stress testing. The justification for this further work will become evident on reading this Interim Report and the associated documents. The Project Team has the view that its final Report to Council must await completion of that work.

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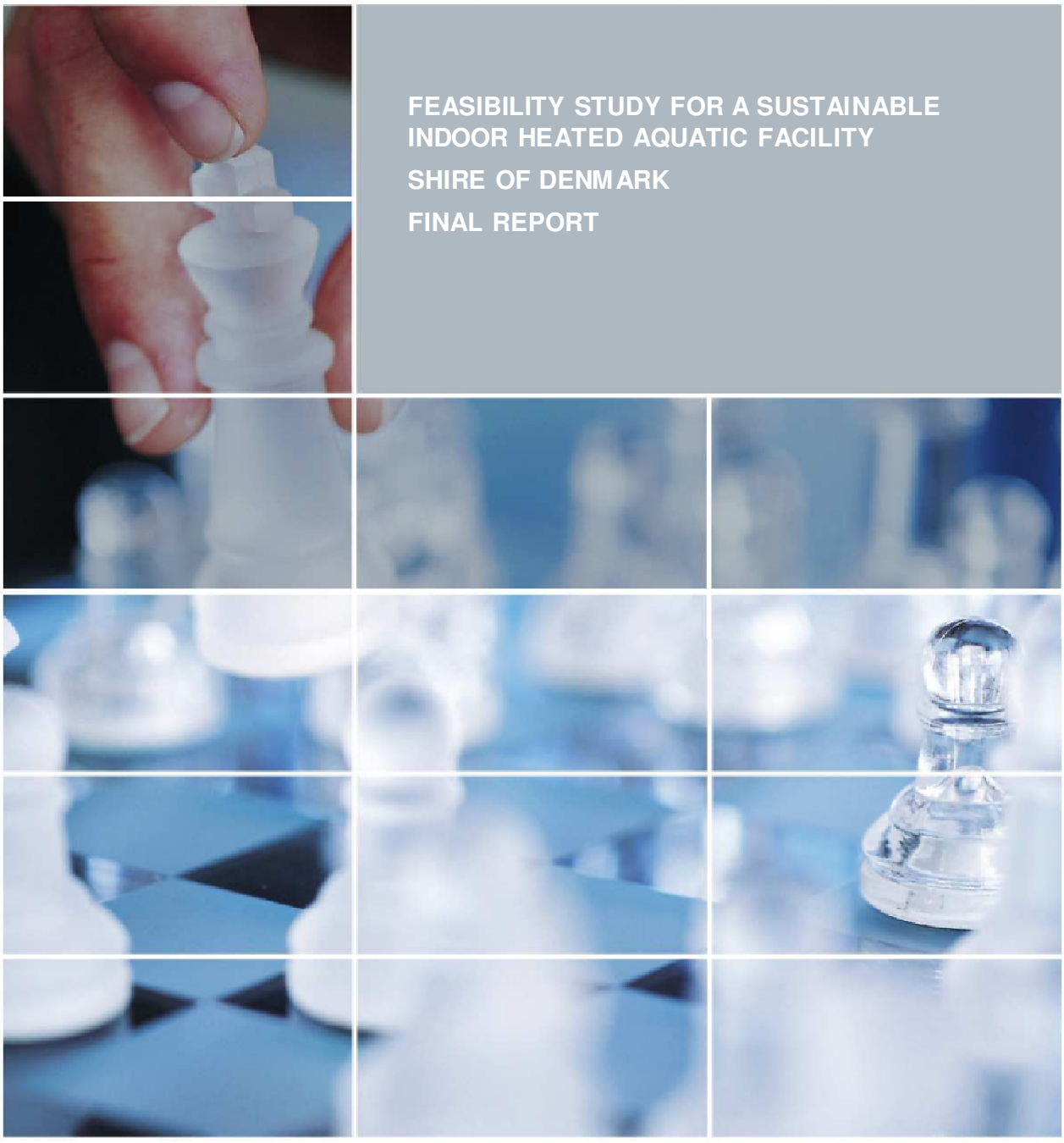

FEASIBILITY STUDY FOR A SUSTAINABLE INDOOR HEATED AQUATIC FACILITY

SHIRE OF DENMARK

FINAL REPORT

The following pages contain a marked-up version of Coffey Commercial Advisory's Final Report on the Feasibility Study for a Sustainable Indoor Heated Aquatic Facility in the Shire of Denmark. The purpose of the mark-up is to draw the reader's attention to certain issues identified by the Shire's Project Team. These are shown either in red or in yellow. The latter tend to be comments only, but those marked in red and accompanied by X require closer examination. These cases are all discussed in Appendix G which appears after the CCA Appendices A to F.

Separate copies of both Appendix G and the Report without mark-up are available on request.

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50 YEARS

FEASIBILITY STUDY FOR A SUSTAINABLE INDOOR HEATED AQUATIC FACILITY

Shire of Denmark

Date December 2010

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1 Background Information

The following information provides an overview of the relevant background information associated with the development of the Denmark Aquatic Centre (DAC).

1.1 Introduction

The Shire of Denmark is located in the Great Southern Region of WA, west of the Regional City of Albany and has an estimated population of 4,982 people. The Shire covers an area of 1,860 square km being 420km south southeast of Perth City. It has a distinct east-west orientation, with the South Coast Highway and Western Australian coastline forming the southern boundary. Denmark is the main town in the Shire which is divided into 3 wards of Scotsdale/Shadforth, Kent/Nornalup and Town.

The Shire Council currently has no indoor pool provision, but benefits from access to natural coastal waters. Since 1990, there has been ongoing local interest in the development of an indoor heated aquatic facility within Denmark. This culminated in a needs analysis and operational cost projections report undertaken by Ian Mumford Consulting in 2006 and a further needs assessment undertaken by Jill Powell and Associates in May 2009. The latter report identified a need for an indoor aquatic facility and recommended further work be undertaken to thoroughly test the practicality of:

Management Options

Facility components

Location Options

Design Options

Social, economic and environmental sustainability

Cost

To resolve these matters and provide a clear direction for the potential future provision of indoor aquatic space, The Shire of Denmark in Partnership with the Denmark Aquatic Centre Committee Incorporated (DACCI) and the Department of Sport and Recreation initiated this feasibility study.

1.2 Study Scope and Objectives

The purpose of the study was to determine the feasibility for a sustainable indoor heated aquatic facility in the Shire of Denmark in accordance with Department of Sport and Recreation's (DSR) Feasibility Study guidelines.

The brief included a number of requirements which can be summarized as:

Test the assumptions and recommendations of the Needs Assessment.

Verify the following:

- What can the community afford from both a capital and operational perspective
- The basis for the project.
- Identify factors which have changed since the Needs Assessment.

Test assumptions against a number of different scenarios.

Provide a list of requirements that need to be addressed before the project should proceed

To investigate and report on innovative models of design, operation, and financial management to provide a modern, sustainable, best-practice aquatic facility.

To investigate and report on the social and financial viability of selected facility models from a capital and operating perspective, including fully costed management options and the methodology and assumptions used to prepare this analysis. These models should be based on a 30-year life for the facility and include depreciation.

To establish a workable benchmark based on existing facilities in other shires which are similar in size, geography and demographics for comparison with the concept plan.

To conduct a site analysis and identify the most suitable site for the facility.

To develop a concept plan for the facility, including a component list detailing the principal requirements of the facility and any special facility needs (e.g. disabled access). Included within this would be environmentally sustainable design initiatives which enable a suitably qualified Quantity Surveyor to prepare an Opinion of Probable cost.

The initial needs analysis identified a need for aquatic provision in the Shire, but did not identify any options to be considered. The feasibility study therefore began with a review of the output of the consultation processes and identified a series of options for consultation purposes.

1.3 Methodology

The methodology used for this study is as follows:

1. Clarification and Review of Aims and Objectives.
2. Situation Analysis, taking into account current policy directions of the Council, operational performance of regional aquatic facilities, industry trends and demographic trends.
3. Community Consultation and Demand Assessment. This was undertaken by direct one to one contact with key individuals and groups underpinned by a survey distribution for ratepayers, feedback from DACCI members and a community briefing and consultation event.
4. Identify Facility Development Opportunities and Options. This involved analysing the current market circumstances, competitors and potential options for service delivery.
5. Detailed Assessment of the Proposed Aquatic Leisure Facility through the development of concept plans, management plans, an operational plan, potential funding strategy and implementation plan
6. Preparation of a Draft Feasibility Report.
7. Final Report.

1.4 Acknowledgements

Coffey Commercial Advisory would like to acknowledge the contribution of Damien Schwarzbach (Manager – Recreation, Cultural and Community Facilities, Shire of Denmark), Gregg Harwood (Director of Community & Regulatory Services), DACCI representatives and the Project Steering Group for their assistance in providing background information and guidance as required in the preparation of this Feasibility Study for a Sustainable Indoor Heated Aquatic Facility.

In addition, the input, advice and information contributed by other individuals and groups during the study has been important which includes Elected Members, Council staff, residents, representatives from sporting clubs, community groups and other stakeholder representatives.

2 Contextual Background

The following information provides a summary of background information relevant to the proposed aquatic facility development.

2.1 Literature Review

The following table contains a review of the relevant reports and plans for this study.

Study	Summary and/or Key Findings
Shire of Denmark Needs Assessment into a Sustainable Indoor Heated Aquatic Facility (Jill Powell & Associates, May 2009)	This study reviewed undertook a needs analysis of developing an indoor heated pool in the Shire. The key conclusions were: A need was identified but no direction was provided on potential components and the market it would serve. The consultation process resulted in 779 responses (563 residents, 216 non-residents). Indoor pool was identified as the top priority by respondents. The highest type of use was identified as social, recreational and fitness. The need for warm water space (hydrotherapy) would rank highest combining results for addressing rehab, joint mobility and physical health problems. Further analysis of the output from the needs assessment will be referenced later in the report.
Proposed Indoor Heated Aquatic Facility Needs Analysis and Operation Cost Projections (Ian Mumford Consulting, August 2006)	This study undertook a needs analysis and provided operational cost projections for an 8 lane pool. It highlighted: Recreational and competitive swimming is the primary focus. An 8 lane lap pool is the principle desired component. Denmark Recreation Centre was identified as the preferred location. The operation of the pool was to be financed through participation fees and rates subsidy. Affordability was a key concern of the Shire Council and residents. Based on a Shire population of 5,000, the annual attendance figures would be 38,500 (i.e. 7.7 visits per head of population x 5,000) The report concluded that the operational running cost would run at a deficit of $254,313 plus $100,000 for depreciation, capital replacement and loan repayment.

Study	Summary and/or Key Findings
Community Needs and Customer Satisfaction Survey 2008	The survey conducted during 2008 asked the local community a series of questions related to existing and potential future service provision within the Shire of Denmark. - Council should construct a swimming pool within Denmark? - Council should raise rates to construct and maintain a swimming pool? The response from residents indicated that whilst there was a strong demand for a swimming pool within the Shire, there was a lack of willingness overall to pay for it. In analysing the detailed responses to the questions a common theme of "user pays" arose.
Shire Of Denmark Local Recreation Plan (Lesley Solly & Associates, March 2003)	The Local Recreation Plan in March 2003 identified the need to assess the viability of a new 6 to 8 lane 25m pool. A hydrotherapy pool to be located either at Denmark Hospital or elsewhere with the 25m pool. Recreation centre consistently highlighted as the optimum site.
Shire of Denmark Commercial Strategy: Town Planning Scheme Policy No.31 (February 1999)	The Commercial Strategy suggests that certain civic and cultural facilities should be prominently located within the CBD in order to achieve a mix of commercial and community activity.
Settlement Strategy for Denmark: Town Planning Scheme No.28 (adopted 22nd December 1998)	The strategy identifies that the Shire of Denmark is well provided for with reserves that can accommodate community uses. The strategy promotes the principles of Liveable Neighbourhoods (subsequently reviewed and updated) and the linking of reserves and open space's to incorporate footpaths and cycleways, linking outlying residential areas.
Denmark Leisure & Aquatic Centre Feasibility Study (Denmark Community Swimming Pool Committee, 1998)	The report identified a number of aspects relevant to the current study: Fundraising for pool began in 1990. The assessment determined that a minimum requirement would be for a 25m x 6 lane pool to serve residents of the Shire. Operating costs in 1998 were estimated at $258,700 with an income of $200,976.

2.2 Additional Council Committee Reports

Over the past 15 years a series of reports have been presented to the Shire of Denmark Council in relation to the development of a swimming pool within the Shire. A selection of historic references is provided below to indicate the stance which has been undertaken during the most recent period in relation to support for a swimming pool facility:

11th September 2006: The recommendation noted comments received from DACCI regarding its concerns with the methodology of the report and its preference that the study not be proceeded with. It went on to state that given the projected operating and capital costs of an Indoor Heated Aquatic Facility and the sustainability of such, the completion of the feasibility study and the project not be proceeded with. The matter was however deferred pending receipt of further comments.

2nd January 2007: The report concluded "it is still a fact that capital and operating costs for a facility such as this are significant and Council needs to be cautious about raising its debt level by at least $1 million" The recommendation of the September 2006 committee was therefore carried.

26th August 2008: The provision of an aquatic facility was further reviewed by members following a request by DACCI to undertake an in-house study of the need for an Aquatic Facility. The recommendation for the council to engage in partnership with DACCI to assess the need for a sustainable indoor aquatic facility was supported.

26th May 2009: The report referenced the needs assessment report identified above and acknowledged that there is a need for an indoor aquatic facility in the Denmark locality.

2.3 Tourism Australia: Denmark Shire – Tourism profiles for Local Government Areas in Western Australia

This document highlights the tourism movement in a three or four year average too June 2007. Of the main highlights it indicates:

The Shire caters for 10,000 international visitors annually and 97,000 domestic overnight visitors.

The average contribution to the local economy is $1m from international visitors and $31M from the domestic market.

The average spend per night ($40) in the Shire is less than 50% of the state ($86) and and national average ($97) for international visitors. However the domestic market average spend for the Shire ($100) is slightly below the state average ($116) which is below the national average spend ($127).

The majority of international visitors (93%) visit the shire for holiday/leisure purposes with the top activities being eating out (81%) and going to the beach (75%).

The average stay in nights for international visitors is 2.7, whilst for domestic travel it is 3.2

Whilst visitors to Denmark contribute significantly to the local economy it is likely that such visits are short term in nature and are unlikely to significantly contribute to the financial viability of local community infrastructure. The main focus for both international and domestic visitors will be on natural and environmental attributes of the Shire

2.4 Strategic directions for Western Australia Sport and Recreation Industry: SD4 2006-3010

Of the challenges identified, SD4 states infrastructure planning and provision must embrace the principles of:

Sustainability.

Evidence based decision making.

Collaborative provision modelling.

Asset management and lifecycle costs.

Ensure that future generations have places to participate in sport and recreation. This will involve:

- The development of a range of innovative and creative participation opportunities;
- The development of partnerships with other key stakeholders and
- Identification of the contribution that sport and recreation provides in addressing health, education and social problems associated with physical inactivity.

2.5 Denmark Recreation Centre Overview

The existing Denmark Recreation Centre (DRC) is the location of the main sport and recreation infrastructure provided by the Shire. The Recreation Centre provides a wide range of "dry" programs and services for the general public, clubs, organisations and schools. A summary of the existing facility is outlined below.

DRC Location

Denmark Recreation Centre is located on Brazier St, Denmark, 1km south of the South Coast Highway. It is located 700m south east of Denmark Primary School and between 1.1km and 1.2km south-southwest of the Agricultural College, Denmark High School and Denmark Golf and Country Club.

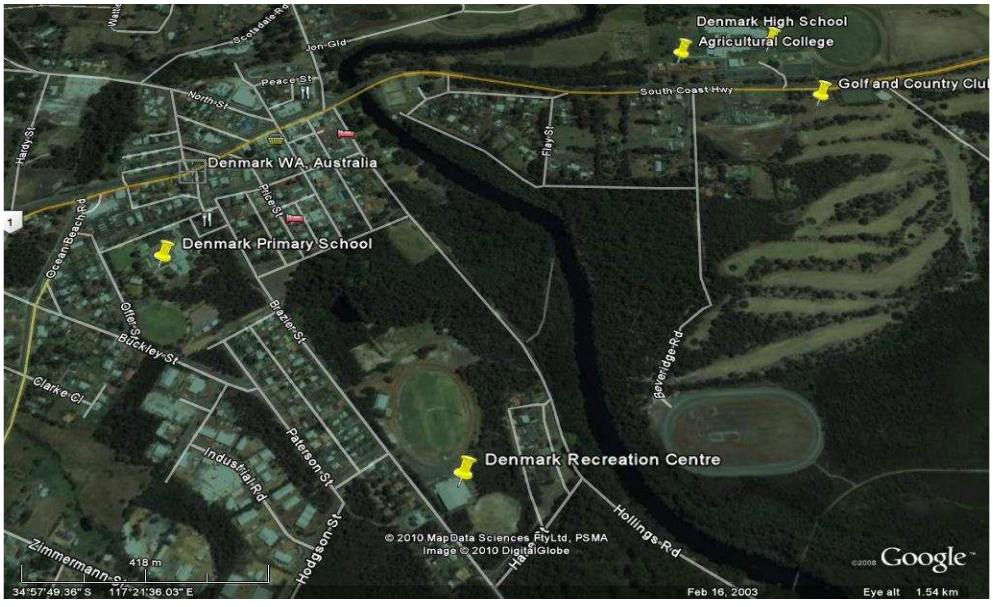


Figure 1: Location of DRC & Relationship with Other Key Education & Sporting Infrastructure

DRC Existing Facilities

The existing DRC has the following facilities:

A two court sports hall

Gym equipment and aerobics/ workout room

Crèche

Storage

Reception incorporating small snack retail

Offices and meeting rooms

DRC Hours of Operation

The DRC current hours of operation are:

Monday	7.30am – 8pm.
Tuesday	7.30am – 7.30pm.
Wednesday	6.30am – 8.30pm.
Thursday	7.30am – 10.30pm.
Friday	6.30am – 5pm.

Closed Saturdays, Sundays and Public Holidays.

In summary, the DRC is opened for approximately 3,200 hours per week.

Current Facility Usage

The following graph provides a summary of the DRC annual attendance levels[1].

Program or User Group	2006/07	% of Usage	2007/08	% of Usage	2008/09	% of Usage
Fitness/Gym Participants	2,191	10%	3,278	15%	8,172	29%
Denmark Basketball Association	3,258	15%	3,528	16%	3,615	13%
Denmark Netball Association	3,194	15%	3,163	14%	3,409	12%
Centre Operated Activities	4,254	20%	5,766	26%	5,822	21%
Denmark High School	1,881	9%	2,142	10%	2,120	8%
Total Centre Attendances	**21,110**		**22,100**		**28,116**	

Table 1: DRC Annual Attendance Levels

Based on the above information, the following is identified.

The average annual attendance for the DRC over the last three years is 23.7K.

[1] Provided by DRC Management.

3 Demographic Overview

The following section outlines the key demographic data for the Shire of Denmark.

3.1 Current Population

The 2006 census identified the Shire population as 4,509 people and these have been broken down into five year age groups and gender:

Age Cohort	Male	Female	Total	% of Population
0 - 4 years	119	108	227	5.0
5 - 9 years	160	160	320	7.1
10 - 14 years	149	158	307	6.8
15 - 19 years	191	114	305	6.7
20 - 24 years	61	53	114	2.6
25 - 29 years	70	67	137	3.1
30 - 34 years	72	118	190	4.2
35 - 39 years	118	162	280	6.2
40 - 44 years	189	190	379	8.4
45 - 49 years	185	205	390	8.7
50 - 54 years	176	177	353	7.8
55 - 59 years	203	209	412	9.1
60 - 64 years	171	184	355	7.9
65 - 69 years	137	118	255	5.6
70 - 74 years	91	92	183	4.1
75 - 79 years	73	70	143	3.2
80 - 84 years	30	49	79	1.8
85 - 89 years	26	35	61	1.3
90+ years	8	11	19	0.4
Totals	**2,229**	**2,280**	**4,509**	**100**

Table 2: Age Structure of Denmark Shire in 2006

The following provides a summary of the key information from the above table for 2006:

- The percentage of males in the Shire is 49.43%, whilst females make up 50.57% of the population.
- The age cohorts with the greatest population number are:
  - 412 or 9.1% of the total population are 55 - 59 year olds.
  - 390 or 8.7% of the total population are 45 - 49 year olds.

The ABS also makes projections of the kind needed for the financial analysis summarised in §12. The CCA Report chooses to ignore the most recent ABS projections in favour of much older and more optimistic WADPI estimates. As a consequence the population estimates in Appendices D, E & F may be too high. ***Issue #3-01.***

The following graph provides a summary of the age cohort breakdown of Shire of Denmark when compared to the Great Southern Region and overall Western Australian population.

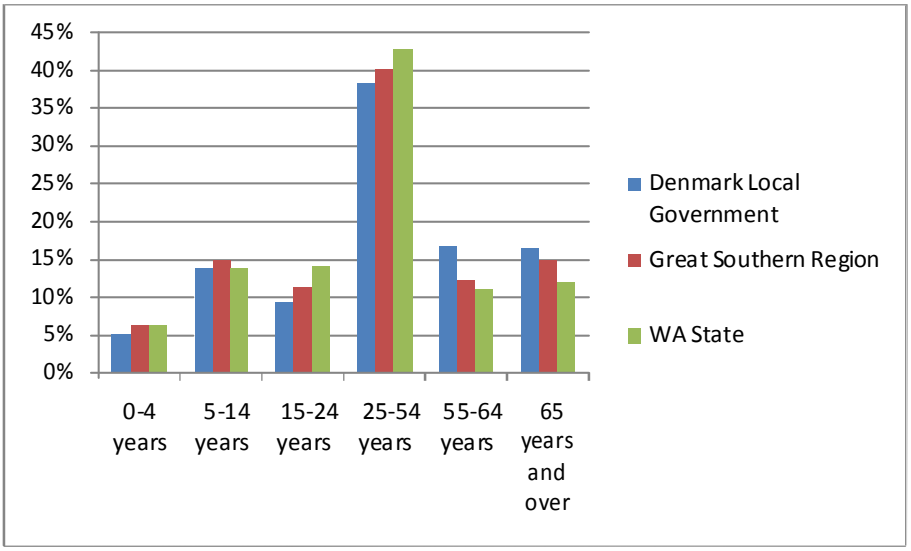


Figure 2: Age Structure of Denmark Shire compared to the Great Southern Region and WA State in 2006

The following information provides a summary of the above graph:

The Shire has a significantly lower population in the 15-24 and 25-44 age groups with much higher numbers in the 45-64 and +65 age groups.

The Shire has comparable numbers of 5-14 year olds to that of the State (13.9%), but significantly lower than the Great Southern Region (15%).

A total of 33.5% of the population are contained within the 45-64 years of age, (Baby boomers) this will have a major impact on services and facilities over the next 10 years which will increasingly need to cater for senior's activity, aged care and more passive recreational activities.

3.2 Family Household Type and Household Tenure

The figures below indicate the various family household types within the Shire of Denmark. A summary of the key findings is outlined below:

The largest proportions of Denmark Shire households comprise of "Couples" without children (48.3%). This is 10% above the current household composition across the WA State and almost 5% above the Great Southern Region.

Conversely there are fewer couples's families with children within the Shire of Denmark than the State and Great Southern Region. This would tend to support the indication of an aging demographic and the need to focus facility provision towards on older age range and contain a more balanced program of opportunities, rather than focussing on a strong family market.

Housing tenure analysis shows that a significantly high proportion of residents within the Shire of Denmark fully own their property (41.8%) compared to WA State (30.2%). This would indicate that the resident population is relatively affluent with generally a greater level of disposable income, particularly as the percentage of residents either purchasing

or fully owning their property is comparable across WA State, Great Southern Region and the Shire of Denmark (65%).

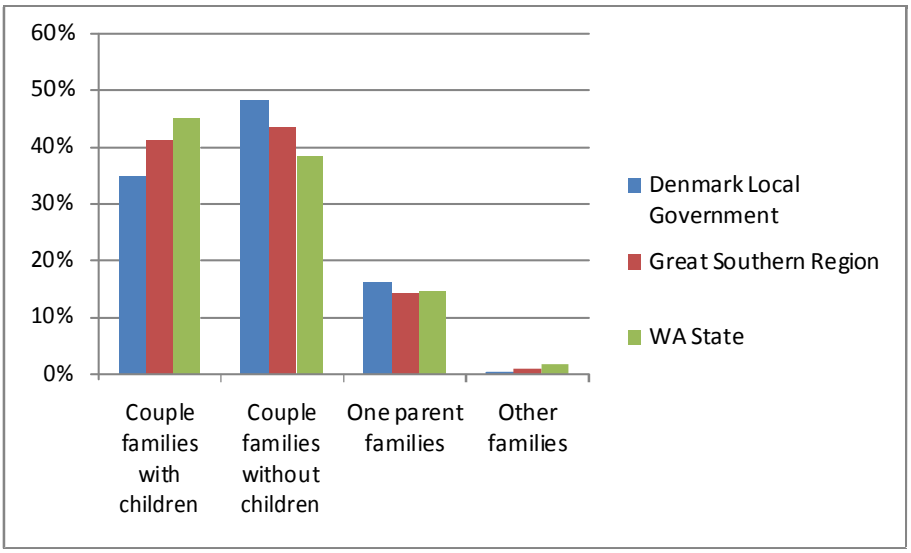


Figure 3: Family Household Composition

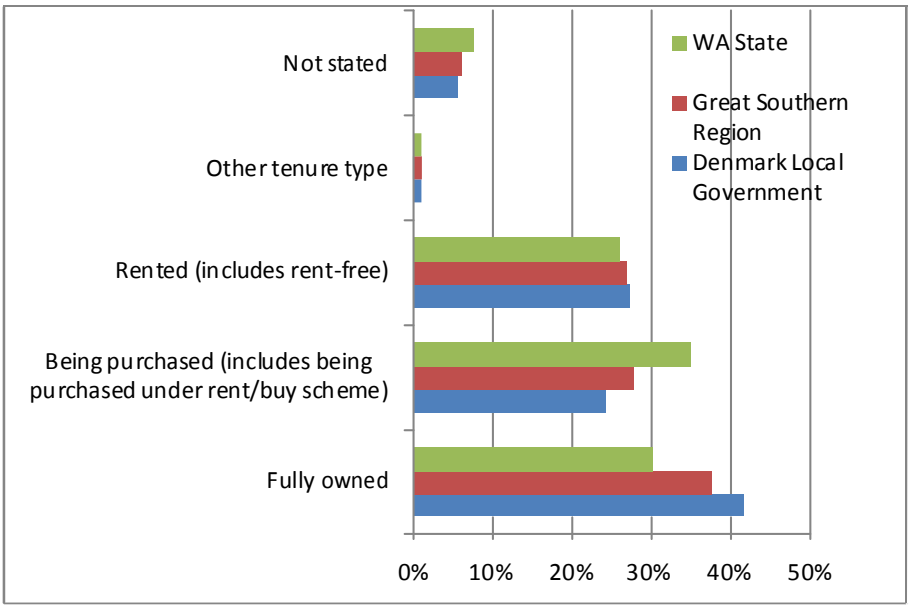


Figure 4: Housing Tenure

3.3 Employment Profile

The figure below shows the employment profile for the Shire of Denmark when compared to the Great Southern Region and WA State. A summary of the key findings is:

Whilst there is a slightly higher unemployment rate within the Shire compared to the State and Region this is marginal. Employment within the Shire is generally consistent with the Region and State averages. However the number of part time employment is

significantly higher within the Shire of Denmark (41%) than the state (28.4%), whereas full time employment is significantly lower for the Shire (46.9%) compared to the state (61%). The Great Southern Region also has significantly higher numbers of people in full time employment (57.7%) and marginally higher numbers of people in part time employment (29.9%)

There can be a number of explanations to such significant variations. It could indicate that the Shire has a high number of residents who undertake work as a social outlet rather than as a major income generator; or may indicate that residents may be employed within more localized service and agricultural industries which are seasonal in nature; or there is a lack of full time employment opportunities in the economy. Nevertheless it would indicate that a higher proportion of the working population could have a higher degree of available leisure time than comparable populations.

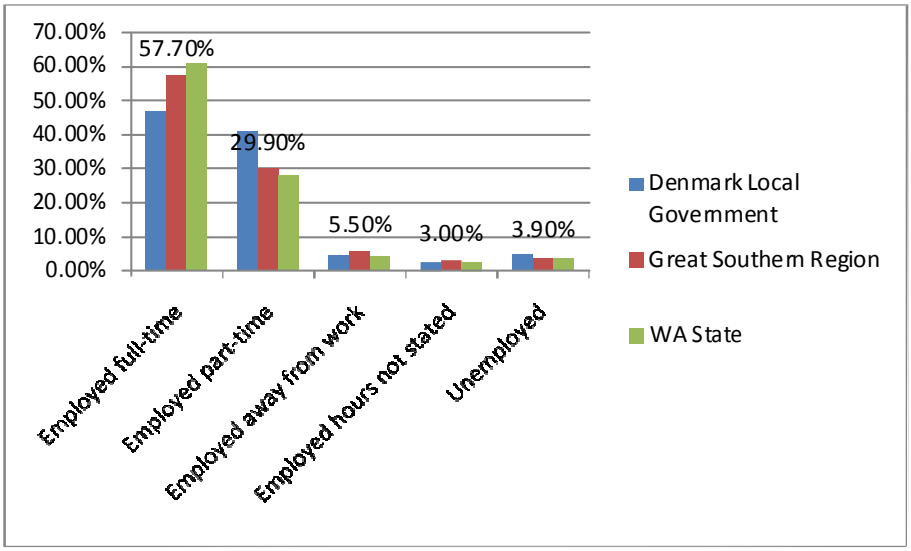


Figure 5: Employment

3.4 Social Characteristics

The relevant social characteristics of the Shire are given in the table below:

Item	Denmark	WA	Australia
Median age	44 years		37 years
Median weekly individual income	$362		$466
Median weekly household income	$641		$1,027
Mean household size	2.3 persons		2.6 persons
Australian born	3157 (70%)		70.9%
Overseas born	1077(23.9%)		22.2%
English speaking only	92.8%		78.5%

Table 3: Social Characteristics of the Shire of Denmark

This data indicates that the majority of Denmark's population (70%) is Australian born with a high level of English speaking households. The highest participating category of people in

recreational activities are Australian born with a participation rate of 57.6%. Of the overseas born, England has 12.3% followed by New Zealand 1.9%, Germany 1.2%, Scotland 1.2% and Netherlands 1.0%. The low levels of weekly individual and household income would however indicate that there is less disposable income for expenditure on leisure pursuits and paid access to facilities.

This observation is incomplete. Issue #3-02

3.5 School Enrolments

The figures below provide an indication of the likely school catchment of an aquatic facility. They are provided by the Department of Education and highlight current limitations in developing a facility which is focused on youth and family access.

Denmark Primary School

The following table provides a summary of Denmark Primary School enrolments.

Semester 2	2006	2007	2008	2009	2010
Pre-Compulsory (PPR Only)	39	40	42	51	52
Primary	379	379	397	395	434
Total	**409**	**419**	**439**	**446**	**486**

Table 4: Denmark Primary School Enrolments

As noted in the above table, total enrolments have varied from 419 to 486 with the most significant movement being in 2010 when enrolments increased by 9%. Prior to that enrolments have increased marginally, year on year.

Denmark High School

The following table provides a summary of Denmark High School enrolments.

Semester 2	2006	2007	2008	2009	2010
Lower Secondary	208	211	210	196	167
Upper Secondary	24	22	34	74	77
Total	**232**	**233**	**244**	**270**	**244**

Table 5 : Denmark High School Enrolments

As noted in the above table, total enrolments have varied from 232 to 270 with the most significant movement being in 2009 when enrolments increased by 11% and then dropped in 2010 to 2008 level. Overall enrolments had remained relatively consistent, although the enrolments in lower secondary have over the past two years shown a significant decrease, whilst numbers in upper secondary have shown a comparable increase.

3.6 Future Population

Population projections for the Shire of Denmark, as outlined below, are taken from Western Australia Tomorrow, Population Report No 6, November 2005 by the Department of Planning. The Department of Planning uses this data for future planning purposes and it is based on anticipated changes to the natural population increase, immigration and interstate migration. In addition the calculation includes local economic intelligence and multiplier affects from known development projects.

Item	2011	2016	2021	2026	2031
Projected Population	6,096	6,756	7,301	7,746	8,094
Increase on 2011	NA	10.8%	19.8%	27.1%	32.8%

Table 6: Population Projection for the Shire of Denmark

It is anticipated that the Shire of Denmark population will increase by approximately 32% in the period 2011 to 2031. This however needs to be tempered against the Shire's current experience which is indicating that population growth is not keeping pace with land acquisition. Nevertheless growth will be relatively low over a 20 year period in comparison to significant growth areas in WA which are experiencing between 4% to 6% growth per annum.

3.7 Conclusions

The above demographic analysis has highlighted a number of key issues in respect of current and emerging population characteristics and will be used to inform the subsequent Demand Assessment.

The DPI projections referred to here are by now very old. The Needs Assessment Report (Jill Powell) recommended caution in using them since they are likely to overestimate population growth. Issue #3-03.

4 Sports Participation Trends

4.1 National Participation Trends – ERASS

The Australian Sports Commission (ASC) conducted its ninth annual Exercise, Recreation and Sport Survey (ERASS) in 2009 to measure Australians' participation in physical activity for exercise, recreation and sport.

ERASS collects information on the frequency, duration, nature and type of activities that are participated in by persons aged 15 years and over for exercise, recreation and sport during the 12 months prior to interview.

ERASS reports are available annually, compared to the physical participation reports generated by the Australian Bureau of Statistics Census which are produced once every five years. The benefit of ERASS therefore is the opportunity to access research data on an annual basis.

4.1.1 Western Australia Specific

The following table identifies the ten most popular activities and participation rates undertaken by Western Australian's compared with National participation rates. 55 sports are assessed through this research.

Rank	Activity	WA-2009	National 2009
1	Walking (other)	37.2%	36.1%
2	Aerobics/fitness	26.2%	22.9%
3	Swimming	17.6%	14.1%
4	Cycling	14.5%	11.1%
5	Running	11.3%	11.0%
6	Golf	6.3%	6.4%
7	Tennis	5.4%	6.4%
8	Basketball	4.2%	3.9%
9	Netball	4.2%	4.0%
10	Football (outdoor)	4.1%	5.1%

Table 7: Western Australia Participation Rates Compared with National Participation Rates

As shown in the above table participation in aerobics/fitness and swimming is considerably higher in Western Australia compared to National participation. Aerobics/fitness and swimming are consistently the 2nd and 3rd most popular activities both nationally and within WA.

The following table identifies the ten most popular activity rates in Western Australia for the period 2006 – 2009 and highlights the fact that the trend in participation in both activities is upwards with a slight decline in 2007, a result which was experienced by all sports in that year.

WA Rank	Activity	2009	Activity	2008	Activity	2007	Activity	2006
1	Walking (other)	37.2%	Walking (other)	40.1%	Walking (other)	33.1%	Walking (other)	37.8%
2	Aerobics/fitness	26.2%	Aerobics/fitness	23.3%	Aerobics/fitness	20.4%	Aerobics/fitness	22%
3	Swimming	17.6%	Swimming	16.9%	Swimming	14%	Swimming	16%
4	Cycling	14.5%	Cycling	13.6%	Cycling	10.7%	Cycling	12.3%
5	Running	11.3%	Running	9.3%	Running	8.4%	Running	9.4%
6	Golf	6.3%	Golf	6.7%	Golf	5.7%	Golf	7%
7	Tennis	5.4%	Basketball	5.6%	Walking (bush)	5.2%	Tennis	6%
8	Basketball	4.2%	Tennis	5.5%	Tennis	4.5%	Netball	5.3%
9	Netball	4.2%	Australian football	5.2%	Basketball	4.1%	Australian football	5%
10	Football (outdoor)	4.1%	Walking (bush)	4.6%	Netball	3.5%	Walking (bush)	3.9%

Table 8: Western Australian Participation Rates by Activity 2006 – 2009

Main conclusions from the ERASS Report in relation to WA:

The most popular activities in Western Australia are walking, aerobic/fitness, swimming and cycling.

In Western Australia in 2009, total participation by the 15-24 years age group was 92.4%, which declined to 71.5% for persons aged 65+ years.

There was a higher rate of participation in Western Australia than Nationally for all age groups. Only ACT has a higher participation rate than WA (87.4% compared to 85.0%).

Total participation in organised physical activity within WA is 39.6%, which is lower than the national average of 39.8%.

4.1.2 National Trends

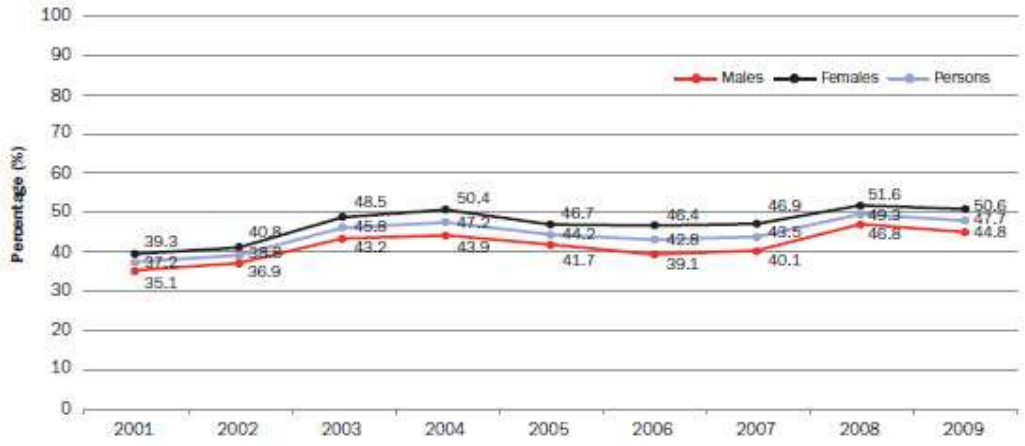
The regular participation rate in any physical activity increased by 10 percentage points between 2001 and 2009 (from 37.2% to 47.7%). This increase occurred for both men and women, although the increase was greater for women. The increase in regular participation rates was almost entirely explained by an increase in participation in non-organised activities.

The median frequency of participation in physical activity was 2.5 times per week in 2009. Women (3.0 times per week) tended to participate more frequently than men (2.2 times).

An estimated 8.2 million persons, or 47.9% of the population, participated for two hours or more per week in the two weeks prior to the interview in 2009.

The table above shows that walking, aerobics/fitness, swimming and cycling are consistently the most popular sport and physical activities on a national and regional level. At WA state level participation in Australian Rules Football, Basketball, Cycling and Swimming is generally consistently higher than the national averages.

Activities experiencing large declines in participation between 2001 and 2008 included tennis (-21% over 2001) and golf (-11%). Swimming has remained relatively constant.



Base: All persons aged 15 years and over in 2009 (n=21,031); in 2008 (n=17,293); in 2007 (n=16,400); in 2006 (n=13,708); in 2005 (n=13,726); in 2004 (n=13,662); in 2003 (n=13,703); in 2002 (n=13,632); and in 2001 (n=13,424)

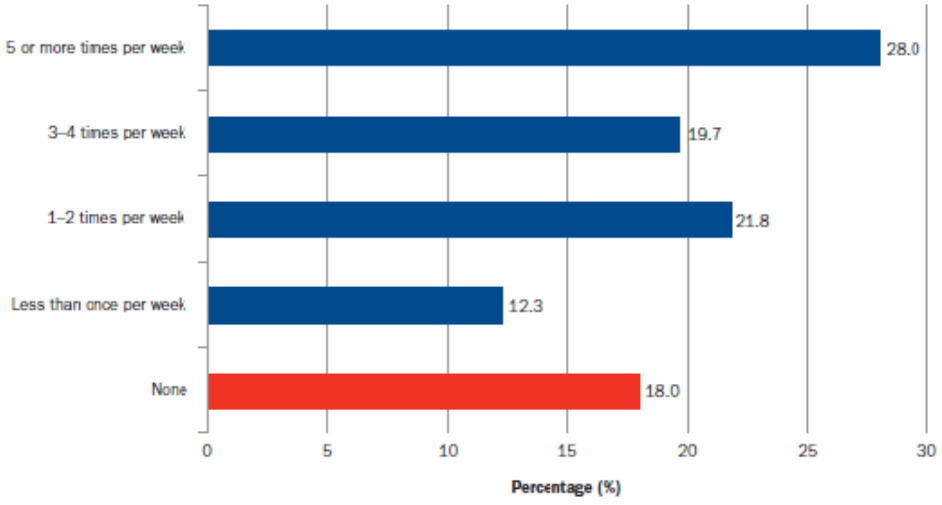
Figure 6: National Sports and Recreation Participation: ERASS Report 2009

Almost all participation in cycling and running was non-organised, and most participation in swimming was non-organised.

4.1.3 National Trends - Organised Participation

Definition: "Organised physical activity' is physical activity for exercise, recreation or sport that was organised in full or in part by (1) a fitness, leisure or indoor sports centre that required payment for participation; (2) a sport or recreation club or association that required payment of membership, fees or registration; (3) a workplace; (4) a school; or (5) any other type of organisation."

The total participation rate in organised physical activity was 39.8% in 2009. About half of all participation in physical activity was partially or fully organised (48.5%).



Base: All persons aged 15 years and over (n=21,031)

Figure 7: Frequency of Participation (ERASS Report 2009)

Unlike non-organised participation, the regular participation rate in organised physical activity increased only slightly between 2001 and 2009. (3.4 percentage points for males; 2.4 percentage points for females).

Regular participation in organised physical activity was higher for males in the 15 to 34 years age group and higher for females in the 35 to 64 years.

While participation in non-organised physical activity increased with age, regular participation in organised physical activity was most common among those aged 15 to 24 years, regardless of gender.

Those still at secondary school had the highest regular participation rate in organised physical activity.

The top-ten organised physical activities in 2009, in terms of total participation rate, were aerobics/fitness, outdoor football, netball, golf, tennis, basketball, Australian rules football, outdoor cricket, lawn bowls and touch football.

4.1.4 National Trends - Non-organised participation

Definition: "Non-organised physical activity' is physical activity for exercise, recreation or sport that was non-organised in full or in part (that is, not fully organised by a club, association or other type of organisation)."

The regular participation rate in non-organised physical activity increased 11 percentage points between 2001 and 2008, and the 2009 rate was similar to the 2008 rate. The increase occurred for both males and females. Overall increases in physical activity were mainly due to increases in non-organised participation.

The total participation rate in non-organised physical activity was 70.7% in 2009.

Women, regardless of employment status, had higher regular participation rates in non-organised physical activity (42.5%) than men (35.3%).

Regular participation in non-organised physical activity gradually increased with age for males and females, peaking at 55 to 64 years among women. Women aged between 55 to 64 years were the most active in non-organised physical activity, with a regular participation rate of 50.6%.

Regular participation rates in non-organised physical activities were lower than average among persons speaking a non-European language at home.

The top-ten non-organised physical activities in 2009, in terms of total participation rate, were walking, aerobics/fitness, swimming, cycling, running, bushwalking, tennis, golf, surf sports and weight training. Almost all participation in cycling and running was non-organised, and most participation in swimming was non-organised.

4.2 National Sports Participation Trends (ABS)

The following information is sourced from the ABS publication – Sport and Recreation: A Statistical Overview, Australia (2008), and relates to the participation patterns for all Australian residents and collates data from a number of studies:

Participation in Sport and Physical Activities Australia 2005-06 for people aged over 15 years.

Children's participation in Cultural and Leisure Activities, Australia 2006 for ages 5-14

National Health Survey, Summary of Results 2004-05

The main participation trends are:

Overall, 65.9% of Australians aged 15 years and over (10.5 million) participated in sport or physical activity during the 12 months prior to interview in 2005/06. Of these persons 4.4 million participated in organized sports and physical recreation. Western Australia had the second highest participation rates of all states at 70.5% (1.1 million people).

The most popular physical recreation activity for both sexes was walking for exercise with participation for females (32.8%) being almost double that of males (16.5%)

Males had a marginally higher participation rate (66.0%) than females (65.7%) in sport or physical activity with males more likely to participate in organized sport than females.

Participation rates were the highest for the 25-34 year age group (75.1%), and declined steadily with age, where the rate for persons aged 65 years and over was 49.4%.

1.7 million children between the ages of 5-14 (63.5%) participated in organized sport outside of school hours during the 12 months ending April 2006. 68.9% were male and 57.8% female.

The most popular organized sports for boys were soccer (19.6%), swimming (16.5%) and Australian Rules Football (13.8%). The most popular organized sports for girl were netball (17.3%), swimming (18.2%) and tennis Football (6.6%).

4.3 Sports Participation Trends - Children

A recent National survey of children's participation in Cultural and Leisure Activities (ABS April 2009) presents data on a range of cultural and recreational activities, including participation in organised sports and use of the Internet. The study includes children aged from 5 to 14 years inclusive and both state and national data is presented in respect of sport activities that:

A comparison of the data from 2003 to 2009 shows that the participation rate in organised sport did not increase significantly (62% in 2003 to 63% in 2009).

Participation rates for males in at least one organised sport did not change significantly over the six year period. After showing an increase of three percentage points from 54% in 2003 to 57% in 2006, female participation rates in at least one organised sport did not show any significant change in 2009 (56%).

An estimated 1.7 million (63%) children participated in at least one organised sport outside of school hours, in the 12 months to April 2009. Participation in organised sport was highest among 9 to 11 years olds at 68% compared with 58% for 5 to 8 year olds and 65% for 12 to 14 year olds.

Participation rates were higher for boys across all age groups compared with girls, with the greatest difference being between 12 to 14 year olds (boys 74% compared with girls 55%).

In 2009, the most popular sport for children was swimming with a participation rate of 19% (502,900). This was followed by outdoor soccer at 13% (360,400) and Australian Rules football at 9% (235,100).

For boys, the most popular sports were:

- Outdoor soccer (20% or 277,800)
- Swimming (17% or 240,100)
- Australian Rules football (16% or 223,700).

The sport's most popular among girls were

- Swimming (20% or 262,800)
- Netball (17% or 225,000)
- Gymnastics (8% or 101,200).

5 Consultation and Demand Assessment

The following information provides a summary of the key outcomes from the consultation undertaken during the feasibility study. The initial section provides further analysis of the data provided in the needs study to gain an understanding of the general facility composition and aquatic requirements of those that responded.

5.1 Needs Analysis Consultation

As part of the needs analysis consultation undertaken in May 2009 a number of questions were asked of the residents and non-residents of the Shire of Denmark. Whilst overwhelming support was given for an indoor pool, it was not clearly evident, the facility composition, respondents were seeking. In order to analyse the data further the following conclusions can be reached:

67% of residents and 38% of non-residents identify the pool as the highest priority for the Shire (equating to 59% of all respondents).

The lowest response rates to the survey were within the 21 to 40 age range, which is reflective of the population demographics, which indicate a high aging population and a relatively significant primary/early high school population.

Included within the analysis was the provision of a hydrotherapy pool which was considered separately to an indoor pool. When combined, the demand for aquatic water space increases.

41% of resident respondents indicated they could either not swim or not swim very well. The highest proportion of these were in the 1-10 age group, tending to indicate that there would be a significant demand for learn to swim programs.

There was a high level of good to strong swimmers in the age group 11-20 and between the ages of 41 to 60. This indicates that current swimming programs either within Denmark, the neighboring City of Albany or Shires of Manjimup and Plantagenet are providing opportunities for juniors to advance and middle to old age adults to sustain their swimming capabilities.

Of particular concern is the number of non-swimmers or poorer swimmers above the age of 50. It is quite clear from this analysis that safe indoor provision is required for the aging and younger members of the resident population, which is reflective of the potential future demographic growth of the area.

The attractiveness of Albany Aquatic Centre for residents of Denmark in both summer and winter is comparable. It indicates that those members of the community who are prepared to travel the 50km to Albany will undertake the journey irrespective of the seasonal fluctuations in temperature. The attractiveness of the facility therefore remains relatively consistent throughout the year.

With regards to the type of facility residents within Denmark would use once a fortnight or more, the use for joint mobility, rehab/hydrotherapy, physical health, were strong amongst the older elements of society and in total represented 22% of respondents. Other program activities (Learn to swim, weight loss, water aerobics) accounted for 27% of respondents whilst recreation accounted for 17%, lap/fitness swimming for 16% and social interaction 12%. In addition water sports were identified as a 5% response. This indicates that any facility should provide a high degree of programmable/flexible water space, for a variety of fitness and health activities and limited traditional lap based activity.

- Respondents when asked the question how often would they expect to use an aquatic centre, residents predominantly indicated that they would use the facility once a week or more. The very youngest and middle aged and above being the most significant respondents. This is again reflective of the demographics of the Shire.

5.2 Shire and Industry Consultation

5.2.1 Shire of Denmark CEO - Shire President and Deputy Shire President

A meeting was held with the Chief Executive Officer, Shire President and Deputy Shire President to ascertain the position of the Shire with regard to the development of an aquatic facility. The following represents a summary of the main points raised:

- The most critical aspect's for council consideration are:
  - The need to clearly identify the risks associated with the potential development (particularly financial).
  - Clearly identify the assumptions that have been put into the operating model.
  - Clearly demonstrate and evidence likely throughput and ongoing operational costs.
- The Shire does not have cash reserves or donors to underwrite a facility which operates at a substantial loss and this is a significant consideration.
- Solar energy with innovative design would be looked on positively with a potential staging component to address future population growth
- Historically growth rate is 1.3%. The take up of land for permanent residents within the Shire is not matching land availability (growth is currently identified as between 2 – 2.25%).

5.2.2 Royal Life Saving Society

A meeting was held with a representative of the Royal Life Saving Society and the main points are reflected below:

- The cost of water is a significant issue at present and moving forward with significant annual expected increase in charges.
- Innovative approaches to water retention and storage is required in any new development.
- For program use, no more than 1.5m depth is required and there is a tendency to utilise 25m pools for program purposes when not required for lap swimming.
- It was recommended that an innovative and flexible approach to satisfy needs of small community is required within the Shire of Denmark and not necessarily a standard pool configuration.
- The single problem with the majority of pools in WA is that they provide the same service. There is a need to avoid replication.

The last bullet point here is challenged. In a follow-up conversation with the Director of the Leisure Institute of WA and the Manager of the Royal Life Saving Society it was made clear that the original comment to CCA should not have been interpreted as advice relevant to the needs of a small rural community such as Denmark. Rather, it might be more appropriate to metropolitan or regional communities where choice between several alternatives could be entertained.

5.2.3 Swimming WA

A meeting was held with the Chief Executive Officer of Swimming WA who highlighted the following areas for consideration:

- Generally across WA there is sufficient competition space to satisfy the needs of swimming.
- A significant problem within WA is the quality of some provision which is poor and in need of upgrade, modernisation, refurbishment or replacement. One of the biggest failures with current pool provision is either under utilisation or poor programming.
- Membership of Swimming WA has stayed consistent between 5,500 and 7,500 since 1984. The construction of new pools is unlikely to result in the creation of more swimming clubs.
- The current partnership model in Rockingham between the facility and local swimming club (which undertakes work to generate cost recovery) is highlighted as good practice to be followed.
- Key issues for the future are to get more people involved to build the base of pyramid (volunteers, coaches, officials) and a need to plan where organised sport goes.
- Currently the cost for an individual is great, time commitment is huge and few people want anything other than "fast food" sports.

5.3 Consultation with targeted user groups

On the advice of the Project Group a number of key potential user groups were contacted at the outset of the study. They were specifically asked questions with regard to their preferred facility type, preferred location, likely use and usage and ability to pay. The following table represents the comments received by specific user groups:

Consultee	Facility type	Location	Use	Usage	Ability to pay
Primary School	25 x 6/8 lanes	Primary School or Recreation Centre	Learn to swim and galas	6/8 hours per week (1 term)	Yes – through DoE
Secondary School	No preference	Recreation Centre	Limited	10 weeks (2 periods per term – 80 pupils)	Limited
Agricultural College	25 x 6 lane pool	Recreation Centre	Limited	Early morning and evening	Limited (pass costs on to parents)
Hospital	Hydrotherapy	Recreation Centre	Limited	Occasional rehabilitation	Yes
Physiotherapy	Hydrotherapy and lap pool	Recreation Centre	Rehabilitation	Regular (tbc)	Yes
Over 50's	Hydrotherapy and program pool	Recreation Centre	Extensive for rehabilitation	Regular (3 – 5 hours per week)	Yes
Surf Club	Preference for lap swimming but not essential	No preference	For certification purposes	Sept/Oct qualification updates (60 people)	Yes

X

This Table paints a misleading picture. It may be a correct record of the Consultant's impressions at the time of the interviews, but we have subsequently been advised that those interviewed felt that they were being asked to make financial commitment when they were in no position to do so. Issue #5-01.

It was clear from the comments received that the Recreation Centre was the preferred location for a facility and that a combination of a 25m lap facility and hydrotherapy facility would be desired.

5.4 Respondents to an Independent Survey (by DACCI)

During the consultation process DACCI contacted their members independently for a view on the preferred facility composition. 170 responses were received and the following summarises the views expressed with regard to the potential pool usage:

Lap	Hydrotherapy	Learning to Swim Classes	Aquaerobics
152	20	40	4

Figure 9: DACCI Survey

In addition many respondents expressed their desire for formal lap facilities. Below is a selection of comments received:

- I would like to have the option to go swimming other than in the ocean.
- If there was a swimming pool in Denmark I would use it every week for swimming lessons for my two children.
- At present we travel to Albany around once a fortnight for a social family swim with the kids, to try and improve their swimming skills and to keep fit through swimming laps/walking against the whirl pool for conditioning/toning.
- Having a pool with lap swimming lanes is a critical feature of the Denmark swimming pool, each of my family members would use this facility often at least four times a week if we able and at least twice weekly as a minimum.
- I enjoy swimming for fitness and have not been doing it for the last 3 years because Albany is too far away. If Denmark had a pool with lap facilities I envisage that I would use it 3-4 times a week.
- My husband and I would indeed use a lap lane on a weekly basis, for general exercise. Our two children would use the pool for structured swimming lessons and for practice and fun in our free time.

5.5 Additional Questionnaire

An additional consultation process was undertaken as part of the data collection and collation process to ascertain the general communities view on the type of pool infrastructure provision desired. This involved the distribution of a survey to 1,000 residents (random distribution to 1,000 ratepayers). The survey was specifically targeted to identify a range of swimming pool configurations on which respondents were requested to rank in order of preference (on a scale of 1 to 10, with 1 being the highest priority. The pool configurations were identified as:

- 25m x 8 lane lap pool
- 25m x 6 lane lap pool
- Hydrotherapy pool
- A non-traditional "L" shaped pool accommodating 3 to 4 25m lap lanes and a smaller body of water attached.

Additional aquatic infrastructure was also identified and respondents were similarly requested to rank in order of priority. Further questions were raised on entry price for a 6 or 8 lane facility and a facility containing a hydrotherapy facility. The questionnaire is attached as Appendix A.

The survey attracted 437 responses but due to the ambiguity associated with some when responding to the pool configurations, this, following discussion with the Project Reference Group, was reduce to 380 legitimate responses,. The results are provided in the table below:

Facility Type	No. of respondents ranking 1-3	No. of respondents to question	Percentage of respondents to Question ranking 1-3	Percentage of respondents to Questionnaire ranking 1-3
25m 8 lane lap pool	163	239	68.2	42.9
25m 6 lane lap pool	168	226	74.3	44.2
Hydrotherapy pool	214	287	74.5	56.3
Multi functional "L" shaped pool	304	334	91.0	80.0
Water Play area for children	170	290	58.6	
A spa	40	165	24.2	
A sauna	26	131	19.8	
A steam room	11	115	9.6	

Table 10: Additional Survey Results

From the responses to the questionnaire it can be seen that the favored water space configuration was the multi-functional "L" shaped facility. In addition the provision of a hydrotherapy pool ranked high amongst respondents. This trend supports the broad conclusions reached when re-assessing the data presented in the 2009 needs assessment. The demand for a spa, sauna and steam room facilities is relatively low and not considered to be a high priority for the development of an aquatic facility in Denmark.

When questioned about the price users would be prepared to pay per entry for a 6 or 8 lane lap pool facility 29.5% of respondents identified $5 as the optimum entry price, with the range of $4-$8 being the most common response.

When questioned about the price users would be prepared to pay for an aquatic facility providing opportunities for a multi-use pool, incorporating a lap facility and separate hydrotherapy facility 19.7% identified $5 as the optimum entry price with a range of $5 to $8 being the most common response. However 16.7% referencing $10 as an optimum entry price. The entry price for both facilities of approximately $5 is slightly higher than the industry benchmarks for adult swimming in WA, which is generally at $4 to $4.50. However, given the response received, a $5 cost entry for adult swimming is to be used as the optimum level for adult swim at the Denmark Aquatic Centre for the purpose of financial modelling

(i) The totals shown here are not correct.
(ii) The questionnaire confused many recipents and was generally felt to have been biased in favour of the L-shaped pool which, by implication, would be the only one capable of multi-functional use (which is not the case).
(iii) It also failed to clarify the fact that the hydrotherapy pool would be additional to, rather than in competition with, the preferred option.
(iv) Finally, the conclusions are not justified by the observations - even when corrected. Issue #5-02.

5.6 Civic Centre Pool Meeting

On 22nd July 2010 a community meeting attended by 117 persons was held. A number of comments were raised by interested individuals and the main comments raised are identified below:

- There will be a high demand for learn to swim.
- Questions were raised about the health benefits and the potential financial input of the health authority. It was explained that detailed research and analysis of health benefits were not part of this study and the health authority were most likely to contribute to ongoing running costs rather than capital build.
- Concern was raised over potentially building a pool which would be too small.

5.7 Potential Demand

Based on the consultation undertaken the demand for a heated indoor aquatic facility is shown in the following table:

Group	Program	Comments
Denmark Primary School	Carnivals	Currently use Albany
	Learn to Swim	Currently use Mount Barker or Albany
DHHS	Recreational	By individual patients rehabilitating
	Therapy	Structured health assistance on a one to one basis (hydrotherapy pool)
Other Health Service Providers	Recreational	Occasional after school use but limited use (walking lanes, general physiotherapy)
	Therapeutic	Occasional through rehabilitation program (hydrotherapy pool)
Community	Recreational	Lap swimming and general family use
	Various programmed use	Aqua aerobics, health and fitness, learn to swim
Surf Life Saving	Recreational	Lap swimming and general fitness
	Certification	Primarily Sept/Oct prior to surf season (Dec- March)
Denmark High School	Recreational	General recreational and lap swimming (infrequent). Currently prefer the natural environment
Agricultural College	Recreational	General recreational and lap swimming (infrequent)
Over 55's	Recreational	General recreational swimming
	Therapeutic	Regular joint and health sessions if hydrotherapy available

Table 11: Expressed Demand by Group

As shown in the above table the expressed demand for aquatic facilities are:

Although these conclusions may reflect the Consultant's impressions gained from a single interview with a spokesperson, those marked with an X are challenged. Issue #5-03.

X

... and fitness

- Schools - The local Primary school use the existing pool for swimming carnivals and learn to swim programs. The High School does not envisage significant future use.
- DHHS - Would use a proposed aquatic facility on irregular basis if warm water (hydrotherapy) were available.
- Other Health Service Providers - Current physiotherapy assistance is limited through lack of available space.
- Community - Currently use Greens Pool for general swim, but limited to summer months due to temperature. Demand is generally for a facility to serve the population outside of the summer months. Albany pool is used on an infrequent basis to cater for some of this demand.
- Agricultural College - would offer the service to students on the basis they pay.
- Over 55's - mainly for social, recreational and rehabilitation use. Recognise the value of warm water space to address low impact recreational opportunities for an aging community. ... and fitness
- Swim Club - Currently utilise the seasonal pool for club training and hosting one swim carnival. The majority of swim club members buy a season pass to enter the pool and are not charged any other entry fees. Does this refer to Albany or the ocean?

X

√

√

X

X

X

5.8 Competitor Analysis

There are no indoor pool facilities located within the Shire. The most accessible indoor heated pool to Denmark is located in Albany, which is over 50 kilometres away. An outdoor 50m pool at Mount Barker is located over 50 kilometres from Denmark.

	Indoor Elements					Wet Facility Pricing		Aquatic Programs	Comments
Facility Name	25m	Program	Learners	Hydrotherapy		Adult	Concession		
Albany Leisure and Aquatic Centre	√	√	√	X	√	$4.30	$3.40	Aquarobics, Fab 50's, school swimming, Vac Swim, mother and baby, Squad and adult lessons	Concessions available in 3,6 and 12 month blocks.
Manjimup Regional Aquatic Centre	√	√	√	X	X	$4.70	$3.50	School Swim lessons, Learn to Swim, Various fitness	
Mount Barker Pool	X	X	X	X	X	$4.00	Various	Swimming Club Training, Vac Swim, School Lessons	

Table 12: Comparative Analysis of Swimming Pool Provision

This comment is about the Shire's Budget, not the facility itself.

This pool is therefore closed for six months every year.

Whilst the public indoor heated pool at Albany attract users from within the Shire of Denmark it is unlikely any proposed indoor aquatic facility in Denmark will draw any significant number of users from the City of Albany and the adjacent Shires of Plantagenet (Mount Barker facility) and Manjimup (Manjimup Regional Aquatic Centre).

There is an alternative perspective on this point. Issue #5-04.

The columns headed "Potential Implications", in the following pages 28-30, imply a knowledge of future trends within various age groups that is supported nowhere in the remainder of the Report. In cases where this is relevant, the stated implication should be treated as an unsubstantiated opinion, rather than substantial evidence.

5.9 Key Demographic Implications

The key potential implications from the demographic profile in relation to provision of aquatic and recreation facilities include:

Population Profile & Projections

Issue/Characteristic	Potential Implications
• 2006 population 4,509 people. • Average age, 44 years. • Median weekly income $362 which is low comparable to metropolitan and other active (resource intensive) rural areas • Median weekly household income $641 • For 2007-8 ABS growth rate for Denmark was identified at 2.8%, which is comparable with Perth Statistical division and above Albany (2.1%). • Average growth is forecast at 1.6% (2.6%) to 2021, significantly higher than Western Australia at 1.3% and Albany at 0.7%: (Reference WAT). • The population is forecast to reach between 7,301 by 2021 and 8,094 people by 2031. • Age 65+ represent 16.4% of the population compared to a state average of 11.7%.	• Strong and sustained population growth will drive demand for access to additional recreation facilities and services. • Median individual and family weekly income is low and may have an implication on the ability for people to pay for the use of community facilities. • Due to the high level of an aging population demand for facilities to treat illnesses and diseases associated with age (arthritis, joint, muscle and nerve problems) is likely to be at its greatest. • This factor is expected to drive demand for access to age appropriate recreation facilities and services, for example recreational, rehabilitation and participation opportunities, rather than more formal organised/competitive infrastructure.

Young Families

Issue/Characteristic	Potential Implications
• The percentage of young families with children is expected to continue declining (slightly) in the Shire as a percentage of population. • Whilst there is expected to be a substantial increase in 25 to 34 age range from 7.3% in 2006 to 12.9% by 2021, there will be a commensurate drop off in ages 40 to 49 from 17% to 10.3%.	• The level of demand for children's recreation services and facilities is unlikely to increase significantly from current levels • The significantly lower than average population between the ages of 15 to 39 years, are the years where people are most active in terms of their potential use of sport, leisure and recreation facilities or services for both family and individual use

Ageing Population

Issue/Characteristic	Potential Implications
• The population will continue to age (increasing the proportion of people aged over 65 years from around 16% of the population to around 23.7% by 2021 (WAT). • The proportion of older adults (55+ years) in the Shire (31.4%) is significantly higher than the State average of 22.5%. This will increase to 38.5% by 2021. • Approximately 33.5% are aged 45-64 years compared to a state average of 25%.	• Aquatic facilities and services will need to be responsive to the needs of older adults. • Demand for unstructured (informal) aquatic facilities and low impact physical activity related social activities. • The aquatic facility will need to be accessible for older adults (mobility and transport access). • Low impact aquatic programs are likely to be in demand. • Perceptions of public safety are a major concern for older adults, therefore the need for safe/accessible (sealed and well lit) paths and facilities is important.

Adult (40 - 54 years)

Issue/Characteristic	Potential Implications
• The proportion of people aged 40-54 years was 24.9%, which is higher than State average of 22.3%.	• This age group has a lower participation rate in formal organised sport compared to younger age groups. Aquatic facilities and services will need to provide a range of flexible, casual participation opportunities.

Young People (15 - 24 years)

Issue/Characteristic	Potential Implications
• The proportion of people aged 15-24 years was 9.3%, which is lower than State average of 14.4%.	• The transition of junior sports participants to active participation may experience a decline. This will impact on programming and the type of water space required.

Children (0 - 14 years)

Issue/Characteristic	Potential Implications
• Approximately 18.9% of the Shire population are aged 0-14 compared to a state average of 20.2%. • Ages 0-14 will represent 16.3% of the population in 2021.	• A declining proportion of families with young children and the declining overall proportion of 0-14 year olds will impact on the water space required. • The school age population is however comparable to the Metropolitan average which would indicate a sound base for learn to swim and casual play space.

6 Site Analysis

As part of the research an initial site analysis was undertaken. A number of sites were suggested by the project steering group and through the consultation process. The initial site assessment focused on the following:

Site Criteria	Rationale
Size and Shape	Potential ability to accommodate an aquatic facility and associated infrastructure (car parking, landscaping)
Ownership	Within the control of the State or Shire (preferably)
Zoning	Community Use
Existing Uses	Would be compatible with the operation of an aquatic facility
Ground condition	Stable and relatively flat site
Power, Water, Sewerage	All existing service infrastructure supplied with capacity to meet requirements for an aquatic facility
Impact on Residential Amenity	Minimal impact on neighboring residential properties
Location to Schools and Colleges	Within close proximity of significant user base
Site Accessibility	Excellent access for car, cycle, bus and pedestrians
Support from current users	Existing site operations should not be compromised by the development of an aquatic facility.
Relationship to Identified Market Catchment	The primary catchment is the Shire administrative centre of Denmark. Therefore the facility needs to be located centrally within the town.

Table 13: Site Analysis Summary

As a result of this initial analysis the following sites were considered appropriate for further assessment:

Denmark Recreation Centre, Brazier Street, Denmark.

Denmark High School, South Coast Hwy. Denmark.

Denmark College of Agriculture, South Coast Hwy. Denmark.

Denmark Country Club, South Coast Hwy. Denmark.

Denmark Primary School, Mitchell Street, Denmark.

Denmark Hospital, 50 Scotsdale Road, Denmark.

All sites are relatively accessible and in public ownership with a strong relationship to the primary catchment of Denmark. In order to assess the viability of each site a Plusses Minuses Issues (PMI) analysis has been undertaken. The table below identifies the key considerations.

Site	Pluses	Minuses	Issues
Recreation Centre	Existing management infrastructure on site Available land (to rear of centre or adjacent to current frontage) Strong alignment to health and fitness Close proximity to local primary school Sufficient size to cater for associated car parking and access road Excellent access	Current recreation centre is tired and in need of modernisation/upgrade There will be cost implications of extending recreation centre associated with enhancing current substandard infrastructure.	There will be a need to review current management arrangements and staffing levels. There will be a need to assess whole site development and review current access and parking arrangements
High School	Site is of sufficient size to accommodate building, potential expansion and car parking. Good accessibility off South Coast Highway	Do not consider community facility management to be core business. Primary School have no wish to access a facility off the coastal highway	Not supported by School Primary School unable to utilise
Agricultural College	Potential dual use arrangement	Inadequate land availability and limited room to expand facility if required. Primary School have no wish to access a facility off the coastal highway	Not supported by College Primary School unable to utilise
Golf and Country Club	Site is of sufficient size to accommodate building, potential expansion and car parking	Separate management arrangement required. Not core business	Primary School unable to utilise
Primary School	Potential for dual use arrangement Site is large enough to accommodate further expansion. Primary school would potentially be a significant user Primary school are supportive of a facility on site.	Separate management arrangement required. Security on school site may be problematic Potential limitations on access due to school use Ability to staff and manage an independent community facility is not proven	Dialogue will need to be entered with DoE. Staffing and management requirements may be cost prohibitive.
Hospital	Potential for a dual use arrangement Site is accessible	Do not consider facility to be core business Will impact on health care amenity and potential future expansion.	Primary School unable to utilize Not supported by health service

Of the sites identified, four sites were immediately ruled out (highlighted in red above) due to the existing users not being supportive of the development of an aquatic facility on their operational land or due to a principle user (Denmark Primary School) stating that they would be unable to commit to utilising the facility due to transport/locational difficulties. This therefore left either the Denmark Recreation Centre site or the Denmark Primary School site as the only viable propositions. On balance it was considered that the Denmark Recreation Centre site is the optimum location:

It has existing community recreational management infrastructure on site and therefore from an operational perspective would be the most cost effective solution.

There is a strong alignment between aquatic facility infrastructure and the existing dry side provision (health, physical activity and sport).

The site is relatively accessible.

All potential user groups are supportive (or ambivalent) to the aquatic facility being located adjacent to the Recreation Centre.

There is substantial existing car parking and open land which could accommodate an aquatic facility without compromising existing site operations.

7 Industry Benchmarks

The following information provides an overview of industry benchmarks relevant to the proposed DAC development.

7.1 Western Australia Aquatic Facility Benchmarking

The following table provides a summary of the aquatic facility patronage and expenditure benchmarking in Western Australia[2]. It is important to note that this information incorporates a wide range of facilities including indoor and outdoor pools, seasonal and all year round facilities and pools of differing configurations. As a result, limitations exist in comparing this information to the proposed DAC however in determining appropriate parameters.

In what way can it determine any relevant parameters?

Region	Population	Number of Pools	Annual Patronage	Average Visits per Pool	Pools visits per head of Population	Total Annual Expenditure	Average Expenditure per pool
Perth	1,507,949	27	6,576,343	243,568	4.36	$29,674,614	$1,099,059
South West	227,981	13	1,066,997	82,076	4.68	$8,705,491	$669,653
Great Southern	72,868	17	716,895	42,170	9.84	$4,952,174	$291,304
Midlands	52,214	24	279,942	11,664	5.3	$2,750,676	$114,612
South Eastern	53,708	7	290,779	41,539	5.41	$2,449,140	$349,877
Central	60,167	13	344,403	26,492	5.72	$4,848,581	$372,967
Pilbara	40,132	12	230,750	19,229	5.75	$3,428,191	$285,683
Kimberley	35,865	7	311,987	44,569	8.7	$1,257,974	$179,711
TOTAL	**2,050,884**	**120**	**9,815,096**	**81,792**	**5.0**	**$58,066,841**	**$483,890**

Table 14: Western Australia Aquatic Facilities Benchmarking

The above information highlights the following:

- Average visits per pool per annum vary from 11K (Midlands) to 243K (Perth), average state wide pool visits per annum are 81K.
- Average visits per pool per head of population vary from 4.36 (Perth) to 9.84 (Great Southern), average state wide pool visits are 5.0.
- Average expenditure per pool per annum varies from $114K (Midlands) to $1.1M (Perth), average state wide pool expenses are $484K.
- The Denmark Shire is in the Great Southern Region which has approximately 9.84 aquatic visits per head of population per annum.

[2] Source: Leisure Institute of Western Australia.

This table is much too coarsely grained to be relevant to the proposed facility. Issue #7-01.

7.2 Multi-Purpose Facility Benchmarking

The following information provides an overview of benchmarking for a range of multi-purpose (aquatic and dry) facilities.

Indicator	Albany Leisure & Aquatic Centre	Beatty Park Leisure Centre	Busselton Geographe Leisure Centre	Kununurra Leisure Centre & Swimming Pool	Mandurah Aquatic & Recreation Centre	Melville Aquatic Fitness Centre	South West Sports Centre	Average
Populations								
Local Government Population	36K	30K	29K	7.3K	70K	100K	66K	48K
Catchment Population - estimated	39K	100K	22K	6K	52K	100K	30K	49K
Attendances and Members								
Annual Attendances - indicative	377K	955K	237K	62K	600K	585K	527K	477K
Total Fitness Membership - as at 1st July 2008	N/A	1,800	800	150	500	1,700	2,200	1,200
Financials								
Total Annual Revenue	$1.7M	$4.3M	$1.1M	$280K	$2.2M	$2.6M	$2.4M	$2.1M
Total Income from Membership - 2007/08	$490K	$850K	$200K	$68K	$250K	$855K	$1.1M	$544K
Total Expenditure inc Dep, Admin, Costs and Loans	$2.4M	$5M	$1.2M	$1.1M	$2.9M	$3.0M	$3.1M	$2.6M
Performance Indicators								
Annual Revenue - per head of catchment population	$44	$43	$49	$47	$42	$26	$79	$43
Annual Attendances - per head of population	9.7	9.6	10.8	10.4	11.5	5.9	17.6	9.9
Members - per catchment population		1.8%	3.9%	2.5%	1.0%	1.7%	7.4%	2.5%
Staff Wages to Total Expenditure - percent	53%	42%	52%	33%	83%	54%	75%	52.1%

Table 15: Western Australian Facility Benchmarking

The above information for multi-purpose (wet and dry) facilities highlights the following:

- Average annual revenue is $43 per head of population.
- Average annual visits are 9.9 per head of population.
- The South West Sports Centre has the highest visits per head of population of 17.6 (Bunbury[3]).

[3] Note: it is important to highlight that this Centre provides the most diverse range of facilities, programs and services.

Table 15 may be interesting for giving a feel for typical numbers but it cannot (as implied) provide useful numerical estimates of variables such as the annual visitation rates. Sensible values for these can only be arrived at by proper statistical analysis. This has not been carried out here. Issue #7-02

7.3 Manjimup Regional Aquatic Centre Benchmarking

The following information provides specific information from the operation of the Manjimup Regional Aquatic Centre for benchmarking purposes.

Indicator	Aquatics Values	Notes
Visitations		
Total Visitation Numbers (per annum)	56,034	
Adult Visits (% of Total)	44.7%	
Child Visits (% of Total)	55.3%	
Revenue		
Total Revenue - Activities	$163,269	Excludes café and retail.
Total Revenue - Secondary Spend	$56,198	Café and retail only.
Total Revenue - All	$219,466	Associated aquatics revenue.
?		
	9,783	
Total Shire Population - Adult	7,525	15 years old plus.
Total Shire Population - Child	2,258	Less than 15 years old.
Benchmarking		
Activities Revenue per Visit	$2.91	Fees per visit excluding café and retail.
Secondary Spend per Visit	$1.00	Café and retail spend per visit.
Total Revenue per Visit	$3.91	
Total Visits per Head of Population (Shire)	5.7	
Total Adult Visits per Adult Head of Population (Shire)	3.3	15 years old plus.
Total Child Visits per Child Head of Population (Shire)	13.7	Less than 15 years old.

Although the previous table illustrates the important difference between Catchment andShire Populations, this distinction appears to be lost here.

Table 16: Manjimup Aquatic Centre Performance Overview

The above information highlights the following: ***No it doesn't ... it simply repeats the last three entries out.***

- Total visits per annum per head of population for the aquatic facilities are 5.7.
- Overall annual visits per head of population significantly higher for children (13.7) than adults (3.3).
- The overall revenue per visit is $3.91.

The average visits at the Manjimup Regional Aquatic Centre (per head of population) for different programs and services are as follows:

Program or Service Type	Adult Visits per Annum for Adult Population	Child Visits per Annum for Child Population
Education	0.003	2.6
Memberships	0.8	2.6
Programs	0	0.6
Recreation	2.5	7.9
Aquatic Average Visits	**3.3**	**13.7**

Table 17: Manjimup Aquatic Centre Average Visits by Group

The above information highlights the following:

- Recreation swim visits are highest with 7.9 visits per head of child population.
- The highest adult visitations by type are for recreational purposes with 2.5 visits per adult population per annum.

The average fees and/or charge per visit at the Manjimup Regional Aquatic Centre are as follows:

Area	Adult	Child	Family	Concession	Total
Education	$12.55	$8.18			$8.19
Memberships	$5.02	$1.99	$4.11	$3.85	$2.22
Programs		$0.98			$0.98
Recreation	$2.81	$1.92	$10.53	$2.35	$2.38
Aquatic Average Fees	**$3.06**	**$3.38**	**$5.30**	**$2.75**	**$2.91**

Table 18: Manjimup Aquatic Centre Average Fees and Charges

The above information highlights the following:

- Average fees for educational programs (e.g. learn to Swim), are significantly higher than those for recreational programs.

X

Why not give populations and visitation rates? Some of the pools serving smaller populations may be useful benchmarks for Denmark. Issue #7-03.

7.4 Other Aquatic Facility Attendances

The table below provides a summary of aquatic facility attendances at specific facilities in Western Australia[4].

Albany attendances are given as 377k in Table 15.

Bilgoman = Mundaring.

Facility	Aquatic Attendances
Albany Leisure and Aquatic Centre	
Ballajura Aquatic Centre	
Bilgoman Aquatic Centre	
Collie Mine Pool	35,500
Geographe Leisure Centre	
Katanning Leisure Centre	13,500
Leschenault Leisure Centre	
Margaret River Aquatic Centre	56,000
Waroona Recreation and Aquatic Centre	12,000

Highlighted facilities are not relevant to Denmark.

Table 19: Total Aquatic Visitations

7.5 Hours of Operation

The following information provides a summary of the hours of operation for regional aquatic facilities.

Leschenault Opening Hours

The centre is open all year round with the following times.

- Weekdays 6.00am - 8.30pm.
- Saturday 8.00am - 5.00pm.
- Sunday 9.00am - 5.00pm.
- Total opening hours per week (excluding public holidays) are 89.5 hours.

Based on the above information it is estimated that the aquatic facility is opened for approximately 4,630 hours per annum (assuming closed Christmas and Good Friday).

Mandurah Opening Hours

The centre is open all year round with the following times.

- Monday - Thursday 5.30am - 9.00pm.
- Friday 5.30am - 8.30pm.
- Saturday and Sunday 7.30am - 6.00pm.
- Total opening hours per week (excluding public holidays) are 98 hours.

Based on the above information it is estimated that the aquatic facility is opened for approximately 5,065 hours per annum (assuming closed Christmas and Good Friday).

Waroona Opening Hours

The centre operates with the following summer hours.

- Weekdays 6.00am - 9.00pm.

[4] Source: Leisure Institute of WA for patronage in 2008/09.

- Saturday and Sunday 11.00am - 5.00pm.
- Total opening hours per week (excluding public holidays) are 87 hours.

The centre operates with the following winter hours.

- Weekdays 6.00am - 9.00pm.
- Saturday 11.00am - 5.00pm.
- Sunday Closed.
- Total opening hours per week (excluding public holidays) are 81 hours.

Based on the above information it is estimated that the aquatic facility is opened for approximately 4,350 hours per annum (assuming closed Christmas and Good Friday).

7.6 Pricing Structure

The following table provides a summary of entry fees and charges at regional and local aquatic facilities.

Item	Margaret River	Waroona	Mandurah Aquatic and Recreation Centre
Adult	$4:50	$4:00	
Child Entry (4-15yrs inclusive)	$3:20	$3:00	
Children 4 yrs and under	Free	Free	
Concession	$3.20	$3:00	
Family (2+2)	$15.00	-	
Spectator	Free	-	
10 Child	$28.50	$28:00	
10 Adult	$40.50	$38:00	
10 Concession	$28.50	$28:00	
20 Child	$54.50	$50:00	
20 Adult	$76:50	$72:00	

Surely Albany figures would be more relevant here?

Table 20: Fees and Charges Benchmarking

7.7 Summary of Key Findings

The following information provides a summary of the key findings associated with the industry research relevant to the DAC proposed development.

Visitations

- The average visits per pool per head of population per annum for WA regions varies from 2.2 (Goldfields) to 14.9 (Wheatbelt) with a state wide average of 4.8.
- A comprehensive analysis of the Manjimup aquatic facility identified that the total visits per head of population per annum is 5.7.
- Overall annual visits per head of population per annum at the Manjimup aquatic facility are significantly higher for children (13.7) than adults (3.3).
- The average visits per head of population per annum for a diverse range of multi-purpose (dry and wet) facilities are 9.9 per head of population.

The first and last of these points are not relevant to our needs. The second is relevant and the third is interest- ing but not relevant. Issue #7-04.

- The current visits, per head of population per annum, for the existing DRC facility is approximately 6.

Revenue per Visit

- The average revenue per visit for a range of multi-purpose (dry and wet) facilities is $4.40.
- The overall revenue per visit at the Manjimup venue is $3.91 (Note: this includes secondary spend).

Financial Performance

- It is estimated that for a range of multi-purpose (dry and wet) facilities that the overall financial deficit is approximately $500K per annum.
- The above figure equates to a cost recovery of 80% (i.e. revenue accounts for 80% of expenditure).

Hours of Operation

- Total annual operating hours for the aquatic facilities reviewed vary from 4,350 to 5,065 hours per annum.
- The average annual operating hours for the aquatic facilities reviewed is 4,680 hours per annum.

Prices

- Average casual adult entry fees are approximately $4.25.
- Average casual child entry fees are approximately $3.20.

This Chapter fails to establish the benchmarks upon which subsequent critical financial projections depend. It uses the wrong mathematical approach. As a consequence, key numerical values are potentially misleading. It fails to explain why a rate of 9 might be considered "Reasonable", why 6 is to be considered "Pessimistic" and 12 "Optimistic". Issue #7-04.

8 Industry Trends

The following aquatic facility trends are considered relevant to this project.

8.1 General Trends

Information and data on participation, motivation to use aquatic facilities, aquatic facility design and financial trends is useful when considering the component facilities and their capacity to attract visitations.

Participation in swimming is ranked in the top three most popular activities across the age cohorts 18 - 45+and participation rates in swimming in Western Australia is higher than all other states.

Swimming is a popular activity for both males and females.

Potential users of aquatic leisure facilities are significantly influenced by their "first impressions" of the facility, therefore having a welcoming and motivating entrance and / or reception area is important.

The overall appearance of a facility is important.

The main motivators for visiting indoor aquatic and recreation facilities are health and safety related (e.g. increase health / fitness), rather than recreation or leisure related.

The five main factors that enhance user experiences in aquatic and recreation facilities are staff, services / facilities, location, atmosphere and the other people who attend the venue. The main factors that detract from user experiences are overcrowding, cleanliness, size of facilities, noise, temperature and change room quality.

Essentially there are four distinct markets that aquatic leisure facilities cater for:

- Recreation and Leisure Market - usually made up of families, people coming with friends and groups for fun, relaxation, social activity and low level competition / participation.
- Competitive / Training / Fitness Market – usually made up of people predominantly attending facilities alone for structured fitness or competition activities.
- Health and Therapy Market – usually made up of older adults and specialist health condition groups such as arthritis, asthma sufferers, etc. They require hot water pools and associated health relaxation areas (i.e. spa / saunas).
- Aquatic Education – usually made up of parents bringing their children for structured water safety programs like Learn to Swim and Water Safety.

There is a move away from the traditional lap pool towards a combination of leisure and programmable pools. Most public swimming pools built in Australia since 1990 have incorporated water features that encourage play and leisure by all sectors of the community (young and 'young at heart').

8.2 Financial Performance Trends

Previous studies and specific research conducted by the consultant team indicate that for the majority of aquatic facilities, particularly outdoor venues, revenue does not meet annual operating costs, and that this situation has been the case for many decades. Recent trends that have further impacted on the viability of aquatic facilities include:

The dramatic increase in costs for public liability insurance premiums.

Higher qualifications and professionalism required from appropriately trained lifeguards, leading to increased staffing costs.

Increased awareness of the life-cycle costs of maintaining aquatic facilities to an acceptable community standard.

The financial viability of aquatic and leisure facility developments will predominantly depend on the size of the primary catchment area, the catchment multiple (how many times on average each person in the catchment visits the facility), the number and type of competitors within that area and the demands for aquatic and leisure services that are identified by residents within the catchment area.

In order to minimise the operational subsidy required to provide community aquatic facilities a number of strategies may be considered including:

Flexible facility design that allows for a mix of indoor facilities, outdoor facilities, and "wet" and "dry" program variety to attract a more diverse demographic mix.

Co-locating features like aquatic, leisure, sports or retail to share some of the labour, administration, maintenance and presentation costs.

The introduction of a fee for use to offset costs (at facilities that had been provided free-of-charge in the past).

Securing facilities (through design) so that a reduced amount of security staffing and expenditure is required outside of operating hours.

Establishing profitable "secondary spend" facilities such as cafes and retail shops to offset costs.

Aquatic facilities are primarily a serviced based industry with staffing the largest single expense item. The need for increased staffing can be minimised by astute facility design to improve sight lines and control points that reduce the number of staff required.

Due to the high capital costs required for development, and low level of capital return, private sector investment in aquatic facilities has traditionally been in specialist pools, such as learn-to-swim and hydrotherapy, or as additions to premium health and fitness clubs.

8.3 Environmentally Sustainable Design (ESD) Initiatives

As indoor aquatic and recreation centres require high levels of energy to operate it is important to consider Environmentally Sustainability Design (ESD) principles and facility operation practices. The major objectives associated with ESD are:

Reducing overall energy consumption through energy efficient buildings,

Maximising the use of energy from renewable sources, and

Minimising emissions and waste.

The following information outlines specific ESD initiatives for the design and management of aquatic and recreation centres. Whilst some of these options may be cost neutral others may increase the overall capital cost of the project by in excess of 10%. In undertaking the subsequent costing analysis, an approximation of the cost of ESD initiatives associated with the development of a swimming facility at the Denmark Aquatic and Recreation Centre Site has been made.

Options are normally assessed beyond the feasibility stage when the budget is known and design is more detailed. During the subsequent costing of the concept plan for the Denmark aquatic Centre, an allowance has been made for a number of ESD initiatives and referenced in the cost data sheet produced by the quantity surveyor.

8.3.1 Design

Inclusion of good passive design should be used in all buildings to optimise the use of solar energy and natural cooling.

Generous use of natural daylight by a combination of glazing, skylights and appropriate shading to reduce the reliance on artificial lighting.

8.3.2 Energy

On a per capita basis, Australians are the world's largest generators of greenhouse gas[5]. There are a variety of technical options for reducing the energy consumption of indoor aquatic leisure centres which are detailed hereunder:

Reticulated gas produces less than 30% of the greenhouse gas outputs of mains electricity[6]. Mains gas is not currently available in Denmark.

Building Management System (BMS) – is an automated system that can be used to automate the functions of maintaining a comfortable working environment (i.e. hot water, heating, cooling, security and lighting) within a building. Using an automated system can achieve efficiencies in energy consumption by means such as maintaining temperature set points, turning heating / cooling and lighting on or off automatically.

Heating Ventilating and Cooling Systems (HVAC) – HVAC plant should be separately zoned for areas with substantially different characteristics for maintaining comfortable operating environment (i.e. pool hall, gymnasium, meeting rooms, offices, etc).

Pool water heating – is generally the largest single energy user within aquatic and leisure facilities consuming in excess of 20% of total building energy use. The energy required for pool water heating is strongly influenced by the set point temperature of the water with annual energy consumption dropping between 15 – 17% for every 1o C fall.

Pool pumping – is generally the second highest energy consumer in indoor aquatic centres consuming approximately 20% of total energy used. Centrifugal pumps are generally the most energy efficient option.

Pool air heating and ventilation – pool air heating and ventilation is generally the third highest use of energy in an indoor aquatic centre. The energy used to heat pool water and pool hall air is largely dictated by the evaporation of pool water and is minimised by air temperatures within 30 of the pool water temperature. Therefore the air temperature inside an indoor pool should be as close as possible (i.e. +/- 10) to the temperature of the pool in order to reduce pool heating costs.

Pool shell – enhanced thermal insulation to the sides and base of the pool shell offer the greatest opportunity for reducing pool heating requirements.

Pool covers – the heating requirements of a swimming pool are directly proportional to heat loss, evaporation loss and refilling due to water losses. Pool covers assist in reducing the evaporation rate from the surface of the pool which affects the energy use in two basic ways - the main heat loss from pool water is through evaporation and with low evaporation the need for a high ventilation rates and air heating in the pool hall is minimised allowing the air circulation system to be turned down to minimum seatings or shut off.

[5] United Nations Framework Convention on Climate Change website - http://unfccc.int/2860.php
[6] Sustainable Built Environments

Unglazed solar pool collectors – currently the most energy efficient option for pool water heating. It is likely a secondary system of pool heating will be required to supplement the solar collectors during the winter months in colder climates.

Boilers – traditional boilers are inefficient in their use of energy. In most instances electric boilers have an energy efficiency of over 90%, however the greenhouse gas emissions are very high due to the fuel source on which they depend.

Mechanical heat pumps – heat pumps utilise free heat by collecting and absorbing energy from sources such as air warmed by the sun, heated humid air exhausted from enclosed pools and heat collected from air conditioning plant. This energy is then compressed and transferred to the pool water via a heat exchanger. Higher efficiency is gained in more temperate locations but heat pumps are capable of maintaining pool temperatures year round in nearly all areas of Australia. There are several types of pool pumps available – air-to-water, water-to-water and ground-sourced or ground-coupled.

Heat recovery from air – the humid indoor pool air that is often exhausted to reduce humidity levels can be used to pre-heat incoming fresh air. The benefits of heat recovery are dependent upon the climate and the pool's operating period and need to be considered on an individual basis. It is not an attractive option for all aquatic facilities. Larger centres with multiple pools and gym/class areas; those with extended hours of operation and new rather than existing facilities tend to be more viable. Some examples of heat recovery from pool air systems are run-around coils, thermal wheels, plate heat exchanger and co-generation. Existing Australian facilities which use cogeneration include Adelaide Aquatic Centre, Noarlunga Aquatic Centre (SA) and Sutherland Leisure Centre (NSW).

Hot water for showers – solar hot water can be used to preheat water for a boiler for showers and ancillary uses, as this produces the lowest greenhouse gas emissions for a hot water system.

Indoor lighting – opportunities for energy efficient electrical lighting include the type of light fittings, layout and switching and motion activated light sensors.

Varying the pool temperatures with the season.

Renewable energy options – includes options such as "green power", wind power and solar power.

8.3.3 Water Quality, Conservation and Recycling

Water management techniques such as pressure equalising systems and water and energy efficient pipe layout.

Provision of bigger pipes and low head filters to reduce pressure and energy use by pumps.

Rainwater harvesting from roofs for toilet flushing and irrigation.

Installation of waterless urinals in toilets.

Water efficient appliances such as AAA water efficient fittings in showers, toilets and basins.

Reuse of backwash for toilet flushing.

Efficient backwash systems to reduce the amount of water used for backwashing.

8.3.4 Other Strategies

Reduction of use and increase of recycling of suitable materials such as office paper, cardboard, glass, aluminium, metals.

Develop a "Waste Minimisation Plan" – based on the concept of controlling inputs to tailor waste coming into the facility, maximising recycling and minimising the amount of waste sent to landfill.

Consideration given to the selection of building materials to optimise the use of recycled materials (i.e. recycled aggregate), materials that are durable, low maintenance, low embodied energy from sustainable resources, choice of the colours of materials selected for the interior should have high reflectance values.

Building fabric – a well constructed and sealed building envelope will help to lower energy consumption and improve ambient temperature levels. Excessive infiltration of wind gusts will require an increase in energy consumption and in some cases it may be impossible to achieve design temperatures on cold or windy days.

Pool halls – need to be ventilated in order to control humidity and remove chemical vapours that have evaporated from pool surfaces. Excessive heating costs may result if the latent heat load in the air is not recovered. Heat transfer / exchange devises can be used to recover heat from the air leaving the hall and use it to preheat incoming ambient air.

Landscaping design to consider sun and wind protection, native vegetation and low water use.

Prominently displaying "Water Wise" information in public use areas.

Consideration given to the location of facilities to ensure the site is well located to public transport, provision of lockable bicycle points, and promoting the use of public transport.

8.4 Design Trends

This section identifies some current facility development opportunities for an aquatic facility and highlights features which could be incorporated which increase flexibility and attractiveness. Water feature designs are only limited by imagination and technology, with the range of aquatic play features now including uphill waterslides and indoor surfing rides, vortex pools and 'worm' rides. Such features are being incorporated into public and private sector operated facilities, reinforcing the belief that the public does not discern between the sectors when making a purchase. Features can include

8.4.1 Moveable Floors and Bulk Heads

Moveable floors are being used more extensively to change the water depth over all or part of a pool to achieve greater programming flexibility. They are essentially a membrane which moves upwards or downwards depending on the desired water depth required. They provide a solid floor base without displacing water and can be used to reduce net operating costs and achieve greater throughput, particularly in 50m pools. They are less common in facilities which experience low throughput of patrons due to installation and associated maintenance costs. Melbourne Sport and Aquatic Centre contains a good example of a multi-purpose warm pool with moveable floor which can be used for a variety of rehabilitation and learn to swim purposes.

Bulk heads are used to divide water space into different activities simultaneously and can provide a safe barrier to the edge of a moveable floor. They can either traverse laterally

(stored at one end of the pool) or vertically (housed in a recess in the floor) and are generally located in larger pool facilities (50m) where operationally, they can add greater flexibility to their use.

8.4.2 Flow riders

Flow riders provide opportunities for adventure based surf activity where space is limited. It features a slightly sloped wave surface that generates a smooth "barrel-less" wave. It can be constructed in various models from junior, single, double and mobile unit. Flow riders have become more common place in the USA but the Shire of Kalgoorlie Boulder boasts Western Australia's only FlowRider which is located within the Goldfields Oasis Recreation Centre. Facilities of this nature, due to their limited presence in the market can often be a unique selling point and attractor.

8.4.3 Wave Pools with Beach

A wave pool is a swimming pool in which are artificially generated reasonably large waves, similar to the ocean's. Wave pools are often a major feature of the larger water parks such as Oxenford's Wet 'n' Wild Water Park in Queensland which has a wave pool with 3-foot-high surf amongst many other attractions.

8.4.4 Splashdecks, Splash Pads and Interactive Play Fountains

Splash pad's and Splash decks are area's for water play that has no standing water. They have been introduced in many facilities to reduce the need for lifeguards or other supervision, due to a significantly reduced risk of drowning.

Typically there are ground hoses that spray water upwards out of the splash pad's raindeck. Other water features include a rainbow pipe showers, mushroom showers, tree showers, spray guns, and variable water pressure points. The showers and ground nozzles are often controlled by a hand activated-motion sensor, to run for limited time. Typically the water is either freshwater, or recycled and treated water, treated to the same level of quality as swimming pool water standards.

8.4.5 Pool Enclosures

There are a variety of pool enclosures within the market which may provide flexibility in operation during hot and cold seasons. Lightweight structures such as the EcoDome provides high strength aluminium beams and doors. Unsupported spans range from 5.00m to 30.00m with an inside height at the centre ranging from 2.20m to 7.00m. Options include fixed position, centre opening and telescopic structures.

Roof enclosures, their construction and finish should be resistant to the pool environment, provide sound absorption and reduce condensation. Due to the high incidence of corrosion within a pool environment it is recommended that it is subject to a high technical specification which reduces excessive lifecycle costs.

8.5 Conclusions

As suggested there are numerous opportunities available to enhance an aquatic leisure facility. However such additions do not come without cost and ongoing maintenance requirements.

The most critical aspects are the ESD initiatives which have the potential to reduce the carbon footprint of the building and reduce ongoing operational costs. Some aspects

however will not be cost neutral and will impact on the development cost of an aquatic facility. Further detailed analysis of the site and potential performance of the building will determine, in due course, the acceptability or otherwise of the opportunities available.

With regard to other design initiatives moveable floors and bulkheads are useful for providing pool flexibility. They do however come at a cost and a decision needs to be taken on whether their installation would provide significant benefit. It is unlikely that within a community which may grow to 8,000 by 2031 that this benefit would be substantial enough to warrant such installations. In addition alternative pool enclosures may reduce the capital cost initially, but could potentially increase ongoing operational and maintenance costs.

With regard to leisure water/features, these can add significantly to the complexity and cost of a project and whilst are desirable to provide a complete aquatic experience, they are generally most viable within a large aquatic facility within a significant catchment population area and customer throughput. Some of the most significant issues are with the space requirements required to provide sufficient infrastructure to accommodate features such as beach entries, increased circulation space and the potentially high number of bathers being concentrated in the shallow water areas. In addition they can create issues with regard to the water treatment and environmental systems necessary to minimize unwanted affects of chemicals on bathers. This in turn can add significantly to operational costs with limited beneficial return.

In considering further the design options for a facility it was important to address two key questions:

Who will be the principal users of the facility?

For the Denmark aquatic Facility the principle users will be:

The Local community – including the Surf Life Saving Club.

Schools – particularly Denmark Primary School.

Swimming club – To be developed.

People with disabilities .

Over 50's.

Mothers with babies and young children (Learn to Swim).

What activities need to be accommodated?

The key activities to be accommodated based on the research are:

Recreational swimming.

Learning to swim, including water acclimatisation for young children.

Fitness swimming: e.g. lap swimming and aquarobics.

Training.

Competitive swimming (Carnivals).

Life saving practice and qualifications.

Leisure activities.

Private parties.

The consultancy team therefore considered that whilst recognition should be given to the opportunities available in developing an aquatic facility in the Shire of Denmark, at this stage the focus should be on the principle uses and users identified through the consultation phases, with recognition being made to ESD within the overall cost parameters.

9 Facility Development Options

The following information provides an analysis and summary of the potential facility development options for the DAC.

9.1 Multiple Bottom Line Analysis

The following section contains a Multiple Bottom Line (MBL) Analysis and considers the key facility development opportunities and options for a DAC that arose from the consultation undertaken, an assessment of demand for facilities and industry trends.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	**Social Outcomes**	**Sports Development Outcomes**	**Environmental Outcomes**		
Development of a 6 lane 25m pool (400m^2)	Medium capital cost for water body Medium labour costs	Would provide an attractive community asset which can be used for casual swimming, fitness and dedicated lap swimming	Would provide ability to run carnivals. Swim club and events Provides good flexibility in pool programming, but potential facility throughput may not justify the extent of water space	High levels of water and energy use Significant building footprint Potential to minimize impact by reducing lap lanes width and thereby reducing the extent of the water body	Whilst level of demand for indoor swimming space exists, a strong demand for formal lap provision is not evident. Income generation may not be substantial in comparison to other options. Projected population growth could potentially justify this level of provision but the operational deficit may be higher than smaller comparable water bodies, which could deliver the same sports development outcomes	That a 25m 6 lane pool only be pursued if a smaller dedicated lap pool and associated program area is not viable. This would be the medium cost option (both from initial capital and ongoing running cost). For this option to be more cost effective it would be preferable to provide lap lanes of no more than 2.1m in width (to reduce the total pool area to 325m^2)

This pool would be 16m wide ... allowing 6 lanes @ 2.5m with 0.5m to spare on each long side. Issue #9-01

This statement is misleading. Issue #9-02.

This statement is misleading! The only evidence offered in the Report contradicts it emphatically. Issue #9-03.

This is good advice and it serves to define Option 1 in §9.3.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	**Social Outcomes**	**Sports Development Outcomes**	**Environmental Outcomes**		
Development of an 8 lane 25m pool (525m^2)	Highest capital cost for water body. Medium labour costs	Would provide an attractive community asset which can be used for casual swimming and dedicated lap swimming	Would provide ability to run carnivals. Swim club and events Provides greatest flexibility in pool programming, but occupancy of water space would be a critical concern with the low population base evident	Highest levels of water and energy use Largest build footprint (with associated apron to service the pool). Whilst the water body could be minimised by reducing lap lane width below 2.5m, the need/demand is not considered appropriate when balanced against the environmental impact.	Whilst level of demand for indoor swimming space exists, formal lap provision is not evident Income generation may not be substantial in comparison to other options. Given projected population growth (from 5,000 to potentially 8,000 by 2031) the need/demand for such a facility could not be justified when other more cost effective opportunities exist which potentially offer similar opportunities	That a 25m 8 lane pool not be pursued on the grounds that it would be the highest cost (both from initial capital and ongoing running cost)

X

Such a pool could also be described as a "multi-use pool (with specific purpose of providing rectamgular water space for eam to swim, aqua aerobics, life saving and other general aquatic activity") as in option (d) of the Shire Survey. Issue #9-02.

If 2.1m lanes are OK for a 6-lane pool why not for an 8-lane? Exactly where in this report is the environmental impact considered? This is a no more than a motherhood statement!

*This recommendation ignores the possiblity that this configuration might also attract the largest user throughput and thus **revenue**. Issue #9-04.*

X

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	Social Outcomes	Sports Development Outcomes	Environmental Outcomes		
Provision of small lap facility and adjoining programmable area (271m^2)	Lowest capital cost for water body. Medium/low labour costs (dedicated areas). Potential to generate the highest income per m^2 of water space as return on programmable activity is higher than lap swimming	Would provide an attractive community asset which can be used for casual swimming and limited dedicated lap swimming. Would meet the emerging needs of catering for an aging demographic and pre-primary and primary school aged children	Would primarily be for fitness, learn to swim, aerobics and other associated uses. No opportunity would exist for carnival activity which is currently provided in Albany.	Lowest levels of water and energy use. Minimal build footprint.	Output from community consultation indicated that low intensity activity, fitness and swim programs would be the most dominant use of the facility. The facility would potentially cater for lap swimming demand although carnivals/events could not operate from the centre. The 1 or 2 carnivals and events operating per year would not justify additional space	That this option be pursued as the preferred option on the grounds that the build footprint, energy costs and water consumption are likely to be the lowest of the three options. In addition the aging demographic and potential use of the facility indicates that available water space would most likely be maximized.

The second statement is simply not true: such a configuration would NOT meet the needs of the children of the Primary School. Nor would it be of interest to the High School or the Agricultural College. The latter have independently indicated their enthusiasm for a pool that they could incorporate into thie physical activities programmes. This configuration would not be satisfactory. Issue #9-05.

X

Nor would School swimming lessons for classes of ~ 30 children be possible!

X

Misleading. Issue #9-06.

X

This advice is narrow and superficial. It is not supported by the evidence and it ignores the loss of functionality that would be inevitable with such a limited choice. Issue #9-07.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	Social Outcomes	Sports Development Outcomes	Environmental Outcomes		
The provision of a hydrotherapy pool (30m^2 to 40m^2) which can provide dedicated warm water programmable space	Lowest capital cost for water body. Medium/low labour costs (dedicated areas) Potential to generate significant income due to age demographic and requirement to provide care for chronic health issues and joint disease	Will provide a level of community infrastructure available to those residents of Denmark who do not have the ability to travel (through health, economic or mobility issues). The aging demographic and numbers of pre-primary and primary school residents would indicate that such provision would be well utilised. Access to a similar facility in Albany is limited to a private operator and health service.	Introductory learn to swim programs for toddlers, babies and older adults can be accommodated. Provides additional programmable space which would complement the use of the main pool.	High environmental costs due to need to energy costs required to maintain the pool at a constant high temperature (32-34 degrees)	A facility of this nature would be unique in the locality and service the needs of an aging population with associated health issues. Commercial opportunities exist in conjunction with associated dry side provision to maximize the potential financial return which would assist in the operational running costs of the pool infrastructure	That the facility be considered as a fundamental component of the indoor swimming facility or as a subsequent second phase of the development.

The Project Team came to this conclusion very early. For this reason, it was a mistake to list it as an alternative to be ranked with 3-, 6- and 8-lane configurations in the Shire Survey.

X

This opportunity receives little attention elsewhere in the report. Issue #9-08.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	**Social Outcomes**	**Sports Development Outcomes**	**Environmental Outcomes**		
The provision of consulting rooms for physiotherapy and other allied health opportunities X	Medium capital cost Increased program income for complimentary uses. Increased program income for complimentary uses Increased labour expenses to service programs	Would allow diversification/development of programs base	Potential to use for training purposes (i.e. practical out of water sessions) May duplicate existing provision at the Recreation Centre.	Increase to footprint of building. Additional heating/lighting cost	The potential to expand program activity and attract commercial use makes the addition of such space a viable proposition. A lack of indoor training/meeting room space may inhibit potential programming of the water space	That up to two dedicated meeting rooms be incorporated within the building to provide opportunities for training, development, swim club and general community leisure/recreational use. (this could be achieved by reconfiguring current recreation centre space)
Installation of moveable floor to all facilities	High capital cost	Permits the most flexible use of water space. Would permit a lap pool and program area to accommodate shallow water activities.	Greatest flexibility for programming of water space for various sports development activities. The movement of the floor may impinge on day time programs	Provides greatest flexibility to use water without the need to drain and re-fill water area. The additional structure will have additional energy costs and	Such a facility is generally provided in high trafficked facilities which have limited water space and where the demand for flexible water space is most needed. The cost implication and likely requirement for such a facility at the Denmark Aquatic Centre could not justify the investment	That a moveable floor not be installed

These issues should be viewed in the context of the Recreation Centre as a fully functional whole - not confused with the addition of a new endeavour such as aquatics. Issue #9-09.

This may be good advice but no engineering information or costs have been revealed in the Report.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	**Social Outcomes**	**Sports Development Outcomes**	**Environmental Outcomes**		
Development of Leisure Water with associated play equipment(including slides)	High capital cost High space requirements with limited financial return. Increased labour costs required for supervision	Creates a strong family social ambience and would attract family use.	Limited. Main focus would be on leisure and family fun.	Increases building footprint and water/energy costs when associated with other swimming facilities	Sufficient space would exist within a main pool and hydrotherapy facility to cater for a wide variety of family orientated activities. The additional floor area required and impact on the operational running costs could not justify such an investment.	Leisure water is not included within the scope of the project
Provide substantial storage area to offset storage issues associated with dry side provision	Low capital cost Space requirements would need to be assessed in conjunction with current dry side provision.	dedicated user groups who are willing and able to utilize the centre. Dedicated secure storage areas will provide the opportunity to attract new user groups	than to provide additional storage potential for various user groups	building footprint	The lack of storage is invariably the most common complaint amongst users of community facilities. The provision of additional storage could offset dry side demands and enhance the service offer within a new centre.	To provide additional storage, for both wet and dry side needs, and to offset potential implications of re-alignment of the existing dry side provision. As part of this process the use of the existing recreation centre office and reception area should be assessed for conversion to dry side storage.

This would be a highly desireable option and can almost certainly be incorporated within the existing building footprint. See the note in the floor plan of Appendix B.

This possibility should be considered as part of the larger exercise of refurbishing the Recreation Centre.

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	Social Outcomes	Sports Development Outcomes	Environmental Outcomes		
Relocate reception area from current recreation centre to utilize one combined entrance at the aquatic facility serving both facilities	Increased capital cost but long term savings with regard to ongoing management and staffing costs X	Obvious central location from which customers can be directed. Provides a safe, secure and manageable one point of entry. *This is a good recommendation ... but it has not been accomplished in the suggested design (Appen- dix B). Issue #9-10*	Combines wet and dry side provision and avoids having to disturb dry side programming to gain access.	More operationally effective building footprint	One combined entrance to the facility will ensure that any management of aquatic provision can be combined more effectively within the existing management structure. Discussions with stakeholders have indicated that one dedicated entrance to serve both facilities would be preferable.	The reception area is relocated to provide a joint reception for dry and wet side activities. This will however have an impact on the internal operation of the Recreation Centre which is outside of the scope of this study.
Provision office space for leisure centre staff	Requirement to undertake centre business operations	Necessary to provide secure space for controlling centre and also providing secure environment for staff development and management.	N/A	N/A	Secure office base for centre staff will be required adjacent to the reception area in order to minimize staffing costs and supervisory requirements	That a secure office be located adjacent to the main reception area at the entrance to the aquatic centre (this will replace existing infrastructure at the recreation centre)

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	Social Outcomes	Sports Development Outcomes	Environmental Outcomes		
Installation of retail and café area	Increase to capital cost but offset by ongoing return on secondary spend. Operation of retail/café outlet can be managed by duty staff if located close to main reception area	If designed appropriately will provide a good viewing area for supervisory use. God focus for social gathering/meeting area and increasing the profile of the centre *We agree.*	N/A	N/A	The introduction of a central meeting place within the centre and café/ retail opportunities will potentially assist in generating income and securing the venue as a social destination.	That a café and retail area be combined adjacent to the main reception in order that it can be effectively controlled/supervised by centre staff
Provision of a crèche	Increase capital cost and ongoing staffing requirement (dedicated personnel would be required to comply with legislation). May be required to pay premium rate to attract and retain appropriately qualified staff	An extension to current provision will provide an attractive proposition to secure additional daytime use particularly for those with caring responsibilities. Potential to increase physical activity amongst resident population with caring responsibilities	Would attract users who previously would be unable to take part in leisure activities	N/A *For efficient staffing, the creche would be best located near the reception area.*	Crèche facilities are beneficial in providing a community service and providing opportunities for those with caring responsibilities to take part in physical activity and health related activities	Extended crèche facilities should be incorporated within any new facility infrastructure to benefit wet and dry side users. (this will replace or require modification to the existing infrastructure at the creation centre)

Opportunity	MBL Analysis				Need/Justification or Issue	Recommendation
	Financial Outcomes	Social Outcomes	Sports Development Outcomes	Environmental Outcomes		
Introduction of swipe card/controlled access points at facility	Initial financial outlay which may be offset by collection of data related to participation and its use for future marketing opportunities	Enables data to be captured which can be used for	Identifies user characteristics and preferences and may be used to inform program development	N/A	Lack of current available data on users. Will assist in the long term marketing and development of the centre	To be considered as part of ongoing management and performance improvements. This could be incorporated initially for school and other dedicated user groups who may potentially access (through a separate access) the aquatic space at dedicated times through agreement with centre management

9.2 Consideration of Design options for the Denmark Aquatic Centre

The development of a 25m by 8 lane pool was highlighted as a priority for some but not supported by the research as the preferred option. Similarly a 25m by 6 lane pool was advocated as meeting the requirements of a significant number of users. The consulting team considered that a reduced volume of water would be preferable and suggested an "L" shaped configuration to minimise capital build and ongoing operational costs (see plan layouts identified within the questionnaire at Appendix A) . However following discussion and advice from the project team it was considered beneficial to draft a concept plan based on a 25m by 6 lane facility and utilize this as the basis for assessing capital costs and ongoing operational costs for both a 25m by 8 lane pool and "L" shaped configuration. A number of features standard for each option is identified below.

Based on the research, consultation, demand assessment and the Multiple Bottom Line Assessment, the following factors have been identified as relevant to the development of the Facility Concept Plan for the Denmark Aquatic Centre.

The aquatic facility for the purpose of drafting the concept plans should be located adjacent to the existing recreation centre fronting the existing car park and oval.

A requirement for a 25m by 6 lane facility.

A hydrotherapy facility was to be incorporated within all costing options and fundamental to the concept plan due to the aging demographics of the area.

A critical aspect of the analysis rests on the viability of a fixed 25m facility against the potential to develop water spaces which permit greater flexibility and programmable use.

A strong focus on Environmentally Sustainable Design initiatives and in particular water and energy consumption is critical.

The impact on remnant vegetation should be minimised.

The need to maximise opportunities for revenue generating opportunities to reduce operational running costs.

The need to minimize the impact on existing dry side provision (Note: the consulting team would strongly recommend that existing dry side infrastructure is reviewed if the development of an aquatic facility is to be supported by the Shire).

Visibility of the pool from the reception area is important for supervision.

One identifiable access, ideally should be provided to the combined wet and dry side facility

Wherever possible minimise operational and management costs through the design options (line of site across facilities and a multi-functional reception area),

Car parking needs to be addressed through provision to the rear of the site and potentially through rear entry controlled access for group bookings (schools, clubs, health services etc)

The main access to the site is to be via the current main Denmark Recreation Centre Access.

9.3 Facility Development Overview

Based on previous information, the following three DAC development options are considered as potential additions to the existing DRC facility.

Area	Option 1 25m 6 Lane Pool with Hydrotherapy	Option 2 25m 8 Lane Pool with Hydrotherapy	Option 3 3 Lap Lanes & 96m^2 of Water plus Hydrotherapy
Wet Areas	m^2	m^2	m^2
Pool Area (with shallow toddler entry to side)	2.1m lane widths (25m x 13m) Total 325m^2	2.5m lane widths (25m x 21m) Total 525m^2	2.1m lane widths (25m x 7m, 8m x 12m) Total 271m^2
Program pool/Hydrotherapy	40	40	40
Sub Total – Water Space	365	565	311
Spectator seating	50	50	0
Wet change rooms	145	145	145
Leisure area	Existing DRC	Existing DRC	Existing DRC
Other outdoor space - excluded	0	0	0
Steam, sauna and spa area	0	0	0
Pool plant, store	130	130	130
Blanket Store (on pool apron)	0	0	0
Storage	40	40	40
Dry Areas			
Gymnasium area	Existing DRC	Existing DRC	Existing DRC
Managers office	20	20	20
Pool managers office	10	10	10
Staff area	20	20	20
Crèche	Existing DRC	Existing DRC	Existing DRC
Café/ kiosk	10	10	10
Retail shop area	10	10	10
Meeting room	15	15	15
Staff area	20	20	20
Entry foyer	20	20	20
Reception	10	10	10
First aid room	8	8	8
Physio's room	15	15	15
Maintenance storage	18	18	18
Circulation areas	TBC	TBC	TBC
Additional Considerations			
Extended car parking area	120 bays	120 bays	120 bays

Table 21: Potential DAC Development Options

In order to progress the analysis further it was therefore critical to address these factors in determining the most appropriate facility design for the site. A concept for the Option 1 design of the Denmark Aquatic Centre is attached as Appendix B.

9.4 Estimated Capital Cost

An indicative order of cost was assessed for Option 1 and this is attached in Appendix C. In summary it is estimated that the cost for the Option 1 development is $8.17M with the following exclusions:

FF&E.

Upgrade of incoming services and reinforcements.

Loss of revenue to existing business due to construction works.

Diversion of storm-water drain.

Public art.

GST.

Using the above QS as an indication of capital cost and based on an indicative construction cost for the aquatic area of $2,600 per sqm (inclusive of allowances), it is estimated that the approximate comparable costs for design Options 2 and 3 are as follows:

Option 2 (additional 200m^2 of aquatic space and additional concourse space of 100m^2) - $8.95M.

Option 3 (less 50m^2 aquatic space with less concourse space of 25m^2) - $7.97M.

10 Management Options

Upon the review of industry trends, previous project experience and benchmarking of facilities, three main options in relation to the overall management of the proposed Denmark Aquatic Centre exist, these being:

Management by the Shire of Denmark.

Management by an Independent Management Group (e.g. YMCA).

Management by Community Organisation

The following table summarises the PMI (Plus, Minuses and Issues) Analysis conducted for each management option.

Options	PLUSES	MINUSES	ISSUES
Option 1: Management by Shire of Denmark.	The Shire Council have an existing management structure associated with the recreation centre and appear to be ideally suited to manage the extended aquatic provision. Council can control facility entry fees charged. Community obligations are met. Part of their core business and could potentially develop capacity within the Shire to train and develop staff as relief support.	Council do not have a commercial focus. Management costs would increase substantially to current operations which have no or limited weekend openings.	Cost implications of extending current management regime (the people and hours of operation)
Option 2: Management by an Independent Management Group.i.e. YMCA, Belgravia Leisure,	Ability to gain specialist management expertise. Singular focus for management group. Minimise public risk associated with facilities management.	Council may have a reduced role in the management of the facility as defined by a management and performance agreement. Will require substantial management subsidy from the Shire The scope of facilities are unlikely to be financially self-sustaining in their own right, therefore it may	Need to clearly define maintenance and operational responsibilities. Council need a very clear delineation of risk and responsibility. Council would need to consider a lease of 10 years or more. It is unlikely that a

Options	PLUSES	MINUSES	ISSUES
		be difficult to attract a quality management group/body.	professional management group/body would be attracted to this facility.
Option 3: Management by a Third Party (Community Group).	Management cost may be minimised. Shire of Denmark have the potential to cap subsidies provided to the management group and therefore control outgoings.	Council may have a reduced role in the management of the facility as defined by a management and performance agreement. May lack the appropriate skills, resources and budget to ensure adequate staff/volunteer training and compliance with regulations. No willingness to manage the facility has been expressed by any community group. Lack of proactive facility programming, or capacity to do so. Lack of proactive marketing, promotion or capacity to do so.	Need a very clear delineation of risk and responsibility. Need to clearly define maintenance and operational responsibilities. High risk for a community group who have little or no existing experience of managing an aquatic facility. Management of the facilities requires a heavily reliance on key volunteers which is unlikely to be sustainable in the future.

Based on the above analysis it is strongly recommended that subject to the development of an aquatic facility being supported, that the facility be managed by the Shire of Denmark who are best placed to ensure:

Operational costs are managed effectively.

Ongoing maintenance is planned and executed in a timely fashion.

Resources are available to market and manage the facility effectively.

The needs of the community are appropriately catered for within the programming and management of the facility.

Staff are trained and developed to meet industry standards and adhere to statutory obligations.

Ongoing risk is assessed and managed.

Coordination between dry and wet side provision is managed.

The following section references the operational assumptions associated with the Denmark Aquatic Centre and identifies the preferred staffing structure.

11 Operational Overview

The following information provides an overview of the fundamental management and operational assumptions associated with the DAC.

11.1 DAC Staffing Structure

It is proposed that the staffing structure for the DAC be integrated with the existing staffing structure of the DRC. This is consistent with wet and dry side facility infrastructure of a similar size in regional and metropolitan WA. As a result it is recommended that the DRC/DAC Recreation Centre Manager have overall responsibility for the centre. An aquatic program coordinator should be appointed to oversee the operation and delivery of content in the aquatic area with this coordinator reporting through to a DRC/DAC Manager.

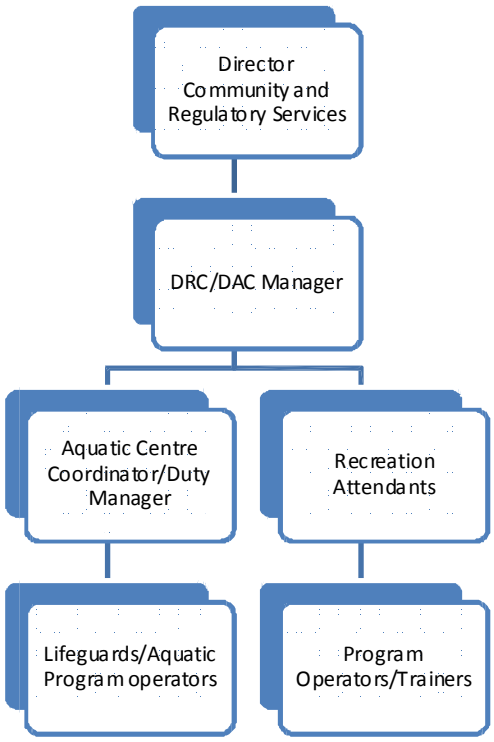


Table 22: Proposed Staffing Structure

Why would anyone buy a 20 visit voucher if it offered no advantage over two separate 10 visit vouchers?

11.2 Pricing Structure

Based on industry benchmarks and an assessment of demand and pricing feedback, the following pricing structure is proposed for the DAC.

Item	Price	Item	Price
Recreation Swim		**20 Visit Vouchers**	
Adult	$5.00		
Child (3 - 15 years)	$3.20		
Family (2 & 2 or 1 & 3)	$14.00		
Senior (60+)	$3.20	Early Bird x 20 sessions before 7.30	$63.00
Concession	$3.20	**Lane Hire**	$15.00
Early Bird swim (before 7.30am)	$3.20	Casual User	$11.00
Spectator fee	$1.00	Permanent User	$7.70
In Term Swimming		**Aqua Programs**	
		Aqua birthday parties	$12.00
		School holiday programs	TBC
Vac Swim lesson entry Education Dept	$2.60		
Vac Swim lesson x 10 Education Dept	$24.50	Bronze Medallion Requalification	$60.00
Swimming Lessons (per Lesson)		Bronze Medallion	$145.00
Learn to swim	$12.00	**Carnivals**	
Additional family member discount	5%	Carnival fee (3 hours or more)	$425.00
Adults	$12.50	Carnival fee (up to 3 hours)	$250.00
Holiday program	Various	Qualified Lifeguard (for carnival) per ho	$35.00
Private Lessons (includes x2 spectators)	$30.00	Carnival entry fee per swimmer	$2.30
Squads		Refund / cancellation fee	$25.00
Per Lesson	$7.70	Spectator entry fee	$1.00
x 10 sessions	$77.00	**Proposed Hydrotherapy**	
Competition event fee	$2.00	Adult (16 years & Over)	$8.00
Junior squad entry	$2.30	Seniors (60=) or Concession	$7.00
10 Visit Vouchers		Student	$7.00
Adult (16 years & over)	$40.50	**Proposed Hydrotherapy x 10 pass**	
Child 10 Pass (3 - 15 years)	$28.80	Adult (16 years & Over)	$72.00
Junior squad entry x 10 pass	$21.00	Seniors (60=) or Concession	$63.00
Junior squad entry x 10 pass (spect)	$30.00	Student	$63.00
		Proposed Hydrotherapy x 20 pass	
		Adult (16 years & Over)	$144.00
Early Bird x 10 sessions before 7.30	$32.00	Seniors (60=) or Concession	$126.00

Why do the the highlighted entries differ?

Table 23: DAC Pricing Structure

So estimated revenues have not been included in Appendices D,E & F etc?

11.3 Hours of Operation

Based on industry benchmarking and community expectation, it is proposed that DAC hours of operation are as outlined below.

Monday to Friday 6:00am - 7:30pm.

Saturday and Sunday 10.00am - 3.00pm.

Total opening hours per week (excluding public holidays) are 77.5 hours.

Based on these hours operation it is estimated that the DAC would be opened for approximately 4,000 hours per annum.

11.4 Staffing Rates

The following table provides a summary of indicative hourly rates for program staff at the DAC. These rates can be used as a basis for hourly rates for staff supplying program services at the DAC facility. These rates reflect the specialist and casual nature of employment are not comparable for centre administration staff.

Function	Level	Summary	Hourly Rate
Classifications	Level 4	Accredited with more than 3 years experience	$49.68
Customer Service			$14.90
Group Fitness	Level 1	No Accreditation	$39.86
	Level 2	No Accreditation 1 - 3 years experience	$43.14
		OR Accredited & less than 1 year experience	
	Level 3	No accreditation & more than 3 years experience	$46.41
		OR Accredited with 1 - 3 years experience	
Gymnasium	Level 1	Cert 3 less than 1 year experience	$21.85
	Level 2	Cert 3 more than 1 years experience	$22.93
		OR Certificate 4 with less than 1 year experience	
	Level 3	Certificate 4 with more than 1 years experience	$25.08
Personal Trainer		Standard - no variation	$31.27

Table 24: DAC Staff Hourly Rates

12 Financial Projections

Financial scenarios have been completed for the three DAC facility options (as previously outlined in Section 9.3), these options are:

- Option 1 - 6 lane pool with hydrotherapy.
- Option 2 - 8 lane pool with hydrotherapy.
- Option 3 - 3 lane pool with additional water space and hydrotherapy.

The three scenarios are outlined below and further clarified in Section 11.1.

- Realistic Usage Scenario.
- Conservative Usage Scenario.
- Optimistic Usage Scenario.

The key assumptions associated with the financial modeling are outlined below together with the key findings of each scenario.

12.1 General Assumptions Relevant to All Financial Scenarios

The following assumptions are relevant to all of the financial models/scenarios that have been prepared:

General Assumptions and Background

The following general assumptions and background information have informed the financial analysis.

- Based on the detailed benchmarking information in Section 7, the following visitations levels per head of population have been used for each scenario.
  - Realistic Usage Scenario: 9 aquatic visits per head of population which equates to approximately 56K visits in Year 1.
  - Conservative Usage Scenario: 6 aquatic visits per head of population which equates to approximately 37K visits in Year 1.
  - Optimistic Usage Scenario: 12 aquatic visits per head of population which equates to approximately 74K visits in Year 1.
- The catchment population for the Shire is assumed to be 6K in 2011 and 8K in 2031. As a result of this increase in population, a "population ramp-up" has been incorporated into the financial projections. The table below outlines the associated percentages for the first 10 years.

Ramp Up Assumptions	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Change	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%

Table 25: Population Ramp Up Percentages

The visitation rates chosen to represent the three Scenarios need justification. Why is V = 9 chosen as "Reasonable" and what is the basis for the values 6 and 12 chosen as the Conservative and Optimistic limits? Similarly, what is the origin of these population projections? See Issue #12-01.

- Consistent with industry trends, a facility utilisation has been included into the model. The table below provides a summary of the utilisation impact factor for the first 10 years.

Ramp Up Assumptions	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lifecycle Adjustment	90%	95%	100%	100%	100%	97%	95%	93%	91%	90%

Table 26: Facility Utilisation Ramp up Percentages

- It is assumed that the centre will open in the 2012/13 financial year.
- The management model assumes that the aquatic facility is managed by Council and integrated with the existing DRC structure.
- All income and expenditure is exclusive of GST.
- Hours of operation of the facility are as previously outlined in Section 10.3.
- It is assumed that the overall capital cost for each Option is as outlined in Section 9.4:
  - Option 1 - 6 lane pool $8.17M.
  - Option 2 - 8 lane pool $8.95M.
  - Option 3 - 3 lane pool $7.97M.

THESE NUMBERS ARE IN-CORRECT! Issue #AppC-01.

- Depreciation has been included in table 30 as an overview, but is not included in all other models referenced in this section.
- Projections do not include any provision for post construction make good and fit for purpose works associated with construction or design issues. Depending on project management methodology, provisions of up to 5% of construction cost should be made for this work.
- Projections do not include any establishment/pre-opening budget for a new facility. An indicative budget allocation is approximately 5% of projected expenditure.
- Utility cost estimates have been based on previous Coffey advice for comparable projects however Coffey strongly recommends that upon development of detailed design drawings that these forecasts are reviewed.

Income Assumptions and Background

The following assumption and background information have informed the income assessment.

- Fees and charges are as previously outlined.

Expenditure Assumptions and Background

The following assumptions and background information have informed the expenditure assessment.

Detailed breakdown is essential.

- Wage rates are as previously outlined.
- Annual proactive and reactive combined annual maintenance costs are estimated at 1% of capital cost.
- An additional refurbishment, detailed cleaning and maintenance allocation of 1% of capital cost has been allocated in every fifth year of operation.

Reference required.

- Utilities expenses are based on industry benchmarking.
- Insurance and cleaning costs are based on benchmarks with similar facilities.

Reference required.

The totals in Table 27 are worthless because of the assumptions upon which they are based Issue #AppC-01.

12.2 Summary of Financial Projections

The projected financial performance associated with each option and scenario for the DAC facility is outlined below.

The detailed 10 Year Financial Projection for each scenario are attached in the following Appendices: Option 1 - Appendix D, Option 2 - Appendix E and Option 3 - Appendix F.

The following table provides a summary of the ten year cumulative financial performance associated with each option and scenario. (Notes: All figures in red indicate operational deficits. All figures are in current day terms).

Option	Realistic Scenario (9 visits per head of population p.a.)	Conservative Scenario (6 visits per head of population p.a.)	Optimistic Scenario (12 visits per head of population p.a.)
Option 1	$1,897,114	$2,844,138	$952,925
Option 2	$2,367,762	$3,314,787	$1,408,013
Option 3	$1,621,294	$2,560456	$688,883

Table 27: 10 Year Cumulative Financial Projections

The following graph also provides a summary of the ten year cumulative financial performance associated with each option and scenario. (Note: All figures in red indicate operational deficits).

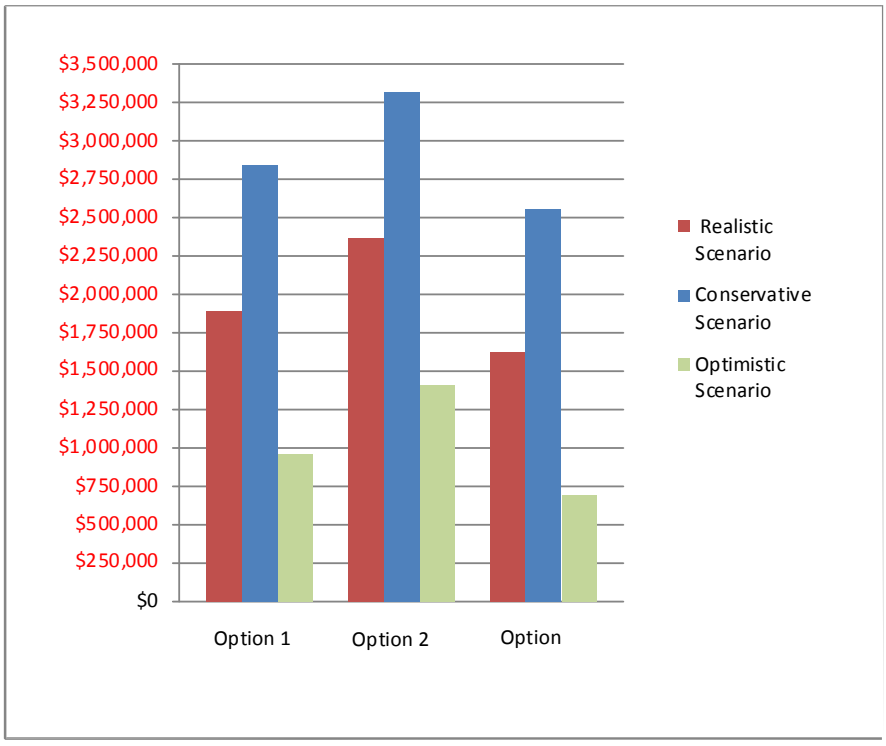


Figure 8: 10 Year Cumulative Financial Projections

Option 1 - Ten Year Cumulative Performance Summary

- Realistic Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $157K per annum to a deficit of approximately $261K per annum. The estimated operational aggregate for ten years is a deficit of approximately $1.90M.
- Conservative Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $240K per annum to a deficit of approximately $357K per annum. The estimated operational aggregate for ten years is a deficit of approximately $2.84M.
- Optimistic Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $72K per annum to a deficit of approximately $165K per annum. The estimated operational aggregate for ten years is a deficit of approximately $952K.

Option 2 - Ten Year Cumulative Performance Summary

- Realistic Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $197K per annum to a deficit of approximately $316K per annum. The estimated operational aggregate for ten years is a deficit of approximately $2.36M.
- Conservative Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $280K per annum to a deficit of approximately $412K per annum. The estimated operational aggregate for ten years is a deficit of approximately $3.31M.
- Optimistic Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $115K per annum to a deficit of approximately $212K per annum. The estimated operational aggregate for ten years is a deficit of approximately $1.41M.

Option 3 - Ten Year Cumulative Performance Summary

- Realistic Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $132K per annum to a deficit of approximately $231K per annum. The estimated operational aggregate for ten years is a deficit of approximately $1.62M.
- Conservative Scenario - It is projected that the cash position for the facility would vary between a deficit of approximately $214K per annum to a deficit of approximately $326K per annum. The estimated operational aggregate for ten years is a deficit of approximately $2.56M.
- Optimistic Scenario - It is projected that the cash position for the facility would vary between a surplus of approximately $46K per annum to a deficit of approximately $137K per annum. The estimated operational aggregate for ten years is a deficit of approximately $688K.

Many words used to say very little! Why not summarise with a simple diagram?

30 Year Cumulative Performance

The following table provides a summary of the thirty year cumulative financial performance associated with each option and scenario. (Notes: All figures in red indicate operational deficits. All figures are in current day terms).

Option	Realistic Scenario (9 visits per head of population p.a.)	Conservative Scenario (6 visits per head of population p.a.)	Optimistic Scenario (12 visits per head of population p.a.)
Option 1	$5,671,432	$8,713,429	$2,638,543
Option 2	$7,188,177	$10,230,173	$4,108,607
Option 3	$4,775,199	$7,791,941	$1,779,309

Table 28: 30 Year Cumulative Financial Projections

30 Year Cumulative Performance including Depreciation

The following table provides a summary of the thirty year cumulative financial performance associated with each option and scenario including depreciation (Calculated as straight line over 30 years with capital costs as outlined in Section 9.4). (Notes: All figures in red indicate operational deficits. All figures are in current day terms).

Option	Realistic Scenario (9 visits per head of population p.a.)	Conservative Scenario (6 visits per head of population p.a.)	Optimistic Scenario (12 visits per head of population p.a.)
Option 1	$13,821,432	$16,863,429	$10,788,543
Option 2	$16,118,177	$19,160,173	$13,038,607
Option 3	$12,725,199	$15,741,941	$9,729,309

Table 29: 30 Year Cumulative Financial Projections including Depreciation

Neither of these Tables is acceptable because, regrettably, no evidence has been presented anywhere in the Report to justify an extrapolation of populations so far into the future. Issue #12-02.

13 Potential Funding Sources

As part of the aquatic and lifestyle facility development options, research into possible funding opportunities was undertaken. An assessment of possible funding options for the proposed facility development and assessment of potential council contribution is outlined below.

13.1 Results of Initial Funding Research

Several funding opportunities were identified for consideration as part of the feasibility process, these included

1. Public Private Partnership and other private sector Investment.
2. Department of Sport and Recreation – Community Sports and Recreation Facility Funding.
3. A rate levy administered by the Shire of Denmark Council.
4. Alternative State Funding.
5. Federal Funding.
6. Funding from other sports bodies.
7. Contributions from key user groups.
8. Other charitable trusts/foundations.

13.1.1 Public Private Partnership and opportunities for other private sector funding

Public Private Partnerships have traditionally been a partnership between the public sector and private sector for the purposes of designing, planning, financing, constructing and/or operating projects. They can take a number of forms from Design, Construct and Maintain (DCM), Build Own Operate (BOO) and Build, Own, Operate, Transfer (BOOT).

Whilst private sector funding has been used to finance the complete build of sport and recreation facility projects, they have historically more often been confined to specific segments of the market where commercial returns can be made on the investment required to “start-up” the facility (e.g. gymnasiums, swim schools, etc).

There have been many examples both in Australia and more particularly the UK where PPP projects have delivered successful outcomes. Such projects have generally succeeded where there has been a clear long term vision and a thorough understanding of the local government’s role in the local leisure market. Projects have generally failed where there has been insufficient consideration of the overall sport and leisure service and other stakeholders such as school and private sector providers. The lack of a robust business case is the single biggest issue which has caused project delays and cost overruns.

Coffey Commercial Advisory has been working with equity financiers and major banking groups to develop “off balance sheet” funding packages that provide incentive for private sector investment for previously unfunded sport and recreation facilities. Based on this work, it has been identified that private sector funding is possible for facilities where it has previously been overlooked, if:

A small capital return can be provided from the day-to-day operations of the facility.

Ownership of the assets can be transferred to a private entity for a specific period of time (typically 10 years).

Depreciation of the assets can be claimed by the asset owners (i.e. the investors).

The funding model, which is loosely based on BOOT principles, has been successfully used for the development of golf courses and the redevelopment of grandstands at several large sports stadiums. However there are few examples where private investment for specific facility components within broader recreation facilities have successfully been implemented. This is usually due to an inability to separate ownership of specific facility components or programs from broader operations and conflicts with overall centre management objectives/operations.

With the current global financial crisis, financiers have curtailed a significant source of borrowing for the Public Private Partnership model. This has resulted in a lack of availability of debt and where it is available, the cost of financing the debt is often prohibitive.

It is not therefore considered that private sector capital investment for the facility is viable and is not recommended for further consideration.

13.1.2 Department of Sport and Recreation CSRFF program

Through CSRFF, the State Government invests $20 million annually towards the development of high-quality physical environments in which people can enjoy sport and recreation. Priority is to be given to projects that lead to facility sharing and rationalisation.

Funding is available to a local government authority, not for profit sport, recreation or community organisation and incorporated under the WA Associations Incorporation Act 1987. The construction of new facilities to meet sport and recreation needs would fall within the remit of this fund. Initial discussions with representatives from the DSR indicated that funding would be unlikely without sound justification and a significant financial commitment from the Shire.

The emphasis of the assessment factors is on a planned approach to facility provision and will require the applicant to demonstrate need and to consider planning, design, and management issues to substantiate the need for the proposed project. The process is identified in the grant application process and subject to an independent assessment.

13.1.3 Funding from a Targeted Rate Levy

A Rate Levy has been used by local governments in the past to part fund major sport, recreation and community infrastructure. Commonly rate levies can be used to contribute in excess of 50% of the total project cost. The amount levied can either be across the Shire or varied depending on the household proximity to the facility (i.e. to ensure that those that were most likely to use the facility were charged more than those who resided further away). This however would be over cumbersome in a relatively small Local Government Area. Whilst this has been suggested through the consultation process it may not be palatable for the wider population. It is however worthy of consideration if a funding shortfall is anticipated.

13.1.4 Alternative State Government Funding

The Department of Local Government and Regional Development produce a Grants Directory which identifies all state and local government support programs in addition to those operated by the Department of Sport and Recreation. Upon detailed review of the criteria for funding and amounts available, it was concluded that none of those funding sources would be able to contribute in any significant way to an aquatic facility.

13.1.5 Funding from a Federal Government

The Federal Government has assisted with the funding of major sport and recreation facilities. Based on a review of current Government policy there may be opportunities to attract investment in community recreation facilities. This however is likely to emerge as the project develops. It is not clear whether additional stimulus investment through the Federal Government will continue to be rolled out following the initial rounds in 2008/9.

13.1.6 Funding from other sports bodies

Sports organisations consulted as part of this project have advised that they are not in a financially suitable position to assist with funding of components of the proposed aquatic facility.

13.1.7 Funding from User Groups

DACCI have inferred that funding is available through a bequest which they have been managing. It is unclear at this stage the financial capability of that bequest.

13.1.8 Funding from Other Trust/Charitable Groups

As part of our research several other potential funding sources were identified, including funding from:

Lottery West.

Healthway.

Be involved Telstra.

Commonwealth Bank Community Funds investment Program.

IGA Community Chest Limited.

HBOS Australia Foundation Limited.

Western Australia Community Foundation Limited.

In total there are currently 754 licensed charities in Western Australia. Upon detailed review of the criteria for funding and amounts available, it was concluded that none of those charities and the above funding sources would be able to contribute in any significant way to an aquatic facility.

13.2 Summary of Funding Research

The following table provides a summary of the likelihood of capital funding for the development of an aquatic facility.

Potential Funding Source	Denmark Aquatic Centre
PPP/Private sector	Unlikely
CSRFF	Possible
Rate Levy	Possible
State Government	Unlikely
Federal Government	Unlikely
Sports bodies	Unlikely
User Group Contribution	Possible
Other trusts/funds	Unlikely

Table 30: Overview of Funding Options

The colour of the flags below have no significance other than to differentiate one issue from another.

14 Conclusion

The study assessed the need and feasibility of developing an aquatic facility within the Shire of Denmark. More particularly following initial consultation and a site analysis the study focussed within the settlement of Denmark on a site adjacent to the existing recreation centre. In order to fully assess financial implications of the development of an indoor aquatic facility 3 discrete aquatic options were considered. The three options identified are best described as:

- Option 1 - 6 lane pool with hydrotherapy.
- Option 2 - 8 lane pool with hydrotherapy.
- Option 3 - 3 lane pool with additional water space and hydrotherapy.

Of the three options identified, all are likely to operate at an annual deficit, the impact of which varies depending on the potential visits per head of population. Given the location of the facility and associated industry benchmarks,

14-01 [redacted] It should however be noted that

14-02 [redacted]

14-03 [redacted] As a result [redacted]

Should the Shire Council be minded to commit initial capital funding and ongoing financial revenue support to the development of an aquatic facility within Denmark,

14-04 [redacted] The rationale for this is:

14-05 ▪ It minimises environmental impact through a reduced volume of water, reduction in energy costs and [redacted]

14-06 ▪ A facility which has the opportunity to provide [redacted]. The Option 3 scenario [redacted]

14-07 ▪ [redacted]

14-08 ▪ [redacted]

14-09 ▪ [redacted] which has the potential to maximise casual, rehabilitation and learn to swim revenue. A facility of this nature provides a significant opportunity for those in the community with limited access to transport and limited mobility.

14-10 ▪ The catchment population to 2031 is small and unlikely to exceed 8,000 people. Option 3 provides a feasible community aquatic facility which caters for all ages and abilities within a limited catchment area where the demand for [redacted]

14-11 ▪ [redacted]

14-12 ▪ The projected 20 year cash position demonstrates that the facility has the potential to be [redacted]

X

There are serious problems with some of these conclusions. These, together with appropriate comments and explanations, are dealt with in Issues 14-01 to 14-12.

Appendix A - Additional Questionnaire

1. Shire of Denmark Aquatic Facility Feasibility Study Questionnaire May 2010

As you may be aware the Shire of Denmark in partnership with the Denmark Aquatic Centre Committee Incorporated (DACCI) and the Department of Sport and Recreation have initiated a feasibility study to determine the viability of an aquatic facility within Denmark from a social, environmental and economic perspective.

An initial needs assessment identified a broad need for aquatic provision and identified a need for a variety of aquatic activities to be provided for. To assist in this process of scoping out the facility composition and financial planning we are seeking to gauge resident's views on a few key aspects.

We would be grateful if you could take the time to complete the attached questionnaire and return promptly either by;

1. Mail - forward in the reply paid envelope (enclosed);
2. In person - to the Councils Administration Office.
3. Complete the survey online at www.denmark.wa.gov.au/news, follow the link. (password is Ocean) Please enter your Survey Number provided at the top right hand corner of the covering letter.

by no later than Friday 29th May 2010

Shire of Denmark
953 South Coast Highway (PO Box 183), Denmark WA 6333
Ph: (08) 9848 0300 Fax: (08) 9848 1985
Email: enquiries@denmark.wa.gov.au
Website: www.denmark.wa.gov.au

2. Copy of page: Shire of Denmark Aquatic Facility Feasibility Study Questionn...

*** 1. ENTER SURVEY NUMBER**

2.

In order of priority what facilities do you consider to be essential within an aquatic facility in Denmark. (1 being highest and leave blank those which are not considered essential)

	Rank
(a) A 25m 8 lane lap pool (traditional rectangular configuration - 26-28 degrees temperature). Please refer to attached plan 1.	
(b) A 25m 6 lane lap pool (traditional rectangular configuration - 26-28 degrees temperature). Please refer to attached plan 2.	
(c) A hydrotherapy pool (33-34 degrees temperature with specific purpose for providing clinical, theraputic and recreational use).Please refer to attached plan 3.	
(d) A multi-use pool (with specific purpose of providing rectangular water space for learn to swim, aqua aerobics, life saving and other general aquatic activity - 26-28 degrees temperature). Please refer to attached plan 4.	
(e) A water play area for children.	
(f) A Spa.	

(g) A Sauna.

(h) A Steam Room.

Other (please specify)

3. Fees for Casual use at various recreational facilities in the Shire of Denmark include the following:

a. A round of Golf at Denmark Golf Club. $15

b. A gym session at Recreation Centre. $7

c. Corporate Bowls. $7

d. Tennis Court Hire. $5 per/hr/person

e. Recreation Centre normal entry. $4.30

In order to gauge acceptable entry prices for a facility providing a range of swimming and, aquatic fitness and recreation opportunities, what price would you be prepared to pay per entry for a 6 or 8 lane lap pool facility ?

Please tick the appropriate fee charge or nominate an alternative in the box provided.

- $10.00
- $9.00
- $8.00
- $7.00
- $6.00
- $5.00
- $4.00
- Don't know
- More than $10.00 (if so please state amount below in other)

Other (please specify)

4. What would be the acceptable entry price for an Aquatic Facility providing opportunities for a multi-use pool (see plan 4), incorporati lap facility and separate hydrotherapy facility ?

- ○ $10.00
- ○ $9.00
- ○ $8.00
- ○ $7.00
- ○ $6.00
- ○ $5.00
- ○ $4.00
- ○ Don't know
- ○ More than $10.00 (if so please state amount below in other)

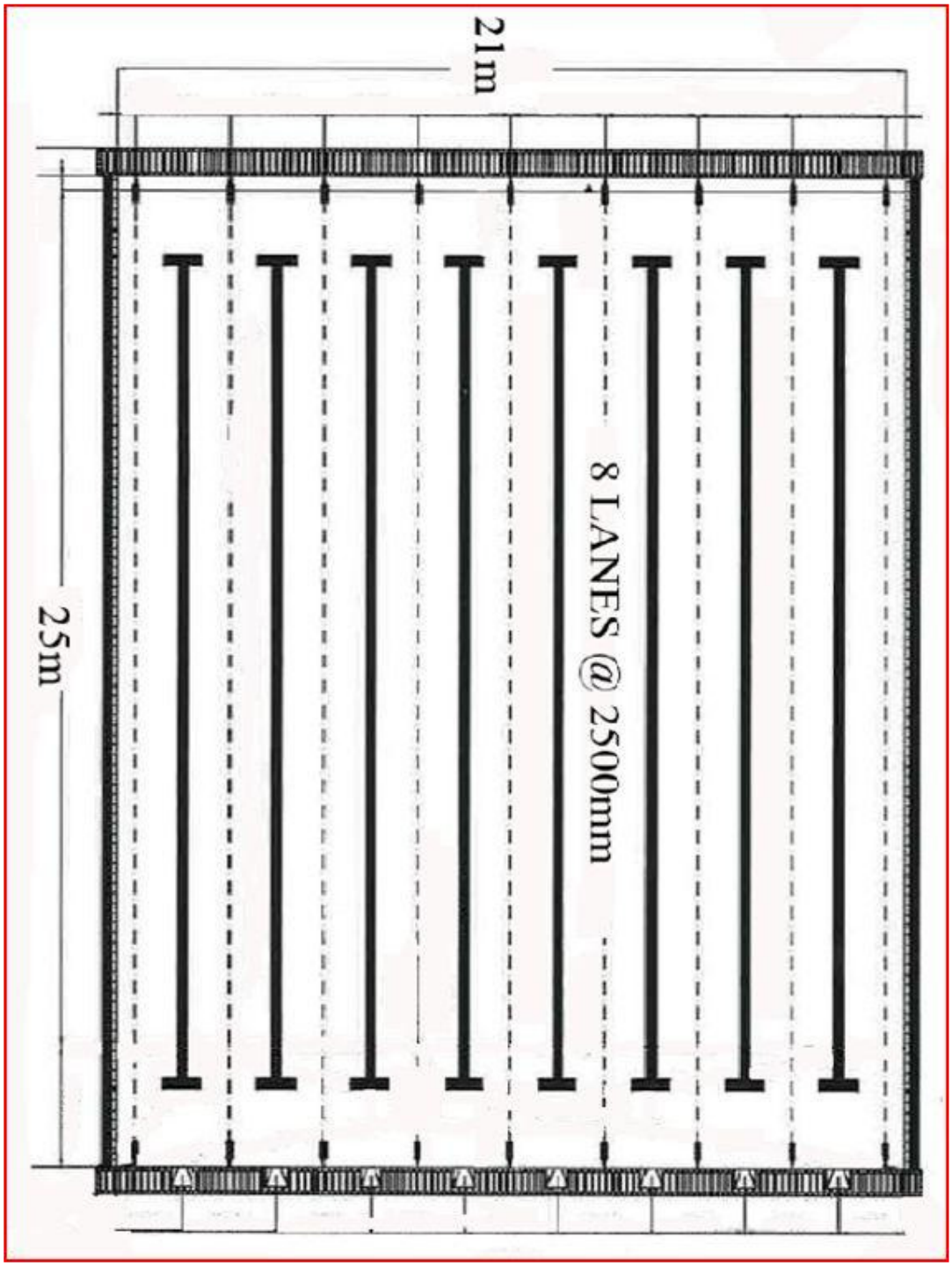
Other (please specify)

3. Shire of Denmark Aquatic Facility Feasibility Study Questionnaire May 2010

INDICATIVE PLANS FOR REFERENCE PURPOSES

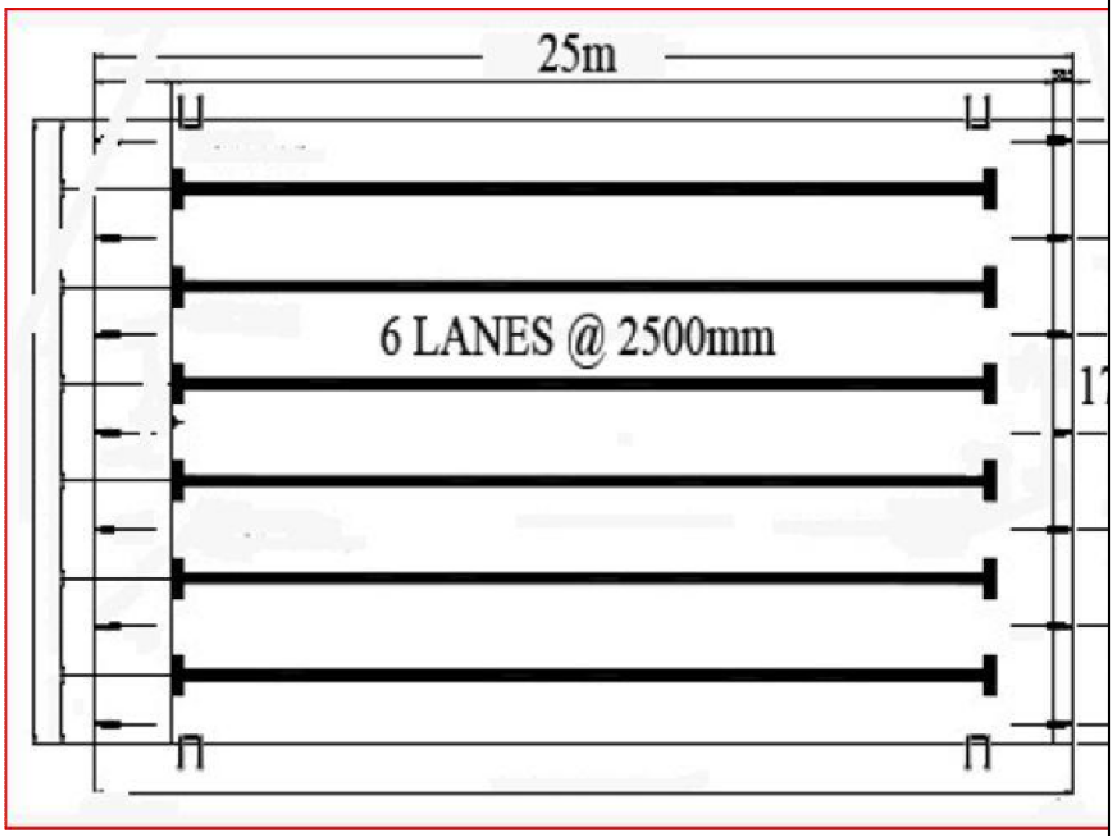
PLAN 1.

25m X 21m - 8 Lane Pool (indicative only)



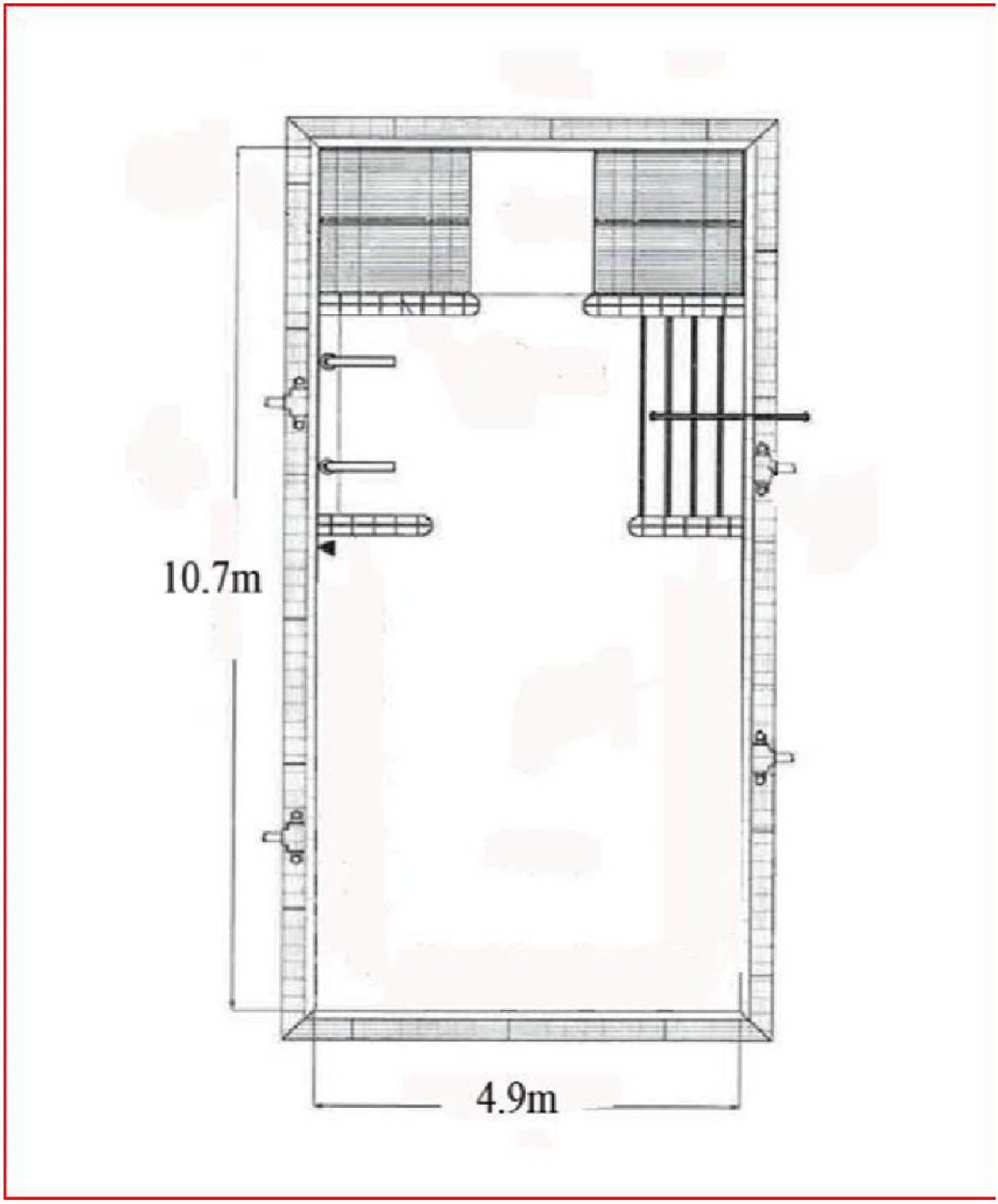
PLAN 2

25m x 16m 6 Lane Pool (indicative only)



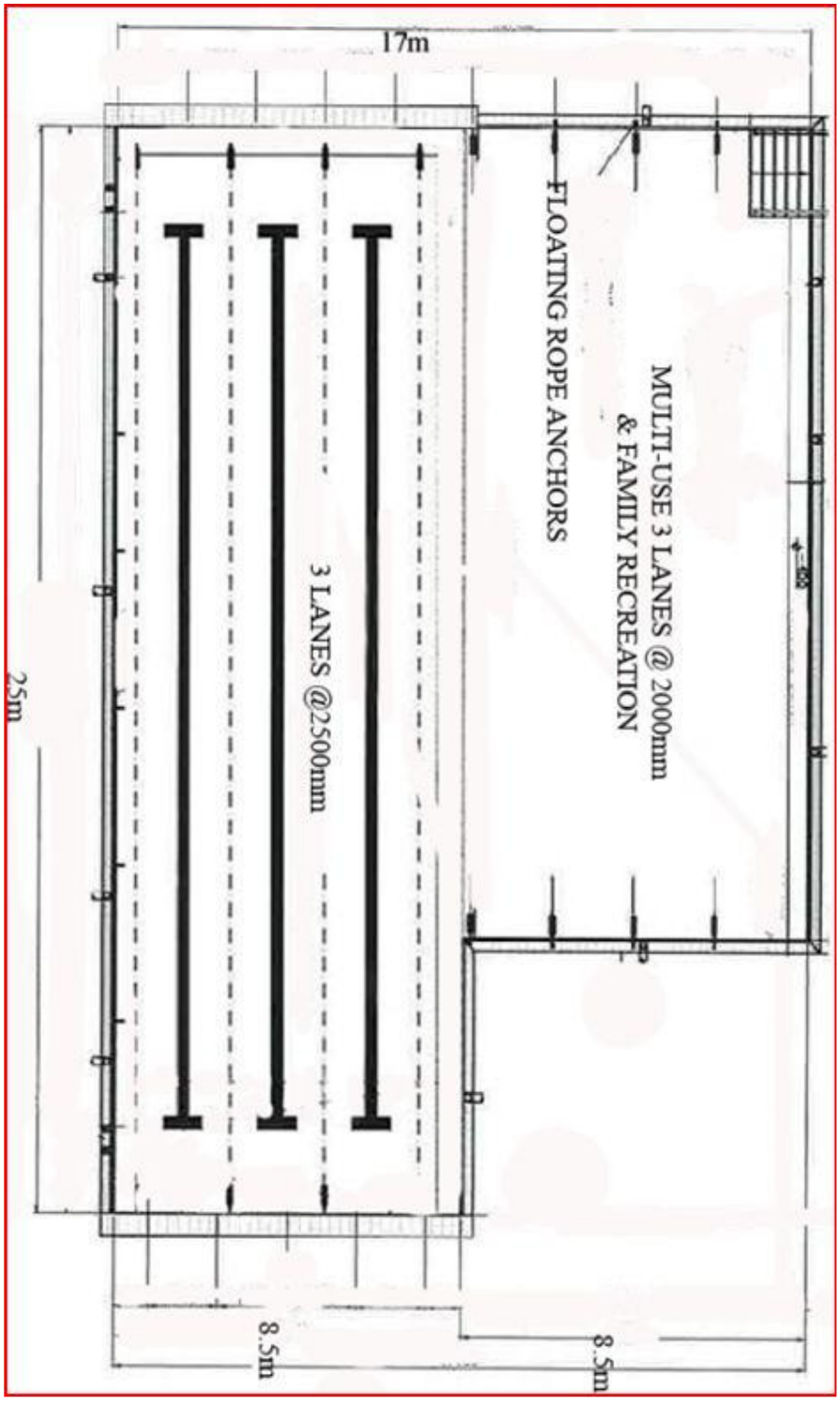
PLAN 3

Hydrotherapy Pool
(between 30msq. to 40msq. in floor area)(indicative only)



PLAN 4

Multi-use Pool providing a 25m lap facility(6m



Appendix B - Denmark Aquatic Centre Design (Option 1)

coffey commercial advisory

AERIAL MONTAGE VIEW Scale 1:1000/A3

EXTENT OF AQUATIC CENTRE EXTENSION & ENTRANCE CANOPIES

DENMARK - AQUATIC FACILITY/RECREATION CENTRE

AERIAL VIEW - CONTEXT

Drg. No: 10117 SK.01 SEPT. 2010

Paterson Group Architects
9 Havelock Street West Perth 6005 Western Australia
Tel (61 8) 9485 2122 Fax (61 8) 9485 2037 email admin@patersongroup.com.au

coffey commercial advisory

SCHEMATIC NORTH ELEVATION - As Proposed Scale 1:250/A3

DENMARK - AQUATIC FACILITY/RECREATION CENTRE

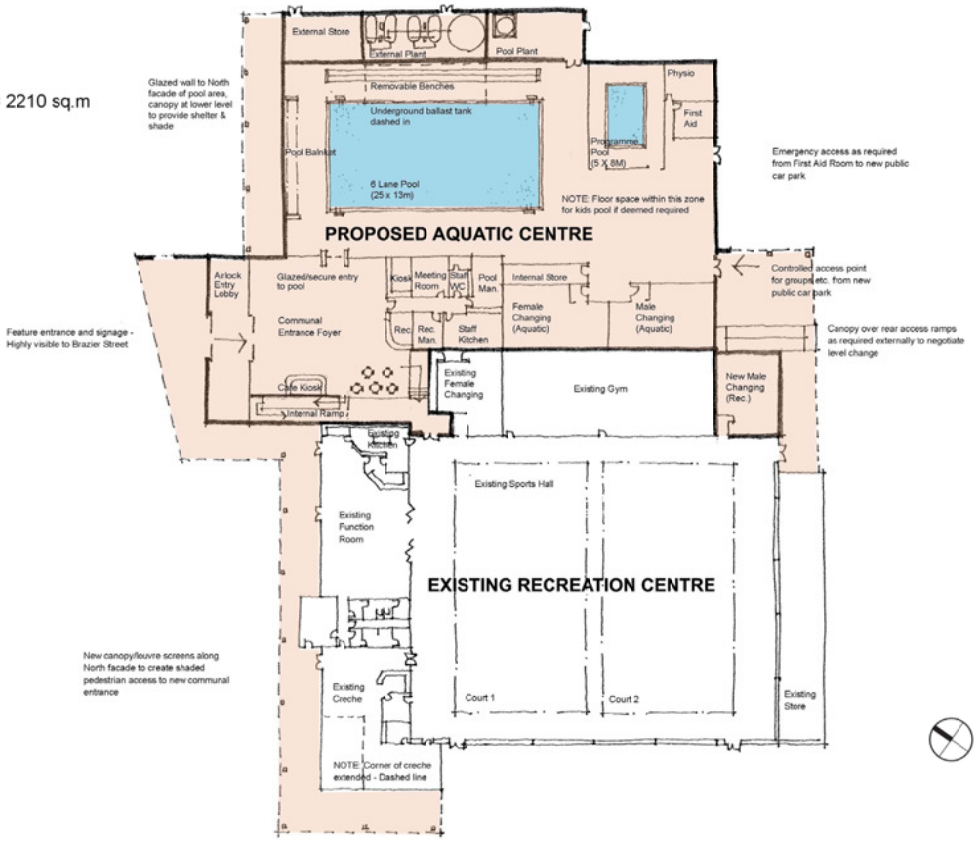
SCHEMATIC ELEVATION

Drg. No: 10117 SK.03 SEPT. 2010

Paterson Group Architects
9 Havelock Street West Perth 6005 Western Australia
Tel (61 8) 9485 2122 Fax (61 8) 9485 2037 email admin@patersongroup.com.au

coffey commercial advisory

PROPOSED AQUATIC CENTRE:
Approx. Gross Internal Floor Area = 2210 sq.m



FLOOR PLAN - As Proposed Scale 1:500/A3

EXTENT OF AQUATIC CENTRE EXTENSION & ENTRANCE CANOPIES

DENMARK - AQUATIC FACILITY/RECREATION CENTRE

FLOOR PLAN

Drg. No: 10117 SK.02 A SEPT. 2010

Paterson Group Architects
9 Havelock Street West Perth 6005 Western Australia
Tel (61 8) 9485 2122 Fax (61 8) 9485 2037 email admin@patersongroup.com.au

Appendix C - Indicative Order of Cost for Option 1

DENMARK AQUATICS FACILITY/RECREATION CENTRE
INDICATIVE ORDER OF COST
7 December 2010

Davis Langdon

Description	Qty	Unit	Rate	Total
			$	$
New Building Works				
Provision of new building	2241	m2	2200	4,930,200
Provision of 6 Lane Pool	300	m2	2200	660,000
Provision of programme pool	35	m2	2400	84,000
Extra over for kitchen facilities		item		10,000
Extra over for café kiosk		item		10,000
Allowance for ramps		item		5,000
Alterations and Demolition				
Works to existing external wall	400	m2	50	20,000
Forming openings in walls	3	Nr.	4000	12,000
Sundry allowance for interfaces (roof etc)		item		20,000
External Works and Services				
Site clearance		item		25,000
Allowance for new canopy	801	m2	350	280,350
Minor works to hardlandscaping generally		item		25,000
New paved courtyard including fence and shade cloth	212	m2	300	63,600
New paved pergola area to creche including fence and cloth	75	m2	400	30,000
New courtyard complete	117	m2	300	35,100
Allowance for soft landscaping		item		50,000
External Stormwater allowance - on site disposal		item		15,000
Incoming Sewer allowance		item		15,000
Incoming Water allowance		item		15,000
Incoming Gas allowance		item		5,000
Incoming Fire Protection allowance		item		20,000
Incoming Electrical allowance		item		15,000
Water Corporation Headworks		item		25,000
Electrical Headworks		item		25,000
				6,395,250
Proportion of Preliminaries @15%		item	15%	104,408
NET PROJECT COST SUBTOTAL (Total Construction Cost)				6,499,658
Construction Contingency @ 3.5%			3.5%	227,488
Design Contingency @5%			5%	324,983
Public Art - excluded				
Professional Fees and Disbursements			10%	705,213
ESD Allowance [rainwater + pv cells]				375,000
GROSS PROJECT COST (At Current Prices)				8,132,341
Escalation to Tender [4Q10]	1%		0.50%	40,662
ESTIMATED TOTAL COMMITMENT				8,173,003

325

40

Exclusions:

FFE	Client Costs
Upgrade of incoming services/reinforcement	Decant costs
Works to existing building	Loss of revenue
Diversion of stormwater drain	Land Cost
GST	Construction Finance costs
Price dated October 2010	Public Art

X

The pool areas shown here do not match those given in §9.3 Table 21. Issue AppC-01.

X

These professional fees have been miscalculted 1. Issue See AppC-01.

X

The cost of extended parking has not been included. See Issue AppC-01.

Appendix D - 10 Year Financial Projections (DAC Option 1)

Denmark Aquatic Centre
Shire of Denmark
Option 1 - Realistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	44,126	$ 200,488	$ 180,439	$ 194,501	$ 208,987	$ 213,236	$ 217,485	$ 214,364	$ 213,278	$ 212,051	$ 210,684	$ 211,527
Pool Bookings	5,000	$ 9,091	$ 8,182	$ 8,819	$ 9,476	$ 9,669	$ 9,862	$ 9,720	$ 9,671	$ 9,615	$ 9,553	$ 9,591
Carnivals/Events	500	$ 2,273	$ 2,045	$ 2,205	$ 2,369	$ 2,417	$ 2,465	$ 2,430	$ 2,418	$ 2,404	$ 2,388	$ 2,398
Aquatic Programs												
Learn To Swim	3,040	$ 33,164	$ 29,847	$ 32,173	$ 34,569	$ 35,272	$ 35,975	$ 35,459	$ 35,279	$ 35,076	$ 34,850	$ 34,990
Squad	160	$ 2,273	$ 2,045	$ 2,205	$ 2,369	$ 2,417	$ 2,465	$ 2,430	$ 2,418	$ 2,404	$ 2,388	$ 2,398
Birthday Parties	160	$ 1,920	$ 1,728	$ 1,863	$ 2,001	$ 2,042	$ 2,083	$ 2,053	$ 2,042	$ 2,031	$ 2,018	$ 2,026
Schools LTS	3,000	$ 30,000	$ 27,000	$ 29,104	$ 31,272	$ 31,908	$ 32,543	$ 32,076	$ 31,914	$ 31,730	$ 31,526	$ 31,652
Ancillary												
Retail Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Café Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	55,986	$ 299,208	$ 270,287	$ 290,571	$ 311,467	$ 317,597	$ 323,727	$ 319,225	$ 317,658	$ 315,888	$ 313,916	$ 315,131

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 4,004	$ 3,604	$ 3,884	$ 4,174	$ 4,259	$ 4,343	$ 4,281	$ 4,259	$ 4,235	$ 4,208	$ 4,224
Swim Instructors	$ 7,600	$ 6,840	$ 7,373	$ 7,922	$ 8,083	$ 8,244	$ 8,126	$ 8,085	$ 8,038	$ 7,986	$ 8,018
Squad Coaches	$ 3,450	$ 3,105	$ 3,347	$ 3,596	$ 3,669	$ 3,742	$ 3,689	$ 3,670	$ 3,649	$ 3,625	$ 3,640
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 400	$ 360	$ 388	$ 417	$ 425	$ 434	$ 428	$ 426	$ 423	$ 420	$ 422
Operations											
Electricity	$ 31,000	$ 31,310	$ 31,623	$ 31,939	$ 32,259	$ 32,581	$ 32,907	$ 33,236	$ 33,569	$ 33,904	$ 34,243
Gas	$ 97,500	$ 98,475	$ 99,460	$ 100,454	$ 101,459	$ 102,473	$ 103,498	$ 104,533	$ 105,579	$ 106,634	$ 107,701
Water	$ 10,000	$ 10,100	$ 10,201	$ 10,303	$ 10,406	$ 10,510	$ 10,615	$ 10,721	$ 10,829	$ 10,937	$ 11,046
Cleaning	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000
Chemicals - Cleaning	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Chemicals - Aquatics	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 20,380	$ 10,190	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380
Buildings - maintenance	$ 81,520	$ 40,760	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520
Administration											
Admin/Mgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 561,094	$ 428,264	$ 481,837	$ 484,511	$ 486,308	$ 569,639	$ 489,303	$ 490,679	$ 492,057	$ 493,437	$ 576,546

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$261,886	$157,977	$191,266	$173,043	$168,711	$245,912	$170,078	$173,021	$176,169	$179,522	$261,414
Adjustment for Inflation (at 4%)	$283,256	$170,868	$215,148	$202,436	$205,262	$311,157	$223,811	$236,791	$250,743	$265,736	$402,435

Denmark Aquatic Centre

Shire of Denmark

Option 1 - Conservative Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	29,388	$ 133,525	$ 120,173	$ 129,537	$ 139,185	$ 142,015	$ 144,845	$ 142,767	$ 142,043	$ 141,226	$ 140,315	$ 140,877
Pod Bookings	3,330	$ 6,055	$ 5,449	$ 5,874	$ 6,311	$ 6,440	$ 6,568	$ 6,474	$ 6,441	$ 6,404	$ 6,362	$ 6,388
Carnivals/Events	333	$ 1,514	$ 1,362	$ 1,468	$ 1,578	$ 1,610	$ 1,642	$ 1,618	$ 1,610	$ 1,601	$ 1,591	$ 1,597
Aquatic Programs												
Learn To Swim	2,025	$ 22,087	$ 19,878	$ 21,427	$ 23,023	$ 23,491	$ 23,959	$ 23,616	$ 23,496	$ 23,361	$ 23,210	$ 23,303
Squad	107	$ 1,514	$ 1,362	$ 1,468	$ 1,578	$ 1,610	$ 1,642	$ 1,618	$ 1,610	$ 1,601	$ 1,591	$ 1,597
Birthday Parties	107	$ 1,279	$ 1,151	$ 1,241	$ 1,333	$ 1,360	$ 1,387	$ 1,367	$ 1,360	$ 1,352	$ 1,344	$ 1,349
Schools LTS	1,998	$ 19,980	$ 17,982	$ 19,383	$ 20,827	$ 21,250	$ 21,674	$ 21,363	$ 21,255	$ 21,132	$ 20,996	$ 21,080
Ancillary												
Retail Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Café Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	37,287	$ 202,613	$ 183,351	$ 196,860	$ 210,777	$ 214,860	$ 218,942	$ 215,944	$ 214,900	$ 213,721	$ 212,408	$ 213,217

Estimated Operating Expenditure		100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff												
Swim School Administration/Reception		$ 2,667	$ 2,400	$ 2,587	$ 2,780	$ 2,836	$ 2,893	$ 2,851	$ 2,837	$ 2,820	$ 2,802	$ 2,813
Swim Instructors		$ 5,062	$ 4,555	$ 4,910	$ 5,276	$ 5,383	$ 5,491	$ 5,412	$ 5,384	$ 5,354	$ 5,319	$ 5,340
Squad Coaches		$ 2,298	$ 2,068	$ 2,229	$ 2,395	$ 2,444	$ 2,492	$ 2,457	$ 2,444	$ 2,430	$ 2,415	$ 2,424
Aquatics Operations												
Operations Coordinator		$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards		$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment		$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties		$ 266	$ 240	$ 258	$ 278	$ 283	$ 289	$ 285	$ 283	$ 282	$ 280	$ 281
Operations												
Electricity		$ 31,000	$ 31,310	$ 31,623	$ 31,939	$ 32,259	$ 32,581	$ 32,907	$ 33,236	$ 33,569	$ 33,904	$ 34,243
Gas		$ 97,500	$ 98,475	$ 99,460	$ 100,454	$ 101,459	$ 102,473	$ 103,498	$ 104,533	$ 105,579	$ 106,634	$ 107,701
Water		$ 10,000	$ 10,100	$ 10,201	$ 10,303	$ 10,406	$ 10,510	$ 10,615	$ 10,721	$ 10,829	$ 10,937	$ 11,046
Cleaning		$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000
Chemicals - Cleaning		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Chemicals - Aquatics		$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000
Insurance		$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance		$ 20,380	$ 10,190	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380
Buildings - maintenance		$ 81,520	$ 40,760	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520
Grounds - maintenance		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment		$ 81,520	$ -	$ -	$ -	$ -	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520
Administration												
Admin/Mgmt Salaries		$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast		$ 555,933	$ 423,619	$ 476,830	$ 479,131	$ 480,818	$ 564,040	$ 483,784	$ 485,188	$ 486,597	$ 488,013	$ 571,100

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$353,320	$240,267	$279,969	$268,353	$265,958	$345,098	$267,840	$270,288	$272,876	$275,606	$357,882
Adjustment for Inflation (at 4%)	$382,151	$259,873	$314,927	$313,935	$323,579	$436,659	$352,460	$369,908	$388,388	$407,963	$550,943

Denmark Aquatic Centre

Shire of Denmark

Option 1- Optimistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment			90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	58,820	$ 267,251	$ 240,526	$ 259,269	$ 278,579	$ 284,244	$ 289,908	$ 285,748	$ 284,299	$ 282,664	$ 280,842	$ 281,965
Pool Bookings	6,665	$ 12,118	$ 10,906	$ 11,756	$ 12,632	$ 12,889	$ 13,146	$ 12,957	$ 12,891	$ 12,817	$ 12,734	$ 12,785
Carnivals/Events	667	$ 3,030	$ 2,727	$ 2,939	$ 3,158	$ 3,222	$ 3,286	$ 3,239	$ 3,223	$ 3,204	$ 3,184	$ 3,196
Aquatic Programs												
Learn To Swim	4,052	$ 44,207	$ 39,786	$ 42,887	$ 46,081	$ 47,018	$ 47,955	$ 47,267	$ 47,027	$ 46,757	$ 46,455	$ 46,641
Squad	213	$ 3,030	$ 2,727	$ 2,939	$ 3,158	$ 3,222	$ 3,286	$ 3,239	$ 3,223	$ 3,204	$ 3,184	$ 3,196
Birthday Parties	213	$ 2,559	$ 2,303	$ 2,483	$ 2,668	$ 2,722	$ 2,776	$ 2,736	$ 2,723	$ 2,707	$ 2,690	$ 2,700
Schools LTS	3,999	$ 39,990	$ 35,991	$ 38,796	$ 41,685	$ 42,533	$ 43,380	$ 42,758	$ 42,541	$ 42,296	$ 42,024	$ 42,192
Ancillary												
Retail Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Café Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	74,629	$ 395,515	$ 356,963	$ 384,001	$ 411,856	$ 420,027	$ 428,198	$ 422,197	$ 420,107	$ 417,748	$ 415,120	$ 416,740

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 5,337	$ 4,804	$ 5,178	$ 5,564	$ 5,677	$ 5,790	$ 5,707	$ 5,678	$ 5,645	$ 5,609	$ 5,631
Swim Instructors	$ 10,131	$ 9,118	$ 9,828	$ 10,560	$ 10,775	$ 10,990	$ 10,832	$ 10,777	$ 10,715	$ 10,646	$ 10,689
Squad Coaches	$ 4,599	$ 4,139	$ 4,462	$ 4,794	$ 4,891	$ 4,989	$ 4,917	$ 4,892	$ 4,864	$ 4,833	$ 4,852
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 533	$ 480	$ 517	$ 556	$ 567	$ 578	$ 570	$ 567	$ 564	$ 560	$ 563
Operations											
Electricity	$ 31,000	$ 31,310	$ 31,623	$ 31,939	$ 32,259	$ 32,581	$ 32,907	$ 33,236	$ 33,569	$ 33,904	$ 34,243
Gas	$ 97,500	$ 98,475	$ 99,460	$ 100,454	$ 101,459	$ 102,473	$ 103,498	$ 104,533	$ 105,579	$ 106,634	$ 107,701
Water	$ 10,000	$ 10,100	$ 10,201	$ 10,303	$ 10,406	$ 10,510	$ 10,615	$ 10,721	$ 10,829	$ 10,937	$ 11,046
Cleaning	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000	$ 20,000
Chemicals - Cleaning	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Chemicals - Aquatics	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 20,380	$ 10,190	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380	$ 20,380
Buildings - maintenance	$ 81,520	$ 40,760	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520	$ 81,520
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520
Administration											
Admin/Mgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 566,241	$ 432,896	$ 486,830	$ 489,875	$ 491,781	$ 575,222	$ 494,805	$ 496,153	$ 497,500	$ 498,845	$ 581,975

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$170,726	$75,933	$102,828	$78,019	$71,754	$147,024	$72,609	$76,046	$79,751	$83,726	$165,235
Adjustment for Inflation (at 4%)	$184,657	$82,129	$115,668	$91,271	$87,300	$186,032	$95,548	$104,074	$113,511	$123,935	$254,372

Appendix E - 10 Year Financial Projections (DAC Option 2)

Denmark Aquatic Centre
Shire of Denmark
Option 2 - Realistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	44,126	$ 200,488	$ 180,439	$ 194,501	$ 208,987	$ 213,236	$ 217,485	$ 214,364	$ 213,278	$ 212,051	$ 210,684	$ 211,527
Pool Bookings	5,000	$ 9,091	$ 8,182	$ 8,819	$ 9,476	$ 9,669	$ 9,862	$ 9,720	$ 9,671	$ 9,615	$ 9,553	$ 9,591
Carnivals/Everts	500	$ 2,273	$ 2,045	$ 2,205	$ 2,369	$ 2,417	$ 2,465	$ 2,430	$ 2,418	$ 2,404	$ 2,388	$ 2,398
Aquatic Programs												
Learn To Swim	3,040	$ 33,164	$ 29,847	$ 32,173	$ 34,569	$ 35,272	$ 35,975	$ 35,459	$ 35,279	$ 35,076	$ 34,850	$ 34,990
Squad	160	$ 2,273	$ 2,045	$ 2,205	$ 2,369	$ 2,417	$ 2,465	$ 2,430	$ 2,418	$ 2,404	$ 2,388	$ 2,398
Birthday Parties	160	$ 1,920	$ 1,728	$ 1,863	$ 2,001	$ 2,042	$ 2,083	$ 2,053	$ 2,042	$ 2,031	$ 2,018	$ 2,026
Schools LTS	3,000	$ 30,000	$ 27,000	$ 29,104	$ 31,272	$ 31,908	$ 32,543	$ 32,076	$ 31,914	$ 31,730	$ 31,526	$ 31,652
Ancillary												
Retail Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Café Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	55,986	$ 299,208	$ 270,287	$ 290,571	$ 311,467	$ 317,597	$ 323,727	$ 319,225	$ 317,658	$ 315,888	$ 313,916	$ 315,131

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 4,004	$ 3,604	$ 3,884	$ 4,174	$ 4,259	$ 4,343	$ 4,281	$ 4,259	$ 4,235	$ 4,208	$ 4,224
Swim Instructors	$ 7,600	$ 6,840	$ 7,373	$ 7,922	$ 8,083	$ 8,244	$ 8,126	$ 8,085	$ 8,038	$ 7,986	$ 8,018
Squad Coaches	$ 3,450	$ 3,105	$ 3,347	$ 3,596	$ 3,669	$ 3,742	$ 3,689	$ 3,670	$ 3,649	$ 3,625	$ 3,640
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 400	$ 360	$ 388	$ 417	$ 425	$ 434	$ 428	$ 426	$ 423	$ 420	$ 422
Operations											
Electricity	$ 37,200	$ 37,572	$ 37,948	$ 38,327	$ 38,710	$ 39,098	$ 39,489	$ 39,883	$ 40,282	$ 40,685	$ 41,092
Gas	$ 117,000	$ 118,170	$ 119,352	$ 120,545	$ 121,751	$ 122,968	$ 124,198	$ 125,440	$ 126,694	$ 127,961	$ 129,241
Water	$ 12,000	$ 12,120	$ 12,241	$ 12,364	$ 12,487	$ 12,612	$ 12,738	$ 12,866	$ 12,994	$ 13,124	$ 13,255
Cleaning	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000
Chemicals - Cleaning	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600
Chemicals - Aquatics	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 22,325	$ 11,163	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325
Buildings - maintenance	$ 89,300	$ 44,650	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 89,300	$ -	$ -	$ -	$ -	$ 89,300	$ -	$ -	$ -	$ -	$ 89,300
Administration											
AdminMgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 613,299	$ 468,104	$ 526,819	$ 529,775	$ 531,858	$ 623,257	$ 535,432	$ 537,102	$ 538,777	$ 540,458	$ 631,649

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$314,091	$197,816	$236,248	$218,308	$214,260	$299,530	$216,207	$219,444	$222,889	$226,542	$316,517
Adjustment for Inflation (at 4%)	$339,721	$213,958	$265,747	$255,389	$260,681	$379,001	$284,514	$300,325	$317,241	$335,337	$487,264

Denmark Aquatic Centre

Shire of Denmark

Option 2- Conservative Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	29,388	$ 133,525	$ 120,173	$ 129,537	$ 139,185	$ 142,015	$ 144,845	$ 142,767	$ 142,043	$ 141,226	$ 140,315	$ 140,877
Pool Bookings	3,330	$ 6,055	$ 5,449	$ 5,874	$ 6,311	$ 6,440	$ 6,568	$ 6,474	$ 6,441	$ 6,404	$ 6,362	$ 6,388
Carnivals/Events	333	$ 1,514	$ 1,362	$ 1,468	$ 1,578	$ 1,610	$ 1,642	$ 1,618	$ 1,610	$ 1,601	$ 1,591	$ 1,597
Aquatic Programs												
Learn To Swim	2,025	$ 22,087	$ 19,878	$ 21,427	$ 23,023	$ 23,491	$ 23,959	$ 23,616	$ 23,496	$ 23,361	$ 23,210	$ 23,303
Squad	107	$ 1,514	$ 1,362	$ 1,468	$ 1,578	$ 1,610	$ 1,642	$ 1,618	$ 1,610	$ 1,601	$ 1,591	$ 1,597
Birthday Parties	107	$ 1,279	$ 1,151	$ 1,241	$ 1,333	$ 1,360	$ 1,387	$ 1,367	$ 1,360	$ 1,352	$ 1,344	$ 1,349
Schools LTS	1,998	$ 19,980	$ 17,982	$ 19,383	$ 20,827	$ 21,250	$ 21,674	$ 21,363	$ 21,255	$ 21,132	$ 20,996	$ 21,080
Ancillary												
Retail Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Café Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	37,287	$ 202,613	$ 183,351	$ 196,860	$ 210,777	$ 214,860	$ 218,942	$ 215,944	$ 214,900	$ 213,721	$ 212,408	$ 213,217

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 2,667	$ 2,400	$ 2,587	$ 2,780	$ 2,836	$ 2,893	$ 2,851	$ 2,837	$ 2,820	$ 2,802	$ 2,813
Swim Instructors	$ 5,052	$ 4,555	$ 4,910	$ 5,276	$ 5,383	$ 5,491	$ 5,412	$ 5,384	$ 5,354	$ 5,319	$ 5,340
Squad Coaches	$ 2,298	$ 2,068	$ 2,229	$ 2,395	$ 2,444	$ 2,492	$ 2,457	$ 2,444	$ 2,430	$ 2,415	$ 2,424
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 266	$ 240	$ 258	$ 278	$ 283	$ 289	$ 285	$ 283	$ 282	$ 280	$ 281
Operations											
Electricity	$ 37,200	$ 37,572	$ 37,948	$ 38,327	$ 38,710	$ 39,098	$ 39,489	$ 39,883	$ 40,282	$ 40,685	$ 41,092
Gas	$ 117,000	$ 118,170	$ 119,352	$ 120,545	$ 121,751	$ 122,968	$ 124,198	$ 125,440	$ 126,694	$ 127,961	$ 129,241
Water	$ 12,000	$ 12,120	$ 12,241	$ 12,364	$ 12,487	$ 12,612	$ 12,738	$ 12,866	$ 12,994	$ 13,124	$ 13,255
Cleaning	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000
Chemicals - Cleaning	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600
Chemicals - Aquatics	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 22,325	$ 11,163	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325
Buildings - maintenance	$ 89,300	$ 44,650	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 89,300	$ -	$ -	$ -	$ -	$ 89,300	$ -	$ -	$ -	$ -	$ 89,300
Administration											
Admin/Mgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 608,138	$ 463,458	$ 521,811	$ 524,395	$ 526,368	$ 617,658	$ 529,913	$ 531,611	$ 533,318	$ 535,033	$ 626,203

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position		$405,525	$280,107	$324,951	$313,618	$311,508	$398,716	$313,970	$316,711	$319,596	$322,626	$412,985
Adjustment for Inflation (at 4%)		$438,616	$302,963	$365,526	$366,888	$378,997	$504,503	$413,162	$433,441	$454,885	$477,565	$635,772

Denmark Aquatic Centre

Shire of Denmark

Option 2 - Optimistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment			90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	58,820	$ 267,251	$ 240,526	$ 259,269	$ 278,579	$ 284,244	$ 289,908	$ 285,748	$ 284,299	$ 282,664	$ 280,842	$ 281,965
Pool Bookings	6,665	$ 12,118	$ 10,906	$ 11,756	$ 12,632	$ 12,889	$ 13,146	$ 12,957	$ 12,891	$ 12,817	$ 12,734	$ 12,785
Carnivals/Events	667	$ 3,030	$ 2,727	$ 2,939	$ 3,158	$ 3,222	$ 3,286	$ 3,239	$ 3,223	$ 3,204	$ 3,184	$ 3,196
Aquatic Programs												
Learn To Swim	4,052	$ 44,207	$ 39,786	$ 42,887	$ 46,081	$ 47,018	$ 47,955	$ 47,267	$ 47,027	$ 46,757	$ 46,455	$ 46,641
Squad	213	$ 3,030	$ 2,727	$ 2,939	$ 3,158	$ 3,222	$ 3,286	$ 3,239	$ 3,223	$ 3,204	$ 3,184	$ 3,196
Birthday Parties	213	$ 2,559	$ 2,303	$ 2,483	$ 2,668	$ 2,722	$ 2,776	$ 2,736	$ 2,723	$ 2,707	$ 2,690	$ 2,700
Schools LTS	3,999	$ 39,990	$ 35,991	$ 38,796	$ 41,685	$ 42,533	$ 43,380	$ 42,758	$ 42,541	$ 42,296	$ 42,024	$ 42,192
Ancillary												
Retail Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Café Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	74,629	$ 395,515	$ 356,963	$ 384,001	$ 411,856	$ 420,027	$ 428,198	$ 422,197	$ 420,107	$ 417,748	$ 415,120	$ 416,740

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 5,337	$ 4,804	$ 5,178	$ 5,564	$ 5,677	$ 5,790	$ 5,707	$ 5,678	$ 5,645	$ 5,609	$ 5,631
Swim Instructors	$ 10,131	$ 9,118	$ 9,828	$ 10,560	$ 10,775	$ 10,990	$ 10,832	$ 10,777	$ 10,715	$ 10,646	$ 10,689
Squad Coaches	$ 4,599	$ 4,139	$ 4,462	$ 4,794	$ 4,891	$ 4,989	$ 4,917	$ 4,892	$ 4,864	$ 4,833	$ 4,852
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 533	$ 480	$ 517	$ 556	$ 567	$ 578	$ 570	$ 567	$ 564	$ 560	$ 563
Operations											
Electricity	$ 37,200	$ 37,572	$ 37,948	$ 38,327	$ 38,710	$ 39,098	$ 39,489	$ 39,883	$ 40,282	$ 40,685	$ 41,092
Gas	$ 117,000	$ 118,170	$ 119,352	$ 120,545	$ 121,751	$ 122,968	$ 124,198	$ 125,440	$ 126,694	$ 127,961	$ 129,241
Water	$ 12,000	$ 12,120	$ 12,241	$ 12,364	$ 12,487	$ 12,612	$ 12,738	$ 12,866	$ 12,994	$ 13,124	$ 13,255
Cleaning	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000	$ 24,000
Chemicals - Cleaning	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600	$ 3,600
Chemicals - Aquatics	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 22,325	$ 11,163	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325	$ 22,325
Buildings - maintenance	$ 89,300	$ 44,650	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300	$ 89,300
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 89,300	$ -	$ -	$ -	$ -	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520
Administration											
Admin/Mgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 618,446	$ 472,735	$ 531,811	$ 535,140	$ 537,331	$ 621,059	$ 540,934	$ 542,576	$ 544,220	$ 545,865	$ 629,298

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$222,931	$115,772	$147,810	$123,283	$117,304	$192,862	$118,738	$122,469	$126,471	$130,746	$212,558
Adjustment for Inflation (at 4%)	$241,122	$125,219	$166,266	$144,224	$142,718	$244,032	$156,251	$167,607	$180,008	$193,536	$327,223

Appendix F - 10 Year Financial Projections (DAC Option 3)

Denmark Aquatic Centre
Shire of Denmark
Option 3 - Realistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	44,126	$ 200,488	$ 180,439	$ 194,501	$ 208,987	$ 213,236	$ 217,485	$ 214,364	$ 213,278	$ 212,051	$ 210,684	$ 211,527
Pool Bookings	5,000	$ 9,091	$ 8,182	$ 8,819	$ 9,476	$ 9,659	$ 9,862	$ 9,720	$ 9,671	$ 9,615	$ 9,553	$ 9,591
Carnivals/Everts	500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Aquatic Programs												
Learn To Swim	3,040	$ 33,164	$ 29,847	$ 32,173	$ 34,569	$ 35,272	$ 35,975	$ 35,459	$ 35,279	$ 35,076	$ 34,850	$ 34,990
Squad	160	$ 2,273	$ 2,045	$ 2,205	$ 2,369	$ 2,417	$ 2,465	$ 2,430	$ 2,418	$ 2,404	$ 2,388	$ 2,398
Birthday Parties	160	$ 1,920	$ 1,728	$ 1,863	$ 2,001	$ 2,042	$ 2,083	$ 2,053	$ 2,042	$ 2,031	$ 2,018	$ 2,026
Schools LTS	3,000	$ 30,000	$ 27,000	$ 29,104	$ 31,272	$ 31,908	$ 32,543	$ 32,076	$ 31,914	$ 31,730	$ 31,526	$ 31,652
Ancillary												
Retail Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Café Net		$ 5,000	$ 4,500	$ 4,851	$ 5,212	$ 5,318	$ 5,424	$ 5,346	$ 5,319	$ 5,288	$ 5,254	$ 5,275
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	55,986	$ 296,935	$ 268,242	$ 288,366	$ 309,098	$ 315,180	$ 321,261	$ 316,795	$ 315,240	$ 313,484	$ 311,527	$ 312,733

Estimated Operating Expenditure	100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff											
Swim School Administration/Reception	$ 4,004	$ 3,604	$ 3,884	$ 4,174	$ 4,259	$ 4,343	$ 4,281	$ 4,259	$ 4,235	$ 4,208	$ 4,224
Swim Instructors	$ 7,600	$ 6,840	$ 7,373	$ 7,922	$ 8,083	$ 8,244	$ 8,126	$ 8,085	$ 8,038	$ 7,986	$ 8,018
Squad Coaches	$ 3,450	$ 3,105	$ 3,347	$ 3,596	$ 3,669	$ 3,742	$ 3,689	$ 3,670	$ 3,649	$ 3,625	$ 3,640
Aquatics Operations											
Operations Coordinator	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 400	$ 360	$ 388	$ 417	$ 425	$ 434	$ 428	$ 426	$ 423	$ 420	$ 422
Operations											
Electricity	$ 26,350	$ 26,614	$ 26,880	$ 27,148	$ 27,420	$ 27,694	$ 27,971	$ 28,251	$ 28,533	$ 28,819	$ 29,107
Gas	$ 82,875	$ 83,704	$ 84,541	$ 85,386	$ 86,240	$ 87,102	$ 87,973	$ 88,853	$ 89,742	$ 90,639	$ 91,546
Water	$ 8,500	$ 8,585	$ 8,671	$ 8,758	$ 8,845	$ 8,934	$ 9,023	$ 9,113	$ 9,204	$ 9,296	$ 9,389
Cleaning	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000
Chemicals - Cleaning	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550
Chemicals - Aquatics	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200
Insurance	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 19,888	$ 9,944	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888
Buildings - maintenance	$ 79,550	$ 39,775	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550
Grounds - maintenance	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 79,550	$ -	$ -	$ -	$ -	$ 79,550	$ -	$ -	$ -	$ -	$ 79,550
Administration											
AdminMgmt Salaries	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 530,637	$ 400,800	$ 452,932	$ 455,394	$ 456,977	$ 538,122	$ 459,537	$ 460,693	$ 461,848	$ 463,004	$ 543,915

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$233,701	$132,558	$164,566	$146,296	$141,797	$216,860	$142,743	$145,453	$148,364	$151,476	$231,181
Adjustment for Inflation (at 4%)	$252,772	$143,375	$185,114	$171,145	$172,518	$274,398	$187,840	$199,062	$211,168	$221,222	$355,893

Denmark Aquatic Centre

Shire of Denmark

Option 3- Conservative Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment		100%	90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	29,388	$ 133,525	$ 120,173	$ 129,537	$ 139,185	$ 142,015	$ 144,845	$ 142,767	$ 142,043	$ 141,226	$ 140,315	$ 140,877
Pool Bookings	3,330	$ 6,055	$ 5,449	$ 5,874	$ 6,311	$ 6,440	$ 6,568	$ 6,474	$ 6,441	$ 6,404	$ 6,362	$ 6,388
Carnivals/Events	333	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Aquatic Programs												
Learn To Swim	2,025	$ 22,087	$ 19,878	$ 21,427	$ 23,023	$ 23,491	$ 23,959	$ 23,616	$ 23,496	$ 23,361	$ 23,210	$ 23,303
Squad	107	$ 1,514	$ 1,362	$ 1,468	$ 1,578	$ 1,610	$ 1,642	$ 1,618	$ 1,610	$ 1,601	$ 1,591	$ 1,597
Birthday Parties	107	$ 1,279	$ 1,151	$ 1,241	$ 1,333	$ 1,360	$ 1,387	$ 1,367	$ 1,360	$ 1,352	$ 1,344	$ 1,349
Schools LTS	1,998	$ 19,980	$ 17,982	$ 19,383	$ 20,827	$ 21,250	$ 21,674	$ 21,363	$ 21,255	$ 21,132	$ 20,996	$ 21,080
Ancillary												
Retail Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Café Net		$ 3,330	$ 2,997	$ 3,231	$ 3,471	$ 3,542	$ 3,612	$ 3,560	$ 3,542	$ 3,522	$ 3,499	$ 3,513
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	37,287	$ 201,099	$ 181,989	$ 195,392	$ 209,200	$ 213,250	$ 217,300	$ 214,325	$ 213,290	$ 212,120	$ 210,817	$ 211,621

Estimated Operating Expenditure		100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff												
Swim School Administration/Reception		$ 2,667	$ 2,400	$ 2,587	$ 2,780	$ 2,836	$ 2,893	$ 2,851	$ 2,837	$ 2,820	$ 2,802	$ 2,813
Swim Instructors		$ 5,052	$ 4,555	$ 4,910	$ 5,276	$ 5,383	$ 5,491	$ 5,412	$ 5,384	$ 5,354	$ 5,319	$ 5,340
Squad Coaches		$ 2,298	$ 2,068	$ 2,229	$ 2,395	$ 2,444	$ 2,492	$ 2,457	$ 2,444	$ 2,430	$ 2,415	$ 2,424
Aquatics Operations												
Operations Coordinator		$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards		$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment		$ 2,000	$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties		$ 266	$ 240	$ 258	$ 278	$ 283	$ 289	$ 285	$ 283	$ 282	$ 280	$ 281
Operations												
Electricity		$ 26,350	$ 26,614	$ 26,880	$ 27,148	$ 27,420	$ 27,694	$ 27,971	$ 28,251	$ 28,533	$ 28,819	$ 29,107
Gas		$ 82,875	$ 83,704	$ 84,541	$ 85,386	$ 86,240	$ 87,102	$ 87,973	$ 88,853	$ 89,742	$ 90,639	$ 91,546
Water		$ 8,500	$ 8,585	$ 8,671	$ 8,758	$ 8,845	$ 8,934	$ 9,023	$ 9,113	$ 9,204	$ 9,296	$ 9,389
Cleaning		$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000
Chemicals - Cleaning		$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550
Chemicals - Aquatics		$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200
Insurance		$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance		$ 19,888	$ 9,944	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888
Buildings - maintenance		$ 79,550	$ 39,775	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550
Grounds - maintenance		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment		$ 79,550	$ -	$ -	$ -	$ -	$ 79,550	$ -	$ -	$ -	$ -	$ 79,550
Administration												
Admin/Mgmt Salaries		$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast		$ 525,475	$ 396,155	$ 447,924	$ 450,014	$ 451,487	$ 532,523	$ 454,019	$ 455,202	$ 456,389	$ 457,580	$ 538,469

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$324,376	$214,165	$252,533	$240,814	$238,237	$315,222	$239,693	$241,912	$244,268	$246,762	$326,848
Adjustment for Inflation (at 4%)	$350,845	$231,641	$284,065	$281,718	$289,852	$398,857	$315,420	$331,073	$347,670	$365,269	$503,168

Denmark Aquatic Centre

Shire of Denmark

Option 3 - Optimistic Scenario

Ramp Up Rate Assumptions	Attendances	Base Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population Variations		6,228	100%	102%	104%	106%	108%	110%	112%	114%	115%	117%
Lifecycle Adjustment			90.0%	95.0%	100.0%	100.0%	100.0%	97.0%	95.0%	93.0%	91.0%	90.0%

Estimated Operating Income			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Casual Swim												
Casual Swimming	58,820	$ 267,251	$ 240,526	$ 259,269	$ 278,579	$ 284,244	$ 289,908	$ 285,748	$ 284,299	$ 282,664	$ 280,842	$ 281,965
Pool Bookings	6,665	$ 12,118	$ 10,906	$ 11,755	$ 12,632	$ 12,889	$ 13,146	$ 12,957	$ 12,891	$ 12,817	$ 12,734	$ 12,785
Carnivals/Events	667	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Aquatic Programs												
Learn To Swim	4,052	$ 44,207	$ 39,786	$ 42,887	$ 46,081	$ 47,018	$ 47,955	$ 47,267	$ 47,027	$ 46,757	$ 46,455	$ 46,641
Squad	213	$ 3,030	$ 2,727	$ 2,939	$ 3,158	$ 3,222	$ 3,286	$ 3,239	$ 3,223	$ 3,204	$ 3,184	$ 3,196
Birthday Parties	213	$ 2,559	$ 2,303	$ 2,483	$ 2,668	$ 2,722	$ 2,776	$ 2,736	$ 2,723	$ 2,707	$ 2,690	$ 2,700
Schools LTS	3,999	$ 39,990	$ 35,991	$ 38,796	$ 41,685	$ 42,533	$ 43,380	$ 42,758	$ 42,541	$ 42,296	$ 42,024	$ 42,192
Ancillary												
Retail Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Café Net		$ 6,665	$ 5,999	$ 6,466	$ 6,948	$ 7,089	$ 7,230	$ 7,126	$ 7,090	$ 7,049	$ 7,004	$ 7,032
Other Revenue (Leases)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Total Operating Income Forecast	74,629	$ 392,485	$ 354,236	$ 381,062	$ 408,698	$ 416,805	$ 424,911	$ 418,957	$ 416,885	$ 414,544	$ 411,936	$ 413,544

Estimated Operating Expenditure		100%	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Swim School Staff												
Swim School Administration/Reception	$ 5,337		$ 4,804	$ 5,178	$ 5,564	$ 5,677	$ 5,790	$ 5,707	$ 5,678	$ 5,645	$ 5,609	$ 5,631
Swim Instructors	$ 10,131		$ 9,118	$ 9,828	$ 10,560	$ 10,775	$ 10,990	$ 10,832	$ 10,777	$ 10,715	$ 10,646	$ 10,689
Squad Coaches	$ 4,599		$ 4,139	$ 4,462	$ 4,794	$ 4,891	$ 4,989	$ 4,917	$ 4,892	$ 4,864	$ 4,833	$ 4,852
Aquatics Operations												
Operations Coordinator	$ 17,784		$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784	$ 17,784
Life Guards	$ 91,104		$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104	$ 91,104
First Aid Equipment	$ 2,000		$ 1,800	$ 1,940	$ 2,085	$ 2,127	$ 2,170	$ 2,138	$ 2,128	$ 2,115	$ 2,102	$ 2,110
Birthday Parties	$ 533		$ 480	$ 517	$ 556	$ 567	$ 578	$ 570	$ 567	$ 564	$ 560	$ 563
Operations												
Electricity	$ 26,350		$ 26,614	$ 26,880	$ 27,148	$ 27,420	$ 27,694	$ 27,971	$ 28,251	$ 28,533	$ 28,819	$ 29,107
Gas	$ 82,875		$ 83,704	$ 84,541	$ 85,386	$ 86,240	$ 87,102	$ 87,973	$ 88,853	$ 89,742	$ 90,639	$ 91,546
Water	$ 8,500		$ 8,585	$ 8,671	$ 8,758	$ 8,845	$ 8,934	$ 9,023	$ 9,113	$ 9,204	$ 9,296	$ 9,389
Cleaning	$ 17,000		$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000
Chemicals - Cleaning	$ 2,550		$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550	$ 2,550
Chemicals - Aquatics	$ 10,200		$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200	$ 10,200
Insurance	$ 15,000		$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Security	$ 3,000		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Plant - maintenance	$ 19,888		$ 9,944	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888	$ 19,888
Buildings - maintenance	$ 79,550		$ 39,775	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550	$ 79,550
Grounds - maintenance	$ 2,000		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Equipment - maintenance	$ 3,000		$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Refurbishment	$ 79,550		$ -	$ -	$ -	$ -	$ 81,520	$ -	$ -	$ -	$ -	$ 81,520
Administration												
Admin/Mgmt Salaries	$ 33,332		$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332	$ 33,332
Staff Development, Uniforms and Allowances	$ 5,000		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
IT support (internal or external)	$ 1,000		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Marketing & Promotion	$ 5,000		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Audit	$ 500		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Bank Charges	$ 500		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Cash security	$ 500		$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500
Telephone	$ 2,000		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Postage	$ 2,000		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Printing & Stationery	$ 2,000		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Licences	$ 1,000		$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Miscellaneous/Contingency	$ 2,000		$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
Total Expenditure Forecast	$ 535,783		$ 405,432	$ 457,924	$ 460,758	$ 462,450	$ 545,674	$ 465,040	$ 466,167	$ 467,291	$ 468,412	$ 551,314

Financial Summary Data		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Total Cash Position	$143,298	$51,195	$76,862	$52,060	$45,645	$120,763	$46,082	$49,282	$52,747	$56,476	$137,770
Adjustment for Inflation (at 4%)	$154,991	$55,373	$86,460	$60,903	$55,535	$152,804	$60,641	$67,446	$75,075	$83,598	$212,091

Appendix G

Cyril Edwards, 07 April 2011

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Appendix G is not part of the CCA Final Report. It has been attached to the marked-up CCA Report so that the latter be read as a single document. When readers discovers "an issue" that has been marked-up, they are encouraged to flip to the appropriate issue in Appendix G to learn exactly what it is that concerns the Project Team.

Appendix G is divided into three parts. Part One discusses in detail all those issues that have prompted alerts in the marked-up version of the CCA Report §1 - 14 and the first three appendices, A, B & C.

The last three, Appendices D, E & F, do not lend themselves to this technique. Here readers may be easily overwhelmed by spreadsheet information packed into 13 columns and 50 lines – say 650 cells, many of which may contain 6-digit entries. The data is presented without explanation of any kind. If we were to flag each issue, many of which are simply questions, in each of the nine spreadsheets any chance of clarity would be lost.

Yet the issues surrounding these three appendices are so numerous, and their resolution so important to understanding the financial feasibility of the project, that a different approach must be found. Thus, Part Two of Appendix G is exclusively concerned with:

(a) understanding the financial model in detail;
(b) summarising the key parameters and variables involved;
(c) determining what further work may be required to form a sound basis for decision.

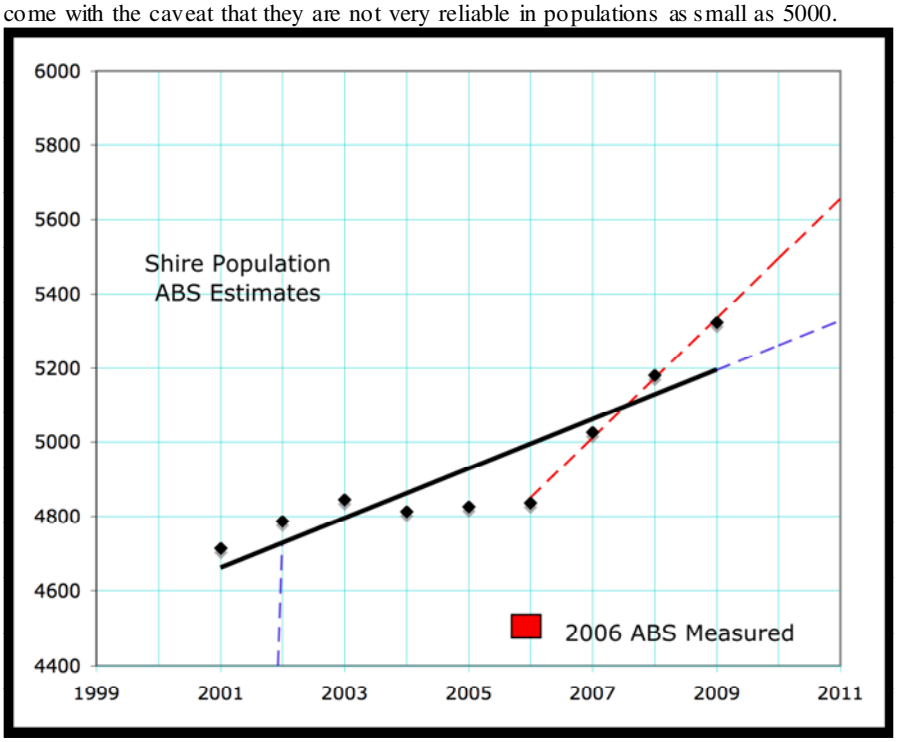
The Report provides little or no guidance in this respect.

Part Three of the appendix deals with items (b) and (c) above.

Part One – Issues arising from the marked-up CCA Report

Issue #3-01 *p8* *[§3.1 – Current Population]*

The 2006 ABS census gives the observed population of Denmark Shire as 4509. In addition to such 'hard numbers' that appear only every five years (2001, 2006, 2011 etc) ABS also makes population estimates and these may be couched in annual terms. The latest available for Denmark Shire were issued 30 March 2010 and are available as a time series from 2001-2009. All such ABS estimates come with the caveat that they are not very reliable in populations as small as 5000.



The solid black line (above) shows the best-fit linear trend line ($R^2 = 78\%$) for the ABS estimates (small black diamonds) and its extrapolation to 2011 (blue dashed line). The red dashed line shows the best-fit trend ($R^2 = 99\%$) if the data is restricted to the 2006-9 estimates- and is also extrapolated to 2011.

Note that these model-dependent estimates do not come close to the actual measurements in the census year. For example, the estimate is 4837 for 2006, rather than the measured 4509 (the large red rectangle above). It is also worth noting that the nine-year average of estimates puts the annual growth at 1.45% over the nine-year span although the three-year average growth rate for 2006-2009 has picked up to 3.24% annually (but remember – these are still estimates, not measurements).

It is clear from this analysis that the most optimistic ABS estimate would be unlikely to exceed 5655 in 2011. Bearing in mind that the actual measured population in 2006 was lower than that estimated by about 330, it might be argued that ABS estimates (extrapolated) are most unlikely to be higher than about 5.3k – a figure falling far short of the 6228 used as the Base figure for 2012 in Appendices D, E & F. See further comment under §12.1.

Issue 3-02 *p12* *[§3.4 Social Characteristics]*

The final paragraph of this section (top of page 12) asserts that "the low levels of weekly individual and household income would however indicate that there is less disposable income for expenditure on leisure pursuits and paid access to facilities."

This observation fails to consider the contrary effect that, along with the relatively high proportion of retirees in the community there is a similar high proportion of professionals (retired or otherwise) with

zero or very low levels of debt. These people are not struggling to pay off inflated mortgages and are in fact "well-off" in terms of disposable income.

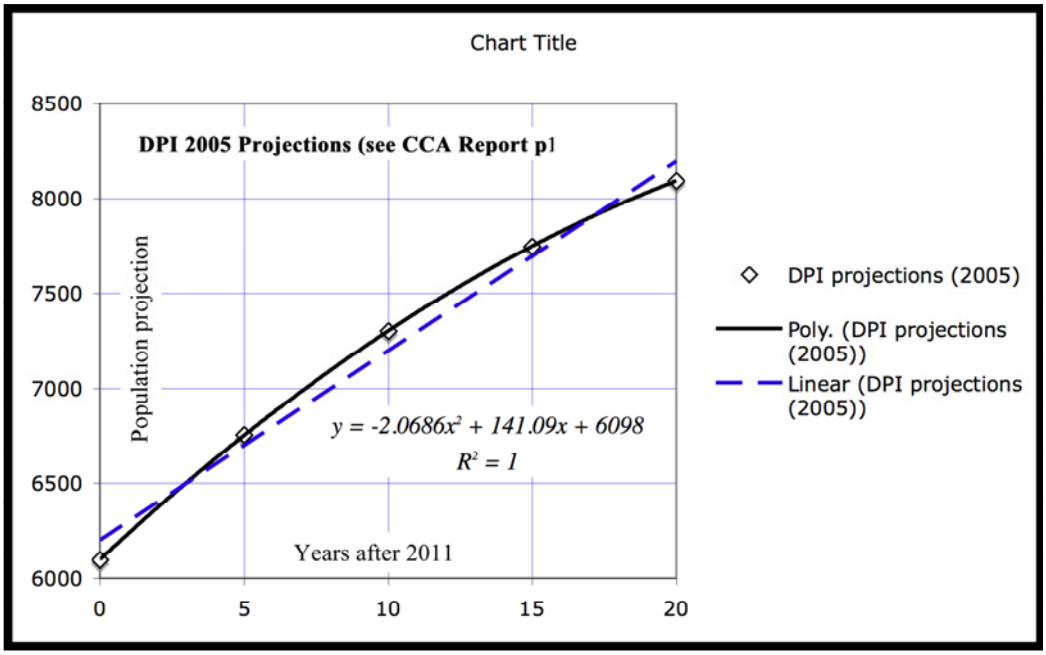
Indeed, the last bullet point in the §3.2 of the Report (p9) is concerned with housing tenure analysis and finds that 41.8% of residents in Denmark fully own their property compared with a WA average of 30.2%. The report goes on to confirm "the resident population is relatively affluent with generally a greater level of disposable income …".

Although it would be difficult to determine which of these opposing trends is dominant, in the interest of balance, both effects should be recognised.

Issue 3-03 *p13* *[§3.6 Future Population]*

These WA DPI projections were published in November 2005 - so the data reflects observations made at an even earlier date. CCA has taken the data from the Needs Assessment Report (Jill Powell, 2009). That Report warned that although the projected population for 2006 was 5,394 the ABS measurement that year found only 4,509 - in other words, the DPI estimate was nearly 20% too high.

These DPI numbers are graphed below together with two "best-fit" lines. The first of these – the dashed blue line – is the best achievable fit if the population is assumed to be a linear function of time (1.64% pa). Clearly, as the heavy black line shows, the data is much better described by a curved line - the polynomial fit. As the equation indicates, a polynomial of second order (a quadratic) is already good enough to yield a correlation coefficient of $R^2 = 1$, without needing any higher order terms.



The slope of this curved line gives the predicted growth rate for any particular year : it starts at 2.31% in 2011 but slows to 1.23% by 2031. If this data is to be used at all, it is the quadratic fit rather than the linear one that would best serve the Appendices D, E & F.

We recognise that CCA (see §3.7) would have had no option other than to use these figures "to inform" subsequent financial estimates (see for example, the tables for each Option and Scenario in Appendices D, E & F). However, we recommend that this conclusion must be taken with caution, bearing in mind the potential for large discrepancies between projections and measurements alluded to earlier (the ~20% overestimate noted in the Needs Assessment) and the foregoing examination of annual growth rates.

It is worthy of comment that each of the tables in the Appendices D, E & F, depends critically on a "Base Year Population" that is nowhere defined in the CCA Report and remains mysterious despite two requests for an explanation. We can only assume that the population of 6,228 is arrived at by taking 2012 as the Base Year and then incrementing the DPI estimate for 2011 (6096) by one fifth of change between the 2011 and 2016 estimates (660/5 = 132).

We also note that, in any financial predictions, it is the Catchment Population that is relevant to user throughput (and thus user generated revenue) - not the Local Government Population which determines revenue from ratepayers.

In the present case it could be argued that although Walpole residents may be formally included in the population of the Shire of Manjimup, they would be more likely to travel to Demark rather than Manjimup for indoor aquatic activities. A similar comment might also apply to the eastern extremities of the Albany Shire – so that residents east of Bornholme (say Young's Siding and the Nullaki) may be legitimately included in the catchment area – making the catchment population larger by as much as 1500+ (i.e roughly 450 and 1200 respectively). Such an effect would help to make up for the shortfall threatened by possibly over-enthusiastic DPI estimates.

Anecdotal evidence suggests that tourists expect to find a swimming pool in the Denmark and are disappointed when exposed to the reality. The community accepts that catering for the needs of visitors (roughly 10,000 pa) is a worthwhile investment. It would not be unreasonable to expect a numerical boost to pool users from this non-resident, non-ratepaying source.

Finally, we note that since 2011 is a Census Year, there will be an opportunity to fine-tune forward estimates by scaling the DPI's 2005 demographics to the new observations (or, of course, by using improved DPI estimates based on the 2011 data).

Issue 5-01 *p22* *[5.3 Consultation with targeted groups]*

The (unlabelled) table paints a misleading picture. We have been advised that those interviewees representing schools (for example) felt that they were being asked to give a financial commitment that they were in no position to make. We have no record of the conversations so we are unable to check the veracity of these claims. Such reports could be described as hearsay - but we have no reason to doubt them. We understand that CCA is obliged to report the Consultant's views at the time of the interviews – but we do not find it acceptable that, having been advised of this misunderstanding, the author of the Report has declined to acknowledge the possibility here. We are also disappointed that the views of physiotherapists remain as "tbc" – unchanged from the Draft Report. Presumably they are yet to be consulted.

Issue 5-02 *p24* *[§5.7 Additional Questionnaire]*

Preliminary data check.

As acknowledged in the Report, the survey was ambiguous. It was therefore agreed subsequently that only 380 of the 435 responses (not 437) would be considered valid.[1]

Table 10, although pivotal to the CCA recommendations, it has not been carefully analysed. In the first place the arithmetic is careless. While it purports to describe preferences for the 380 legitimate responses, the last four entries in column 2 do not. Instead, three of them include responses that should have been excluded from the full set of 435 responses, while the fourth (the Steam Room) appears to be inexplicably wrong (the 'full set' number is 21 not 11 as quoted).

The correct data (legitimate set, 380) is shown in Table 10A below in a slightly different format. (The reason for this reordering will become clear shortly.)

[1] We do not apportion blame here. The Project Team did not foresee the problem.

Option	Facility	1st	2nd	3rd	First 2	First 3	
(a)	8-lane rectangular	86	45	32	131	163	(OK)
(b)	6-lane rectangular	38	65	65	103	168	(OK)
	sub-totals	*124*	*110*	*97*	***234***	***331***	
(d)	3-lane L shaped	192	68	44	**260**	**304**	(OK)
(c)	Hydro	57	103	54	160	214	(OK)
(e)	Waterplay	2	57	79	59	138	(***not*** 170)
(f)	Spa	3	9	14	12	26	(***not*** 40)
(g)	Sauna	1	5	7	6	13	(***not*** 26)
(h)	Steam Room	1	1	3	2	5	(***not*** 11)

Table 10A: Corrected Survey Results counting only legitimate responses.

It should be noted that 435 returns from a possible 1000 surveys posted (to a random selection of householders) is a remarkably enthusiastic response from the community. Even the 380 considered to be legitimate is excellent. Yet the respondents whose opinions were not counted deserve an explanation for their rejection.

The preamble to Table 10 refers to ambiguity but fails to identify its source. By implication, the fault lies with the respondent – but it may be at least in part due to the laxity of the instructions which did not explicitly forbid assigning equal priority to two or more facilities. Thus respondents who ranked two facilities equal in importance (say) and then skipped a rank for their next preference had their views ignored. Such losses could have been avoided had the instructions been more carefully written.

A first-pass look at the data.
Two of the three conclusions drawn by CCA in the paragraph immediately following Table 10 are unchanged by the error. But in this paragraph, it is not clear which 'trend' supports which 'broad conclusions': the trend cannot refer to the L-shaped pool since this was not on the agenda during the Needs Assessment study. Nor can it apply to the need for a hydrotherapy pool – for the author of that study (Jill Powell) remarks "Given the age of the population it was surprising to see that only 5% of the population rated hydrotherapy as a type of use." It follows that the 'trend' in question must refer to the lack of support for a spa, sauna and steam room facilities – for this is common to both surveys. We conclude, using Table 10A, that:-

(1) The Spa, Sauna and Steam Room may be dropped from further consideration.

Despite Jill Powell's comment, the strong support for a hydrotherapy pool evident in Table 10 is ***not*** inconsistent with the Needs Assessment data: this (see the pie chart in Needs Assessment, p32) refers specifically to *rehabilitation hydrotherapy* rather than warm water pools in general. When other categories requiring warm water - such as joint mobility (10%), physical health problems (7%) and mother and pre-school 'learn to swim' classes (up to 14%) - are included, the two surveys tell the same story. We conclude that:-

(2) The hydrotherapy pool is highly desirable and remains a high priority.

If the first conclusion is agreed, only five possibilities remain. Of these, the water play area can have no independent existence and should therefore be considered as an adjunct to any of the three remaining swim-spaces i.e the 3-, 6- or 8-lane pools rather than as a stand-alone choice. This leaves four options, one being the hydrotherapy option which *could* exist on its own – although in this case it would be a stand-alone health facility and cease to be the concern of the present Feasibility Study. The Project Team recommends that: -

(3) The hydrotherapy pool should be accepted as an adjunct to the main swim-space(s) and considered separately from the remaining options;

(4) The water play space should be viewed as an optional extra attachable to any of the pool configurations.

A second-pass look at the data.
We are left with only *three options* – all of which are concerned with the type of swim-space preferred – and we should use the available response data to cast as much light as possible on the preferred configuration. Table 10B below presents the data in an appropriate perspective.

Type of facility	1st	2nd	1st or 2nd
(a) & (b) Multiple lane pools	124	110	**234**
(d) 3-lane L shaped	192	68	**260**

Table 10B: Swim-space priorities.

Table 10B is written in such a way as to focus attention on the choice of swim-space configuration. Clearly it makes no sense to sort the survey responses in terms of first three preferences as in Table 10: so the last column in Table 10A has been removed in Table 10B. Moreover we should no longer present the 6-lane and 8-lane pools as functional alternatives because in practical terms they are both "multiple-lane". In contrast to the 3-lane pool, they are **more multifunctional**, because they can be used for school swim classes and carnivals as well as almost all, if not all the activities ascribed to Option 3 – i.e. learn to swim, aqua aerobics, life saving. We regard this as a very important consideration – whether the multiple-lane pool has six or eight lanes is of secondary importance at this stage, for it is functional versatility that is more important.

Despite the strong *first pass* preference for the 3-lane pool suggested in Tables 10 and 10A , the *second pass* analysis (of exactly the same data available to CCA) shows a far more ambivalent community – just slightly favouring the 3-lane configuration.

Furthermore, it may be argued that respondents who ranked either the hydrotherapy pool or the water play space first are disenfranchised by the decision to leave these two aside from the other option. Only two respondents ranked the latter first, so these would have little impact. But a significant number placed a hydrotherapy pool first or second. If we take all those having it as a first choice and bump their second and third preferences into first and second place respectively the multi-lane options overtake the 3-lane pool as shown in Table 10C below.

Type of facility	1st	2nd	1st or 2nd
(a) & (b) Multiple lane pools	178	171	**349**
(d) 3-lane L shaped	225	72	**297**

Table 10C: Swim-space priorities.

We conclude:-

(5) The clear preference shown for a 3-lane pool in Table 10 proves unsustainable on closer examination. Any conclusions dependent upon this claim should be rejected.

Criticisms of the survey.
DACCI and the Project Team raised a number of issues with CCA about the Survey, and while some were addressed, a number of serious concerns were not.

For example, DACCI reported that a significant number of respondents complained of bias in the wording of the survey question, claiming to have been misled into believing that only the 3-lane pool would be versatile and they ranked it highly on this ground alone. This should have been anticipated. Had the survey taken place *after* rather than *before* the public workshop/meeting (as originally agreed) on 22 July it would have been more meaningful: respondents would not have felt their views were formed in an information vacuum.

The Project Team accepts these as fair comments – for, in the survey, only one of these three swim-space options was described as "mulit-use" in the survey. The 6-lane and 8-lane options were described simply as "lap pools" (traditional rectangular) whereas the third swim-space was described as

"multi-use … for learn to swim, aqua aerobics, life saving and other general aquatic activity". Not surprisingly, this 3-lane L-shaped option was favoured over the conventional multiple-lane pools even though these have all the versatility of the smaller configuration and the *additional advantage* of allowing school aquatic programmes that would otherwise be inconceivable. Thus,

(6) The Project Team accepts the flaws in the survey document and recommends that these be recognised and acted upon insofar as this may be possible.

Issue 5-03 *p26* *[§5.7 Potential Demand]*

This conclusion is misleading. There is no local year-round heated "existing pool" available other than that provided in Albany. The Primary School has indicated strong support to a Denmark facility and would use it for a range of activities. There is similar strong support from the High School. However, when CCSA conducted its early interviews, both schools may have been under the impression that they were being pressed to give firm promises of financial support. Clearly neither were free to make such commitments – hence the lukewarm responses. Strong support (albeit not financial) has been subsequently documented by DACCI and shared with the CCA. This has been ignored.

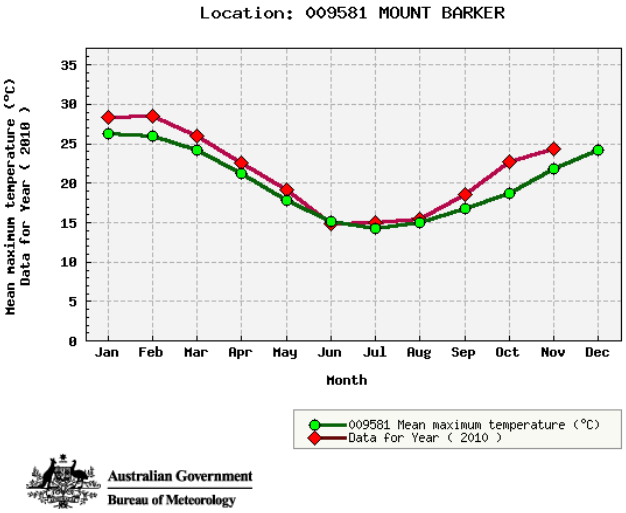
Issue 5-04 *– p27* *[§5.8 Competitor Analysis]*

We challenge part of this conclusion. Whilst we agree that the Albany Leisure and Aquatic Centre is likely to remain more attractive than a smaller facility in Denmark in terms of size and range of facilities offered, a fraction of Albany ratepayers would be more likely to use the Denmark pools simply because they would be closer and would integrate more smoothly with those existing activity patterns for which Denmark is already the focus (schools, clubs, grocery shopping etc).

We cannot at this stage say with confidence how large this group may be … but one member of the Denmark Aquatic Association (living in Young's Siding) insists that there may be several hundred residents in the areas west of Bornholm (i.e. Young's Siding, Redmond West and the Nullaki) that are closer to Denmark than to Albany but lie outside the Shire of Denmark's eastern boundary.

To the west, Walpole (pop ~ 450), residents are faced with a round-trip drive of 238 km drive (2hr 50 min) should they wish to use the Manjimup year round facility - compared with a 50 minute each way (2 x 66 km) drive to Denmark

In the case of Mt Barker (pop ~ 4300), the "Comments" column of Table 12 indicates that its outdoor pool is closed whenever the temperature is forecast to be 20° or lower. The diagram below shows BOM data for average temperatures over the long term in green (1905 to 2010) and for 2010 in red.



Clearly the Mt Barker pool is closed for more than half the year (April to mid-October) on average so an indoor heated pool in Denmark would compete with the Albany facility during these months.

In summary, it is possible that the Catchment Population for a Denmark pool might be somewhere significantly larger than the Local Government Population of the Shire of Denmark. Note that we are not claiming that this is the case: rather, we are saying that the difference between the population types is important and that is an oversimplification to think otherwise. Clearly, further work is needed to establish a more reliable estimate of catchment data.

Issue 7-01 *p34* *[§7.1 WA Facility Benchmarking]* Although Table 14 may have general interest, it is not an appropriate as a basis for estimating attendances in the proposed Denmark facility. The reported data is too coarsely grained. The 17 pools in the Great Southern range from small seasonal outdoor pools to broad spectrum regional facilities such as ALAC. Configurations include 14 'Lap Pools', 2 'Lap & Leisure' and 1 'Multiple Lap & Leisure' pool. The source of the data is *Leaversuch, P., Aquatic Recreation Centres in Western Australia – Industry Profile 2010*, a paper prepared for the Leisure Institute of Western Australia – we assume for quite a different purpose.

It is a mistake to assume that gross regional totals expressed on a "per pool" basis (i.e. dividing the appropriate total by the number of pools in the region) can have any relevance in the quest for estimating a usage rate likely in a single pool with a specific configuration and user profile.

Issue 7-02 *p35* *[§7.2 Multi-Purpose Facility Benchmarking]* In contrast to the preceding example, Table 15 focuses on *individual facilities* rather than on hypothetical "average pools". They are however all *multi-purpose* facilities – so attendances may not be restricted to wet-area users only, but will include those attending for dry-area (or a combination of wet and dry) activities too. This is an important point that the Report fails to clarify. No reference is given so it is not possible for the reader to know whether this separation has been considered and/or allowed for.

The Denmark case is unusual in that the proposal is to add aquatic capability to an existing (dry) recreation centre that is already well established. If, as is the case in this Feasibility Study, we are seeking to estimate wet-area usage only, we should really separate the wet and dry attendances when establishing benchmarks.

Let's suppose, for the moment, that the data is in fact representative of aquatic users – then how representative is the sample chosen? Well it is certainly surprising because (with one exception, Kununurra) the populations are either metropolitan or regional (the LGA average is 48k) rather than rural. Yet it is also important because, amongst other things, it draws attention to the difference between Local Government Population [LGP] and Catchment Population [CP]. The former statistic is important when considering potential financial contrbutions of ratepayers: whereas the latter is a key parameter in estimating income from the user base. The distinction between the two is often lost in the CCA Report: a graphical representation of Table 15 (shown on the following page) will show why this is unwise.

For each of the seven facilities, the authors of the CCA Report divide the Annual Attendance a [AA] - by the Catchment Population, [CP], and claim the average of these ratios to be $V_{CP} = 9.9$ visits per annum per head. It is not. The simple arithmetic average is 10.8 not 9.9. We are at a loss to explain the origin of the 9.9 figure. If, as we suspect, it is simply an arithmetic slip it is easily corrected and in any case unimportant - for what counts is how V_{CP} will be used later. (Here, V_{CP} = AA/CP is the visitation rate.)

In the Financial Projections of §12 it will be assumed that a benchmark visitation rate can be multiplied by a population to provide an estimate of annual attendances i.e. that there is a linear relationship of the form AA = V_{CP} x CP. Unfortunately, in §12, the Report uses a Local Government Population, LGP, rather than a CP i.e the attendances are estimated as V_{CP} x LGP rather than V_{CP} x CP. (Carelessly, it fails to say so … but the circumstantial evidence is overwhelming.)

Let's be quite clear on this. If a genuine linear relationship can be established from the data (as opposed to mere assumption) it is legitimate to estimate attendances either using AA = V_{CP} x CP or AA = V_{LGP} x LGP – but it is *not* correct to use AA = V_{CP} x LGP. The CCA Report fails to define the population used in Appendices D, E &F – but all the evidence suggests that the income projections are based on the LGP's rather than CP's – that is to say they use incorrect formula to estimate AA.

Of course, if by coincidence there is no difference between the CP and LGP, this logical mistake is of no consequence. Most of the entries in Table 14 have a CP that is smaller than their LGP by roughly 20-25% but there are two or three anomalies worthy of note. Beatty Park stands out because its CP is more than three times larger than its LGP. On the other hand, the City of Bunbury's South West Sports Centre stands out at catching only 45% of the LGP. This anomaly arises as follows …

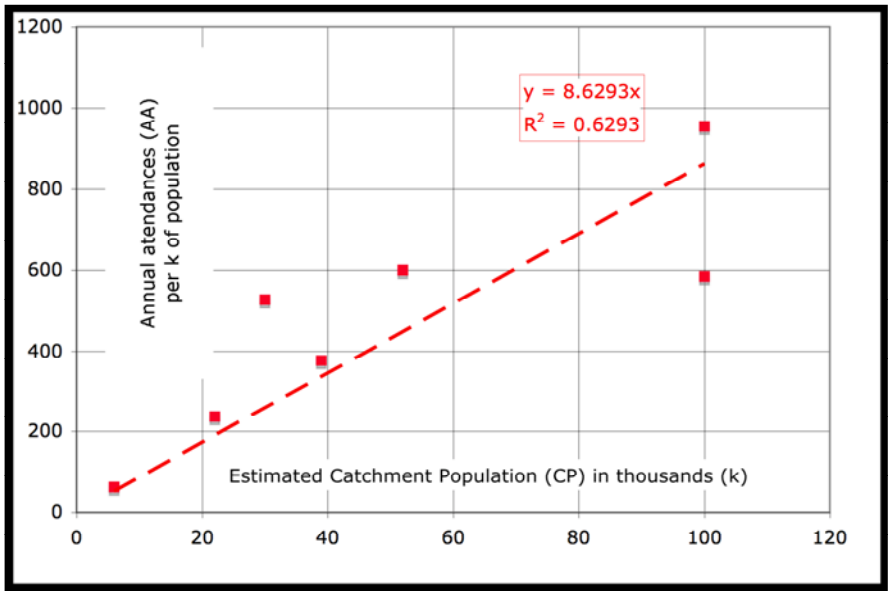
The ABS views the City of Bunbury as a 'statistical local area' within a 'statistical subdivision' that includes parts of the three adjoining Shires – Dardanup, Harvey and Capel. At least one of these, Harvey, has a significant competing facility - the Leschenault Leisure and Aquatic Centre – within easy reach of the city centre. The statistical subdivision has an LGP of 66k as listed in Table 15 – but the statistical local area – the City of Bunbury – has a population of roughly 34k (ABS 2009p).

Suburbanites living within 'Greater Bunbury' (66k) may consider themselves as citizens of Bunbury yet pay rates to one or another of the three adjoining Shires. It is only those ratepayers within the City that are levied for the SW Sports Centre. Clearly, including this facility in the benchmarking sample is questionable – as is the inclusion of Beatty Park.

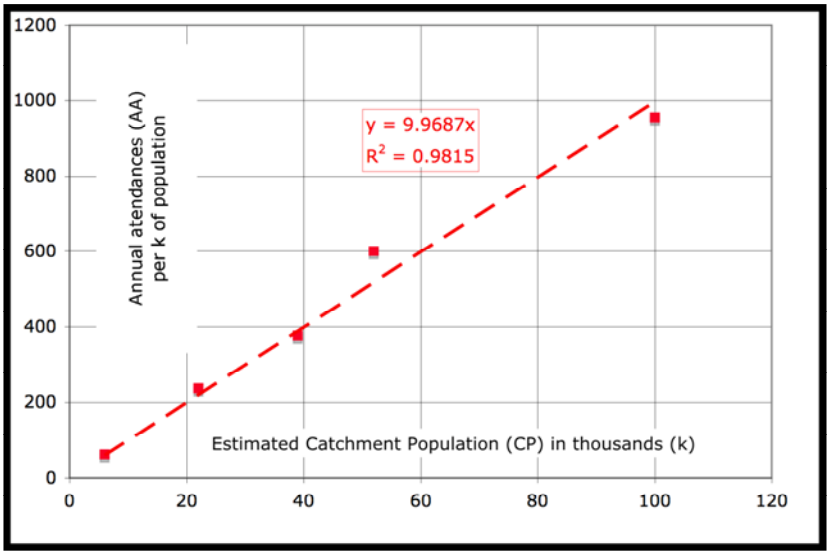
These reflections are unsettling to the reader of the CCA Report and prompt a deeper look at the benchmark information. Since it is an underlying assumption that that there is a linear relationship between the 'total number of attendances annually' and a 'population' (whether LGP or CP) – we really need to test this statistically.

The simplest way to determine whether or not the assumed relationship is appropriate is to perform a regression analysis … and, since we are hoping to find a simple proportionality, we should try a *linear* regression to look at the 'coefficient of determination' which in this linear case is the square of the correlation coefficient, R. A perfect correlation would have R^2 = 100%. A value close to zero would indicate that there is no correlation at all.

Table 14 yields the following graph if all seven facilities listed there are included



With $R^2 = 63\%$ the dashed red line is not a very good fit (statistically speaking). It can be significantly[2] improved $R^2 = 98\%$ however if two of the seven facilities are excluded – Bunbury and Melville. (The suggestion that latter be excluded results from the precise coincidence of its CP and LGP … that they both are exactly 100k is simply too hard to swallow.)



Whichever of these two graphs is the more appropriate to use is up to the reader. However, there are two important points. The first is that linear regression analysis *does indeed confirm* the assumed linear relationship between annual attendance (AA) and catchment population (CP). The second point is that it is the slope of the best-fit line that should be used in estimating annual attendances – **not** the average quoted in Table 14.

The two graphs give visitation rates, V_{CP}, of 8.6 and 10.0 respectively.

We can summarise as follows;

- CCA fails to state the type of population measure it will use later
- CCA also fails to state the type of visitation rates measure it will use later
- But it actually uses the Local Government Population (LGP) estimates
- This benchmark provides a visitation rate based on catchment population, CP
- This is the logically correct benchmark to use for user income
- But should only be used to multiply CPs not LGPs to get annual total attendances
- The benchmark visitation rate should be derived from the slope of the trend line

In §12 the Report proposes scenarios in which the visitation rate, V lies between 6 and 12 -describing these extremes as Conservative and Optimistic Scenarios. It claims that V = 9 is Realistic … but fails to say exactly which benchmark points to this conclusion and what kind of V is being suggested.

Apart from the above, Table 15 has other problems. The arithmetic is sloppy in places. For example the average annual revenue per head of the CP is $47 rather than $43.

Finally, if these multi-purpose benchmarks are to set the scene for the Denmark estimates, they should really only be used when all activities – both wet and dry – are included in the balance sheet. This is not the case in Appendices D, E and F which refer to aquatics only: they do not include the known dry activities at the existing Recreation Centre. They could have been taken into account – but they have not.

[2] Reducing the data set in this way carries risks however, since it comes at the cost of reducing the number of (statistical) degrees of freedom.

Issue 7-03 *p38* *[§7.4 Other Aquatic Facility Attendances]*

Table 16 contains examples that are more relevant to the Denmark proposal than most of the earlier ones … particularly Margaret River which has features such as proximity to ocean swimming, significant tourism statistics and a relatively small LGP. Waroona also has features similar to some of those found in Denmark, but a smaller LGP. It is a pity that these have been given such scant attention in the Report. (Facilities that appear less relevant are highlighted in yellow in this table.)

Issue 7-04 *pp39-40* *[§7.7 Summary of Key Findings]*

To qualify for the description of a "key finding" the reader might reasonably expect that such a finding would either be self-evidently important or that the Report would explain precisely where or when that particular key would unlock/clarify/reveal … something!

The four bullet points (key findings) under Visitations at the bottom of page 39 invite the following comments:

- Irrelevant;
- Relevant – is this the origin of the Conservative Scenario?;
- Interesting perhaps but not used anywhere in the financial projections;
- Irrelevant – but is this the source of the realistic scenario?

Similarly, the relevance of the bullet points on page 40 (appearing under Revenue per Visit, Financial Performance, Hours of Operation and Pricing), is nowhere in evidence as key pieces of the financial jigsaw that the reader expects will be developed later in this study.

It is not enough to present a few tables: the reader deserves a coherent argument demonstrating why the particular facilities have been chosen and why (if at all) they may be relevant to the Denmark case. In particular, this Chapter should validate the visitation rates to be used later, identify why a rate of 9 might be considered "Reasonable", why 6 is to be considered "Pessimistic" and 12 "Optimistic".

Tables involving several facilities are of course needed to provide reliable numerical values for the estimators needed in the financial projections expected to follow. They should suggest numerical *estimates* of *estimators* such as visitation rates, cost per visit etc. These estimates, and the levels of confidence appropriate to each, are best determined by the recognised techniques of *hypothesis testing*. While it is not appropriate to illustrate such a regression analysis here, it may be easily shown that there is no simple relationship between the estimates it would yield and the arithmetic averages calculated by CCA and reported here.

Regretably therefore, this Chapter fails to establish the benchmarks upon which subsequent financial projections critically depend.

Issue 9-01 *p48* *[§9.1 Multiple Bottom Line Analysis]*

The Opportunity described in column 1 appears for the first time as a 6-lane pool ***with 2.5m wide lanes.*** Elsewhere in the Report, Option 1 has been described as having 2.1m wide lanes. Such a pool would have an area of 325 m^2 not 400 m^2.

Issue 9-02 *p48* *[§9.1 Multiple Bottom Line Analysis]*

Such a pool could also be described as a "multi-use pool (with specific purpose of providing rectangular water space for learn to swim, aqua aerobics, life saving and other general aquatic activity") as in option (d) of the Shire Survey. It is misleading to pretend otherwise.

Issue 9-03 *p48* *[§9.1 Multiple Bottom Line Analysis]*

This statement contradicts §5.4 of the Report which correctly claims that 152/170 = 89% of responses from DAC members favoured a lap swimming facility. What evidence would need to be offered to shake the Consultant's opinion?

Issue 9-04 *p49* *[§9.1 Multiple Bottom Line Analysis]*
The CCA Report assumes that the pool configuration will have no impact on throughput but DACCI has presented strong evidence that contradicts this assumption. The schools have made it clear that they would have no interest in any pool which could not handle typical class sizes for learn to swim and other aquatic programmes.

Issue 9-05 *p50* *[§9.1 Multiple Bottom Line Analysis]*
Such a configuration would NOT meet the needs of the children of the Primary School. Nor would it be of interest to the High School or the Agricultural College. The latter have independently indicated their enthusiasm for a pool that they could incorporate into their physical activities programmes. This configuration would not be satisfactory. Issue #9-05

Issue 9-06 *p50* *[§9.1 Multiple Bottom Line Analysis]*
The building footprint is not dominated by the pool area i.e. the pool is 271m^2, or 12.3% of the 2210m^2 total (Appendix B). Even the largest water space considered here (8-lane, 525m^2, only amounts to 23.7% of the total area of the footprint. While it may be literally correct to claim "lowest levels of water and energy use" and "minimal build footprint" it is misleading to imply that these "gains" are relevant without quantifying them.

Issue 9-07 *p50* *[§9.1 Multiple Bottom Line Analysis]*
This advice fails to recognise the loss of functionality of a 3-lane lap pool compared with a 6- or 8-lane configuration. It would be short sighted in the extreme to constrain the development of aquatics in Denmark this way ... especially in the light of the overall cost to the community.

Issue 9-08 *p51* *[§9.1 Multiple Bottom Line Analysis]*
Column 2 in this table, 'Financial Outcomes", acknowledges the income generation possibilities that would accompany a hydrotherapy pool, but provides no benchmarks to guide the reader and no clear account of potential income in the Appendices D, E & F. The latter all contain a mysterious line item labelled "Other Revenue" which is estimated to be $10k for all configurations of swim-space (Options) and is also independent of population (Scenarios) and time. It cannot therefore refer to income from a hydrotherapy pool unless the intention is to arrange a fixed cost lease with a third party entrusted to run that facility. The reader is left guessing.

Moreover, none of the benchmark facilities in §7 are identified as having hydrotherapy facilities and it is therefore reasonable to assume that their visitation rates do not include users of such a facility. Once again the reader is uncertain. This is unsatisfactory.

Issue 9-09 *p52* *[§9.1 Multiple Bottom Line Analysis]*
This opportunity is certainly one should be seriously considered in the context of a new or upgraded Recreation Centre. The existing centre will be due for a refurbishment within the next decade or so and it would be prudent to acknowledge this in planning for the water spaces. However, this would be beyond the present brief. The best that might be expected is to consider how the existing spaces might best be allocated in the meantime.

Issue 9-10 *p54* *[§9.1 Multiple Bottom Line Analysis]*
Although the design in Appendix B does (as claimed) present a common entry point for wet and dry users it does not have good sight lines to the dry side activities. The need for this has been emphasised by the Project Team and must be revisited in any subsequent detailed design.

Issue 9-11 *p57* *[§9.2 Consideration of Design Options]*
The Project Team has repeatedly emphasised that, in order to cater for the widest range of community aquatic activities and thereby maximise user throughput, the design should focus on the option with the most flexible water space. We have been assured by CCA that everything that is possible in Option 3 (the 3-lane L-shaped pool) is also possible in either Options 1 or Option 2. Since either of these multi lane pools (6- or 8-lane) have *additional* functionality (school classes and swim-squad activities for example), and only one design could be analysed in depth, we felt that the 6-lane pool would be the most useful option to consider in detail.

Issue 9-12 *p57* *[§9.2 Consideration of Design Options]*
The Project Team initially favoured a common entry point for both wet and dry activities at the front of the Recreation Centre. However, some members – in particular the DACCI representatives on the team – felt that the existing parking space would be inadequate at certain times and pressed for the inclusion of 120 parking bays on the architect's brief. This resulted in a reconsideration of preferences.

The initial plans from Paterson Group Architects did not include the required Site Plan (or Elevations) so that it was not clear how parking was to be accommodated. DACCI then provided a concept plan featuring a split-level design with its *main entrance at the rear* and well suited to the terrain. It also lends itself naturally to a single-point monitoring station for wet and dry activities. This more compact and effective design should be carefully examined in any future work. It may be that if the architect commissioned to draw up the floor plans had made a site visit, he may well have seen the possibilities. As it is, the revised design shown in Appendix B, does now incorporate a split level - but retains access from the front.

Issue 9-13 *p58* *[§9.3 Facility Development Overview]*
Option 1 allows 0.2 m edge space on each side of the six 2.1m wide lanes – giving a total area of 325m^2. For a fair comparison, Option 2 should also be given eight 2.1m wide lanes (with the same edge space) and a total area of 430m^2 rather than the 525m^2 quoted here and in subsequent analyses.

It is disappointing in the extreme to find that the figures used by the Quantity Surveyor do not reflect Table 21 figures. Costing has proceeded on the basis of a 300m^2 6-lane pool rather than a 325m^2 pool and the Hydrotherapy pool is said to be 35m^2 rather than 40m^2. Such carelessness does not inspire confidence in *any* of the CCA estimates.

Issue 9-14 *p58* *[§9.3 Facility Development Overview]*
The errors mentioned in Issue 9-13 are compounded further when CCA varies the estimates to predict costs for the other two options.

Issue 9-15 *p58* *[§9.3 Facility Development Overview]*
The cost of these parking bays should have been included in the brief to the Quantity Surveyor.

Issue 9-16 *p59* *[§9.4 Estimated Capital Cost]*
There are several types of errors in §9.4. These are discussed below. However, it is important to note that all figures quoted in §9.4 cannot be relied upon – and that any subsequent conclusions that depend upon their accuracy will be questionable.

The first type of error pertains to the total cost of Option 1 – i.e. the base figure of $8.17M. These are errors in specifications and professional fees. Some relate to omissions. They will all be dealt in *Issue AppC-01* which refers directly to *§Appendix C – Indicative Order of Cost for Option 1*.

The second type of error arises in the estimated cost of variations in water space area and building footprint characterising Option 2 & 3. For example, Option 2 (8-lane pool) requires an extra water space of only105m^2 rather than the 200 m^2 used in the Report (See Issue #9-13). If the variation in building footprint is scaled in the same way as in the Report, the total additional space is 155 m^2 rather than 300 m^2. Thus, the Option 2 estimate ($8.95M) is too high. Similarly, the Option 3 is too low: the space variation should be 81m^2 not 75m^2.

We estimate that when these variations are applied to the corrected base figure, the 8-lane pool costs $0.41M more than the 6-lane and the 3-lane pool costs $0.21M less.

Issue 12-01 *p65* *[§12.1 Assumptions … All Financial Scenarios]*
The Financial Projections summarized in §12 are based on Appendices D, E, and F. Estimated income depends largely (but not entirely) on two key variables – the population, P, and the average visits per annum per head of population – let's say V.

Clearly, when considering revenue from users it is the Catchment Population [CP] that counts – whereas revenue raised from ratepayers will depend on the Local Government Population [LGP]. Thus we can calculate V in two ways – depending on whether we divide total annual visits by the Catchment

Population (CP) or by the Local Government Population (LGP). Only V_{CP} can have any meaning however – for although V_{LGP} may be calculated (V_{LGP} = V/LGP) but it has no sensible meaning. Yet CCA appears to use V_{LGP} rather than V_{CP} in its income calculations in all three appendices.

We may of course assume that there is no discernable difference between CP and LGP in which case CCA's error is of no consequence. But the benchmark Table 15 shows clearly that in nearly all cases (in the sample of facilities chosen) CP is less than LGP by 20-25%. One case (Albany) has CP 8% larger than LGP … and another, Beatty Park, has a CP more than three times larger than its LGP.

The choice of three usage scenarios (for each of the three optional pool configurations) – Conservative, Realistic and Optimistic - is reasonable. However, assigning numerical values of $V_{LGP\ or\ CP}$ = 6, 9 or 12 respectively (§12.1) needs more justification than is offered. It is claimed that these values are based on benchmarks contained in §7: specifically in Table 14 (§7.1); Table 15(§7.2); Tables 16-18 (§7.3); and Table 19 (§7.4).

The first of these benchmarks sets, Table 14, gives an estimate of V_{LGP} = 9.8 – calculated by lumping together 17 pools, 14 of which are "Lap Pools, 2 are "Lap & Leisure Pools and 1 is "Multiple Lap and Leisure". The sample includes indoor heated pools, outdoor pools, seasonal pools, and broad-spectrum facilities such as the Narrogin Leisure Complex which includes squash courts, gymnasium and synthetic pitches.. The mix is so varied that little weight can be given to this estimate of V_{LGP}. Given that V_{LGP} is in any case the wrong variable, Table 14 is best disregarded.

The second benchmark set, Table 15, gives both LGP and CP for a sample of 7 multi-purpose facilities (not just their aquatic components) - permitting an estimate of the correct variable V_{CP} However, CCA miscalculates the average V_{CP} claiming it is 9.9 rather than 10.8. In fact one pool in the sample (the South West Sports Centre) is clearly highly anomalous (17.6) and should be excluded. If this facility is omitted, the other 6 give an average of 9.6 ±2.0 … meaning that the omitted entry is 4 times the standard deviation away from the mean.

Issue 12-02 *p69* *[§12.2 Summary of Financial Projections]*

Financial projections over a thirty-year period can rarely be made with any confidence. In the present case population projections over a *ten-year* period have been used elsewhere in the Report, and may be traced to the WA DPI Report referenced on p12, but there is no evidence to identify the source that allows a tripling the extrapolation range. Given that the DPI data dates back to pre-2005 data and has already proved of doubtful value numerically, only the most gullible could believe that they could be useful in 2040. Yet not only does this not prompt even the mildest warning from the Report's authors, the reader is also expected to be naïve enough to believe totals quoted to the nearest $1 in totals as large as $19M!

Even if these objections could be put to one side, changing demographic profiles and usage patterns would, through their effect on visitation rates and/or life cycle adjustment factors, inject fresh uncertainty into such long term projections. There is ample evidence pointing to an increasing awareness of the health benefits of swimming for example – and if this were to continue over a 'whole-generation' interval such as this it would have a significant positive impact on operating income. Similarly, increasing travel costs and climate change issues may lead to a preference for local facilities rather than regional ones - another cash-flow positive trend.

Issue #14-02 *to* ***12*** *p74* *[§14 Conclusion]*

Page 74 of the CCA Report summarises its conclusions and recommends Option 3 to Council provided Council is 'minded to commit initial capital funding and ongoing financial support' to the aquatic facility. This section did not appear in the draft version of the CCA Report.

On this page of the Report, we have highlighted text that needs to be challenged, using different colours to assist with separation of is issues. A colour key and numbering system is shown in the left margin of the original.

Issue #14--01

The claim that 'visits per head of population is likely to range between 6 and 9' suffers from two problems: first it fails to identify any valid source that might justify its accuracy; second, it fails to clarify whether such a source, should it actually exist, provides data relevant to Local Government Populations or Catchment Populations i.e. whether the benchmark is V_{LGP} or V_{CP}.

There can be no doubt that the calculations in Appendices D, E & F refer to LGP's, but in this same paragraph the Report refers to Denmark's 'small catchment population' (see the quote in Issue #14-02 below). No such certainty surrounds the visitation rate V. Indeed, it is hard to avoid the conclusion that the authors fail to appreciate the difference between the two – a conclusion strengthened by their failure to extract statistically valid measures from the samples of facilities offered in §7, the chapter dealing with benchmarks.

Issue #14-02

The assertion that 'irrespective of the water configuration, due to the relatively small catchment population, the likely throughput of users is unlikely to change for any of the three options' must be challenged.

In the first place, the word 'change' is innapropriate … change in what way, when and for what reason? We assume that authors mean that 'the likely throughput of users is unlikely to *differ* for any of the three options'.

We disagree. The assumption that the pool configuration has no bearing on throughput of users is seriously flawed. CCA persists in this view despite repeated feedback that challenges it. The Primary School has clearly advised that it cannot conduct either carnivals or its LTS programs in a 3 - lane pool. The senior schools have similar concerns and would be unlikely to use the 3-lane pool.

On the other hand, those users wishing to swim for fitness need multiple lap pools, preferably programmed by fitness level and usable at the same time as recreational lap swimming. School swimming activities, primary and secondary, involving class sizes larger *could* be accommodated in a multilane pool – but *cannot* make use of the three lane pool. Option 3's lack of suitability for Carnivals has been acknowledged, but ignored, in the Report – but this is by no means the major factor in the case for more than three lanes.

The Project Team received many assurances from CCA during the formative stages of this project that the functionality of 8- or 6-lane pools included all activities possible in a 3-lane pool *plus* all that could not be featured in a 3-lane pool.

Quite apart from the impact of configuration on income from throughput, the differentials in capital cost are relatively small: the 3-lane pool is 2.5% cheaper than the 6-lane and the 8-lane is 5% more. Both amounts fall well within the likely margin of reliability of the building estimates, some of which arise from acceptable forecasting uncertainties and others from careless inconsistencies (see later in 18). In any case, likely differences in usage patterns may well mask these variations in capital costs. For example, a 3-lane pool may be marginally cheaper to build but may attract much smaller user income

Clearly, cost alone should not be a deciding factor in the choice of options. Given the expected life of the aquatic facility it would unwise to impose such a restrictive design on the community.

Issue #14-03

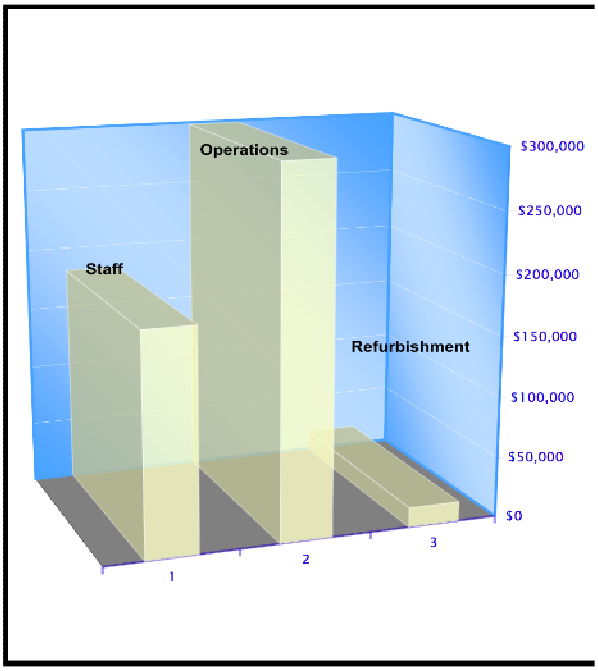
It is hardly surprising that the Report should conclude that 'the most cost effective option from a *capital build perspective* and in respect *of ongoing running costs* is option 3'. We do not challenge the obvious. However, we do comment on the two elements we've italicised in the above quotation.

While it is true that capital build costs differ for the three options, the choice of water configuration is not the dominant factor: The cost is not proportional to the area of the main water space. The figures in Appendix C, "Indicative order of cost – Option 1", show that the cost of the actual pool is only about 10% of the whole. In a building whose footprint is 2210 m^2, an additional 105 m^2 for the extra 2 lanes required for an 8-lane pool – or saving 49 m^2 for the smaller option – should be largely absorbed into the overall architectural concept, without impact on the building's footprint – or overall cost.

The running costs of all three options may be broken into three major categories : Staff (Swim School, Aquatic Operations and Admisistration in the Report) ; Operations; and Refurbishment. The third category is included within the Reports 'Operations" category as a lump sum equal to 1% of capital cost needed every five years. For clarity we have amortised this into annual amounts of 0.2% of capital cost in the table that follows.

Expenditure type	Option 1 6-lane	%	Option 2 8-lane	%	Option 3 3-lane	%
Staff	$180,774	36.5%	$180,774	33.4%	$180,774	38.8%
Operations	$298,400	60.2%	$342,825	63.3%	$269,913	57.8%
Refurbishment	$16,304	3.3%	$17,860	3.3%	$15,910	3.4%
Total	$495,478	100%	$541,459	100%	$466,597	100%

The first two columns of this table - Option 1 - are shown graphically on the right. The major costs lie in Operations – a category that includes the cost of water, energy, chemicals etc and is larger for the 8-lane pool than the 6-lane pool - and smaller for the 3-lane configuration. Likewise, the Refurbishment varies between options because it is proportional to the capital cost.



Note, however, that all three options are assumed to have the *same* staff costs. We are surprised that these are independent of the water configuration – particularly since roughly half ($91k) is attributed to lifeguards. We would expect that the Royal Lifesaving Society would specify an acceptable level of supervision per swimmer and that the larger pools would cost more to be safely supervised

This and other considerations cast doubt on the accuracy of the CCA esitmates.

Issue #14-04

This key recommendation is inescapable in view of the assumptions that precede it. This will become apparent in the following paragraphs.

Issue #14-05

While the claims that Option 3 has less demands on water and energy are valid, the claim that it requires a smaller building footprint is dubious – it depends very much on the ingenuity of the architect. The pools have the same essential footprint – 17 x 25m- except for a 6 x 8.5m piece excised from one corner of the 6-lane rectangle (see Plan 4, Appendix A).

Issue #14-06

In support of Option 3 the Report suggests that it provides a 'higher degree of flexible programmable space [which is] most viable in a smaller population'. We believe the contrary is self-evidently true: for the cited programs – aqua-aerobics, learn to swim and life-saving – are also equally viable (or more so, since they can take place simultaneously) in a 6- or 8-lane pool, yet the latter cater for additional activities such as school class swimming that cannot take place in a smaller pool.

Furthermore, access to a hydroptherapy pool cannot be claimed as a feature available only in the 3-lane pool for it has been agreed that this would be common to all three options.

Issue #14-07
It is misleading to claim co-location as a feature favouring the 3-lane pool over the other two options since this decision applies equally to all three.

Issue #14-08
This point, offered in support of option 3, raises several related isues.

First there is an implication that 'the aging demographic of the population will tend to demand … [a particular water configuration]'. While it is true that seniors represent a higher than average proportion of Denmark's population, it is also true that children – particularly very young chldren – are key drivers (via concerned parents) in arriving at the most suitable water configuration. Other factors being equal, it is the younger element that would be likely to be given the casting vote – for older people are in general more likely to show consideration for others, particulary children.

The water space that is said to be demanded is one which '… provides mainly for social, recreational and rehabilitiation use rather than provide a significantly higher than usual demand for lap swimming.' We do not know exactly what is meant by 'significantly higher' – nor what constitutes 'usual' in this context.

But our main objection here is the failure to include swimming for fitness. As the Report points out (see §4.3 and the source ABS data[3]) there is an increasing national awareness of the health benefits associated with physical activity and the particular advantages that swimming has to offer. Youngsters may participate in aquatic activities believing them to be almost exclusively social, remaining oblivious to the health benefits conferred: older people are more likely to be driven to participate primarily for fitness (see for example §8.1 etc) – but find the social aspect an added pleasurable bonus. It is misleading to imply (by omitting reference to fitness) that the main pool would be used simply for 'social and recreational' purposes.

Issue #14-09
We anticipate that the hydrotherapy pool would be used for mother-infant water familiarity classes as well as rehabilitation. It is not however unique (there can be no degrees of uniqueness). Such 'learn to swim' classes are popular in many aquatic facilities although the water temperature may not always be high enough for infant comfort.

Issue #14-10
In claiming that 'a traditional 25m lap pool is unlikely to generate sufficient throughput to justify the investment', the Report contradicts itself. Elsewhere it insists that usage is independent of the configuration of the water space. The claim cannot be taken seriously – it appears to be an attempt to legitimise a preconceived preference that defies the evidence.

In fact, we would argue that such a statement would be far more appopriate to the 3-lane pool – for as we have shown it has a reduced set of capabilities compared with 6- or 8-lane pools and would therefore appear less attractive.

Issue #14-11
The figures quoted here are incorrect, although the essence of CCA's point remains. However, a lower capital cost is not the end of the matter for, following on the theme of the previous Issue, it may well be that the improved throughput of the larger pools outweighs any gain in capital cost.

Issue #14-12
As we have pointed out elswhere, thirty year projections are not reliable. It is hard enough to extrapolate over five to ten years with any reasonable level of confidence. The differences between ABS and WADPI projections bear witness to this problem. When we add to this uncertainty the sloppy attention to basic concepts and careless arithmetic evident in places in this Report, this particular conclusion is worthless.

[3] ABS 49010DO0001_200904 "Children's Participation in Cultural and Leisure Activities, Australia, April 2009".

Issue #App A-01 *p75* *[§Appendix A – Additional Questionnaire]*
See Issue #5-02.

Issue #App B-01 *p76* *[§Appendix B – Denmark Aquatic Centre Design: Option 1]*
The revised Patterson design ignores an earlier observation that any new design should acknowledge that space in the existing DRC will be available so that all the new rooms originally proposed may not be necessary.

The arrangement in this new layout follows a suggestion (from CE) that the Male Change Room (Dry) might be relocated – thereby freeing space for for a common entrance foyer from which both wet and dry activities could be safely monitored. However, since the design fails to achieve this and since subsequent discussion led to the conclusion that relocating the male change rooms would be viewed as impractical by some existing sporting clubs, further thought is needed on a practical layout.

This and earlier difficulties may be traced back to a failure to ensure face-to-face contact between the Architect and the client (in this case the Project Team with appropriate co-opted stakeholders).

Issue #App C-01 *p77* *[§Appendix C - Indicative Order of Cost: Option 1]*
The area of the 6-lane pool is given as 325m^2 in §9.3 Table 21 whereas it is quoted as 300m^2 here – an underestimate of $55k. Similarly the area of the programme pool (aka hydrotherapy) is given as 40m^2 in §9.3 Table 21 whereas it is quoted as 35m^2 here – an underestimate of $12k.

Professional Fees and Disbursements are quoted as 10% of a figure that *already includes* 3.5% for Construction Contingency ($227,488) and 5% for Design Contingency ($324,983) – rather than 10% of the Net Project Cost Subtotal quoted at $6,499,658. This double-dipping amounts to overcharging by $55,246.

Table 21 allows for Extended car parking as – 120 bays. These have not been included in the Quantity Surveyor's calculations. For open parking on ground we estimate about $3k per bay. This includes: site clearance and removal of vegetation; minor cut/fill; bitumen paving; stormwater drainage; minimal lighting; parking signs & line marking; builder's overheads & profit. – but it excludes major earthworks, retaining walls & professional fees. The total cost would be about $360k. However additional cost should be included for School Bus parking and service access at the rear of the pool plant room. The Aerial View drawing notes the need for "service access at rear to pool plant" but it has not been detailed on the drawing and has not been included in the cost indication.

The net effect of these positive and negative variations is a total of $79,395 from which we should deduct a further $55,246 for double dipping – resulting in a modified total base cost for Option 1 of $8.62M rather than $8.17M if we include the additional parking. If we omit the extended parking the other errors fortuitously cancel and the revised figure is $8.20M.

In the absence of any other notation, can it be assumed the estimate is a price for constructing in Denmark (rather than a Perth price to which a locality allowance for Denmark is added)?

Consideration should be made for the exclusions listed in the Report. FFE includes items of Furniture, Fittings and Equipment outside a building contract but needed for the operation of the facility. FFE should therefore be allowed for.

Issues in §Appendix D, E & F – 10 Year financial Projections (DAC Options 1, 2 &3)
Although the financial projections are key to this project's development, the Appendices D, E & F of CCA Report cast very little light on the key issues to consider. The spreadsheets in these three appendices are next to meaningless without adequate explanation of how the various terms in the balance sheet have been estimated. In fact there is no explanation at all – adequate or otherwise.

The Project Team has emphasised on several occasions its view that it must be able to ***understand*** the various estimates. The team recognised ahead of time that there would surely be a need to devise compromises and that these would be very difficult or even impossible to reach without this understanding. We believe that the Shire's Financial staff would share this view.

We sought clarification on several matters at the Draft Report level and pointed out some early errors. We also offered comments and suggestions – some of which have been implemented. However, we have made no progress in teasing out CCA's explanations of line entries. Until these explanations are forthcoming or otherwise resolved, DACCI regards the work of the Consultant as unfinished and the task of the Project Team incomplete.

Part Two – The financial model

The Financial Projections.
There are three water space configurations to be analysed: Option 1 - 8-lane; Option 2 - 6-lane; and Option 3 - 3-lane. Each of these can be examined in terms of three secenarios – Pessimistic, Realistic, and Optimistic – and each of these needs estimates of Operating Income and Operating Expenditure[4].

§2.1 ***Operating Income basics*** The Tables in Appendices D, E & F confirm that, with the exception of a single activity (carnivals), CCA assumes that the Operating Income is independent of the choice of Option – that is to say the configuration of the swimming space is assumed to be irrelevant to users: the throughput of attendees will be the same for all three (except for carnivals). This uniformity has been challenged elsewhere and is almost certainly wrong – but, in the spirit of the CCA numbers, we must proceed as if this were true.

The operating income, R, can therefore be written as the sum of three terms ***no matter which Option or which Scenario is being considered***

$$R = R_{swim} + R_{retail} + R_{other} \qquad (1)$$

The first, R_{swim}, is the annual revenue raised from entries to the swimming space and the second, R_{retail}, arises from cafe and retail sales. Both of these quantities depend directly on the annual attendance A.

CCA offers no explanation for the origin of third term R_{other} - it is described simply as "Leases" . It has the same value, R_{other} = \$10k, for all three Options and it is *independent of annual attendances*. It could only refer to the hydrotherapy pool if this were leased out to third party management for a fixed fee– thereby hiding the dependence on population that such a pool would actually have – i.e. income would depend on the size and cross-section of the community requiring therapy and infant water familiarisation/learn to swim classes for mother and infant groups.

In the model, the "Operating Income" components of all nine tables in Appendices D, E & F may be summarised by the following equations:

$$R = (\$4.99 + \$0.18) \times A + \$10{,}000 \qquad (2a)$$

$$A = V \times P_{eff} = V \times \mu \times P \qquad (2b)$$

In these equations A is the annual attendance; V is the visitation rate for the Scenario in question (6, 9 or 12); P the population (LGP or CP to match V_{LGP} or V_{GP}); and μ is a new parameter describing the Life Cycle Adjustment factor ($0 \le \mu \le 1$). P_{eff} is an "effective population" - equal to the actual population (whichever kind) multplied by the Life Cycle Adjustment factor. Both μ and P are, of course, functions of time – so we should acknowledge this by writing $\mu = \mu(t)$ and $P_{eff} = P_{eff}(t)$.

If we arbitrarily set $\mu = 1$ for the moment, the second equation tells us that $A = V \times P$. We can feed this directly into equation 2a. The resulting graph (Figure 1) shows this simple linear relationship : the ordinate (y-axis) is R and the abscissa (x-axis) is P.

[4] The CCA model does not include any line items in the Operating Expenditure to account for servicing the capital cost and depreciation. We will look at these important factors later.

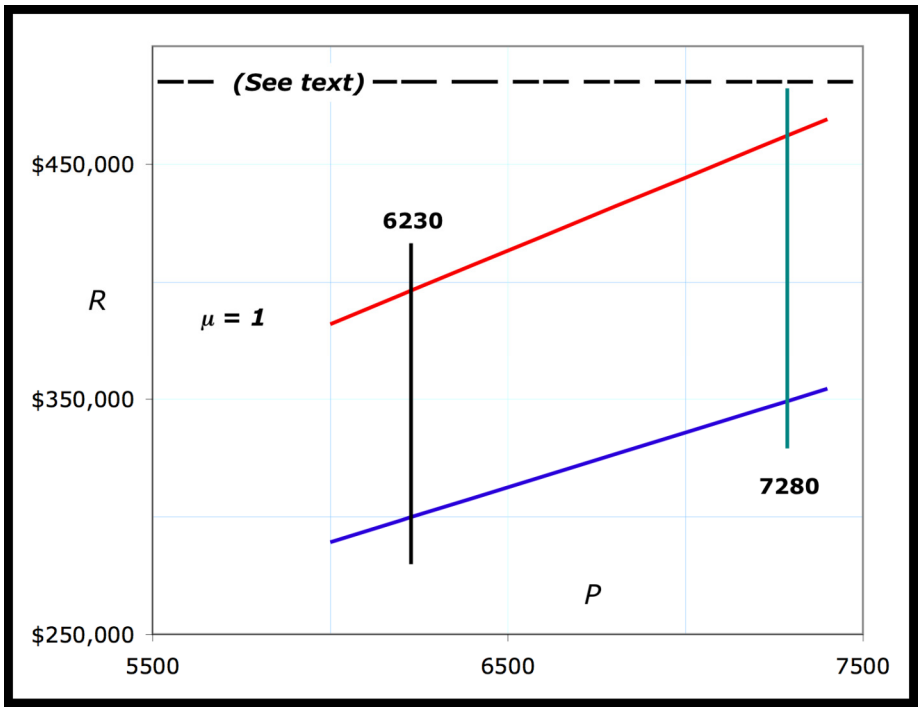


Figure 1: Operating Income versus Population (μ = 1) in the ten-year period used in the model.

The upper straight line (red) corresponds to the maximum value of the visitation parameter, $V = 12$ (the Optimistic Scenario) while the lower straight line (blue) applies when the minimum is $V = 6$ (the Conservative Scenario). The left hand vertical line (black) shows the population in the Base Year, 2012, and the right hand vertical line (green) shows the population ten years later which, accordng to the model, will have increased by 17%.

This is an important diagram. It spans all three Options (1, 2 & 3) and all conceivable scenarios between Conservative and Optmistic – including those in which the visitation rate may vary from year to year. As long as it does not fold back on itself[5], any path drawn within the closed area will describe a possible evolution of the facility's income. The closed region therefore provides an elegant, and far more versatile, albeit *pictorial*, replacement for the totals so painfully and indigestibly ground out in the nine spreadsheets in the three appendices, A, B & C.

More than this however, it allows us to indulge in "what if scenarios" in a very simple intuitive way. For example. The dashed black line near the top of the graph indicates the model's Operating Expenditure in a typical year (~$485k not counting refurbishments). Clearly, the income is *never* large enough to balance expenditure – no matter which scenario we take. (There is no need to scan each of the nine spreadsheets in the hope that the books might balance some time or other!)

Similarly, we might ask what happens if we increase the average cost of a visit from $4.99 to, say, $6.00. This will increase the slope of both upper and lower bounding lines. Increasing the retail spend per visit would have the same effect. On the other hand, changing the estimate of lease revenue would lift the rhombus vertically. Delaying the starting date would slide it to the right and thus take advantage of a (presumed) positive population growth to raise it.

[5] Time is an implicit variable here and we are assuming that P is a function of time, $P = P(t)$. Since there can only be one value of P at any time, there can also only be one value of R … that's why the arbitrary path cannot fold back on iteself.

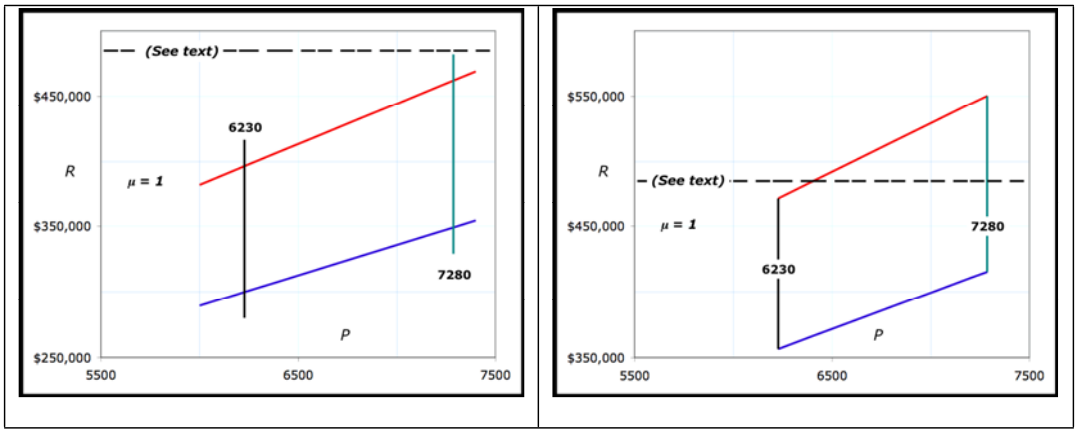


Figure 2: R versus P (μ = 1). On the left, the average entry is $4.99, on the right it is $6.

The diagram on the right hand side is much more promising than the one on the left (which reproduces Figure 1) for it shows that the facility *could* "break even" at some stage in the decade, simply by adding a dollar to the average entry. We might say that the facility "gets its head above water" under certain conditions! We might think of the rhombus as a "submarine" that initially lies entirely submerged (on the LHS) but can "break surface" (cross the dotted black line) under certain conditions. For the Aquatic Facility to be an attractive proposition, we must bring most of it above water!

Three cautions are necessary however. First, and most important, we must not forget that we have arbitrarily set $\mu = 1$ - in effect preventing it from changing with time. Yet except for two or three years in the decade it is less than 1. As we have seen earlier, it starts at $\mu = 0.9$, grows to $\mu = 1$ after a couple of years, and after a further two years of "a full house" decays back to 0.9 by the end of the decade. This means that unless the population growth rate is higher than the decay rate, the effective population, P_{eff} may fall away in the later years and never actually reach 7280. The numbers in this particular case are such that the right hand edge of the rhombus corresponds to the population in the fourth or fifth year - the year it reaches a maximum before declining. Thus, the shape is squashed from the right hand edge – and that part of it that might have crossed the threshold may not remain above it for long.

Secondly, we must draw attention to the fact that crossing the threshold will (obviously) always occur in the top right hand corner of the rhombus … and this will mean that we are always talking about visitation rates that are optimistic rather than conservative. The exposed (above the line) part of the rhombus is a triangular region above the horizontal line in Figure 2: in this example, the lowest *V* for this region is 10.5 in the lower RH corner of the triangle and 12 at the LH and top RH corners. Later, we will draw "contours of equal V" within the rhombus to press this point home. What really counts is the accumulated exposure over the ten year period.

The third alert concerns the "average entry" value. The "average" here is an average across types of activity. The Report suggests entry fees for adults, children, families, seniors etc in Table 23 in §11 p63 - but it offers no account of the user profile that has been assumed in combining these to form an overall average. This is an important omission because there can be no confidence that the user profile is applicable to a population that is noticeably skewed (as is the case of Denmark which has a somewhat atypical age profile). Because CCA fails to source this information we cannot say more than a $1 rise in the average will mean a 20% increase in all the entry fees suggested in Table 23.

There is a related point here that may have already troubled the reader. Equation 2a shows the slope of the line as (4.99 + 0.18). Why have we chosen to keep the two numbers separate – after all they will be added together and it is the total of 5.17 that gives the slope of the *R* versus *A* line? Well - it is because the first is the rate for *mandatory spend* (yielding R_{swim}) whereas the second is the rate for discretionary *secondary spend* and yields R_{retail}. In the absence of more detailed profiling the model assumes that the likelihood of a person participating in an aquatic activity is the same as the likelihood that the same person will participate in retail spending. It is worth noting (Table 16, §7.3, p36) that the

Manjimup secondary spend is $1 per visit rather than 18¢. The model's choice of the latter is nowhere justified.

With this background established, we may easily modify the picture to make it even more useful. We need to reveal the implicit time dependence and we must take account of the Life Cycle Adjustment factor, $\mu = \mu(t)$.

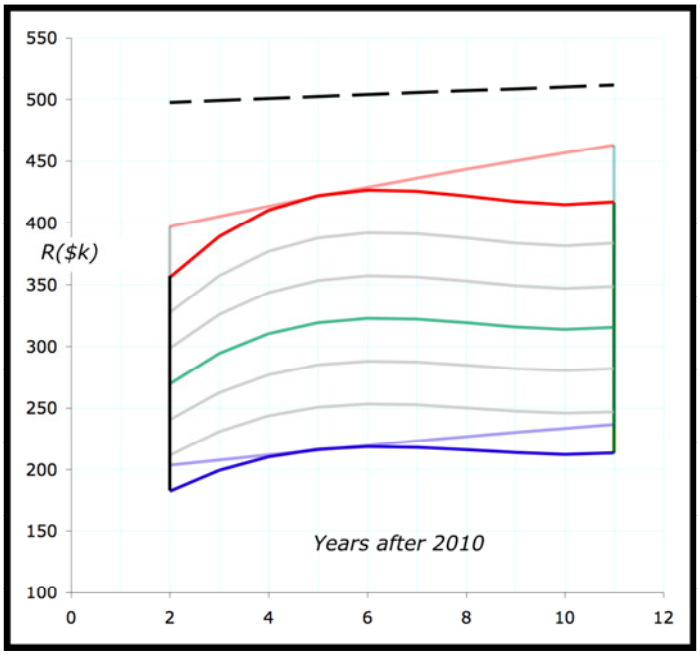


Figure 3: R versus time and the approximate OperatingExpenditure (Appendix D). The curves correspond to visitation rates ranging from 'Optimistic', V = 12, in red, to 'Conservative' V = 6, in blue. The light grey curves lying between these extremes are for V = 11, 10, … 7 except for the V = 9 curve which corresponds to the 'Realistic' scenario and is shown in green. The background figure shown faintly corresponds to the case where the Life Cycle Factor is suppressed (μ = 1).

Figure 3, above, has several interesting features. Note first that the basic background shape no longer has straight line boundaries top and bottom – so it is no longer a rhombus. Given the convenience of having a name for it we might agree (for reasons that may already be evident) to call it a "submarine". It is shown here as if in the background. Note that its upper and lower lines are slight curves (deduced from the original DPI source of the CCA projecions: they are quadratic rather than linear functions of time.) This diagram reveals the explicit time dependence of $R(t)$.

This curvature is, however, completely overshadowed by the impact of the Life Cycle Adjustment [LCF] factor, μ. The modified shape[6] is shown in the foreground. The most striking features of the new shape is the way that the top RH corner has been flattened and the LH side bent downwards. The effective population, $P_{eff} = \mu P$, introduced in equation 2b, never grows beyond its value in the fifth year because the decline due the LCF more than outstrips the positive growth of the population. Clearly, we need to make the best possible estimates of both $P_{eff}(t)$ and $\mu(t)$ since their interaction is so critical.

Note also that the black dashed line in Figure 3 has a small positive slope and that it is higher than it was in the earlier figures. Although we wish to avoid detailed comment on the Operating Expenditure here, we need to flag its time dependence now because of what follows. Its magnitude does vary slightly from one Option or Scenario to another. Here we have used the Realistic Scenario in Option 1

[6] The shape hown here is a smoothed representation of the discrete data points appearing in the Report i.e. on the third line "Life Cycle Adjustment" in the headers of Appendix D, E & F. The smoothing results from a fourth order polynomial fit to the data. No reference is given for the *source* of this data however – other than a claim that it is 'industry experience'.

- but we have adjusted the refurbishment allowance, due every five years, so that it now appears as an annual expense.

Persisting with the maritime analogy, we might ask what needs to be done to ensure that enough of the submarine is exposed for long enough so that over the ten year interval we break even – net operating income matches net expenditure. Since we cannot know V ahead of time, we must treat it as a parameter and do the calculation for a number of values of V.

As discussed in general terms earlier, an increase in the fixed income derived from leasing has the effect of lifting the submarine vertically. A contribution from increased Shire Rates would operate in the same way. But how much do we need to lift it? If we knew the visitation rate this would be easy to calculate – we simply need to compute the area between the dashed black line (expenditure) and the assumed (known?) value of V. This gives the net surplus or deficit over the decade.

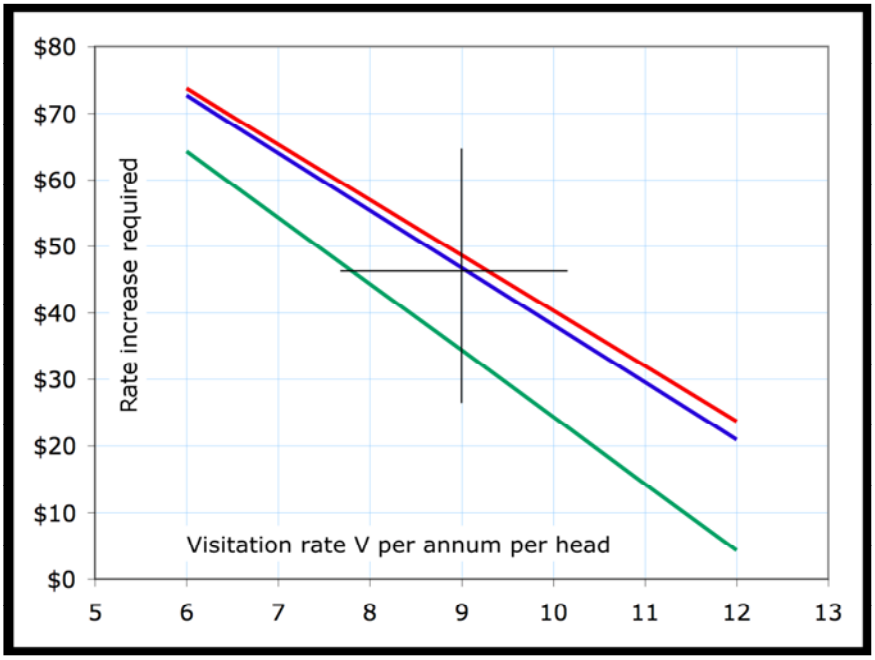


Figure 4: Estimated increase in average annual rates required to achieve a net break-even integrated over ten years. The blue line corresponds to a facility becoming operational in 2014 – the red line, 2012. The cross marks a reference point at about $47 and the 'Realistic Scenario" (V = 9). The difference between red and blue lines at this point is about $2. Except for the green line, the calculation uses the same model parameters as Appendix D and assumes about 4000 'average' ratepayers. The green line shows the rates contribution required to break even if the total income per visit is increased from $5.17 (i.e. $4.99 + $0.18) to $6 … see the discussion below.

When reflecting on Figure 4, we must remember that the Report chooses an average mandatory spend of $4.99 and an average secondary spend of $0.18 per visit. By now it should be clear that the slope of the line in equation 2a is all important and that no justification has been presented for the values used in the Report. We might well ask what happens if we arbitrarily increase this total $5.17 to, say, $6.00. The required ratepayer subsidy falls quite dramatically as greater emphasis is placed on 'user pays'.
The green line in Figure 4 shows this case – and the subsidy required at $V = 9$ falls to about $30.

Finally, we must note the fact that the hydrotherapy pool apparently contributes no income in the CCA model (unless it is the mysterious 'Leases' line item). This is a highly improbable given that many hydrotherapy pools are viable as stand alone facilities. It requires more careful consideration.

§2.2 Operating Expenditure

Any reader disappointed in the level of explanation offered in the Operating Income section will find no solace in the Report's analysis of Operating Expenditure. The key below assigns a question number

to each line item in the estimated Operating Expenditure. In general, the question/comment is relevant to all three Options.

Expenditure Class	Expenditure Item	Question #
Swim School Staff	Swim School Admin/Reception	G2 - #1
	Swim Instructors $	G2 - #1
	Squad Coaches $	G2 - #1
Aquatics Operations	Operations Coordinator	G2 - #2
	Life Guards	G2 - #3
	First Aid Equipment	
	Birthday Parties	
Operations	Electricity	G2 - #4
	Gas	G2 - #5
	Water	G2 - #6
	Cleaning	
	Chemicals - Cleaning	
	Chemicals - Aquatics	
	Insurance	
	Security	
	Plant - maintenance	G2 - #7
	Buildings - maintenance	
	Grounds - maintenance	
	Equipment - maintenance	
	Refurbishment	G2 - #8
Administration	Admin/Mgmt Salaries	G2 - #9
	Staff Development, Uniforms	
	IT support (internal support promotion)	
	Marketing & Promotion	
	Audit	
	Bank Charges	
	Cash security	
	Telephone	
	Postage	
	Printing & Stationery	
	Licences	
	Miscellaneous/Contingency	

G2 - #1. What is the practice at the Albany Leisure and Aquatic Centre and other relevant facilites? Local advice is that these activities should be outsourced.

G2 - #2. Where does this role appear in the "DAC Staffing Structure" suggested in §11.1, p62? How many 'Full Time Equivalents' does it represent and at what Level?

G2 - #3. It is not clear how this estimate is calculated. Table 23, §11.2 gives an hourly rate of $35 – and this is claimed to cost a total of $91,104 in all options and all scenarios. This is a surprising assertion that seems to defy common sense - for it implies that the need for lifeguards is *independent* of the pool configuration.

What are the RLSSWA guidelines for the ratio of swimmers to lifeguards? The arithmetic indicates that lifeguards are employed for 2,603 hours out of a total of 4000 hours of operation annually (§11.3, p64). What is the basis for this apportionment? What is the nature of those aquatic activities that do not require the attendance of lifeguards? Is it assumed that the Cordinator/Duty Manager will perform in this role when lifeguards are not present?

G2 -#4. As might be expected, the elecricity bill increases with the size of the pool configuration (Base Year: $26.35k; $31k; and $37k for the 3-lane, 6-lane and 8lane configurations respectively). But what assumptions underpin this estimate? What is the assumed cost per kWh, and how much electrical energy is needed? How much energy is provided by gas?

Consider thefollowing rough estimate. The electrcity supply company, Synergy, uses the 'L1" tariff for sporting complexes and community recreation facilities, supplying them with energy at $0.2384 per kWh. It follows that an elecricity cost of $31k per annum (Option 1 , Base Year) equates to an average daily demand of 355kWh. Typically, at Denmark's latitude, a nominal 1kW solar panel will deliver 4 kWh per day averaged over a full year. A solar plant would therefore need a nominal capacity of 89 kW. At residential customer rates and without any REC's or other rebates, the capital cost of solar PV is about $1.8k per kW installed (including its share of the inverter). Thus, the cost of panels would be about $160k.

Now Appendix C contains an ESD Allowance of $375k (for 'rainwater and PV cells') – but makes no allowance for any consequential reduction in energy bills. If the preceding estimate is anywhere near the mark, $160k for solar panels and free electricity would be quite a good investment – and there'd be $215k remaining for other ESD initiatives!

G2 -#5. In the case of gas, the reader is once again expected to accept a number appearing out of the blue with no explanation whatsoever – yet it accounts for roughly one fifth of the total expenditure and 75% of the energy budget. What are the assumptions behind this estimate? Do they allow for the fact that Denmark does not have the benefit of reticulated gas supplies? Does it make sense to have an energy mix which requires roughly three quarters to come from this source? Where is the much vaunted expertise/experience in sustainability evidenced here?

G2 -#6. It is generally accepted that water will become an increasingly scarce and therefore more expensive commodity – particularly in the SW. This places special emphasis on the intelligent use and conservation of water. The issue of rising costs of this kind was pointed out to CCA at the Report's draft stage and has been acknowledged in the final Report by a uniform 1% pa increase in water, electricity and gas costs. However, this appears to be more of a conservative gesture than the result of any serious examination of how each of these may evolve over time.

G2 -#7. Should plant maintenance allowance depend on plant size? The latter appears to be independent of which Option is chosen (the variations in capital cost take into account only the adjustment of the water and concourse spaces). Is the same plant be required for all three options?

G2 -#8. Refurbishment should be budgeted as an annual line item, even if it is required only twice a decade.

G2 -#9. The salaries budget need to be broken down so that the reader can understand who is responsible for which tasks. To what extent has the integration with existing DRC staffing practice been considered? In the early stages of this project, much was made about the advantages of co-locating the DAC and DRC and a key factor was the sharing of staff. Why cannot this be spelt out in the staffing profiles and costs reported here? Is there double counting?

Some allowance for an upward trend in real wage rates should perhaps be anticipated.

A general comment on expenditure.
CCA was selected as the preferred supplier in this Feasibiity Study exercise for several reasons, chief amongst these being its claim to ESD capability. Little of substance has appeared in these financial estimates: ESD has been tagged on as line item amounting to less than 5% of the expenditure with the throwaway description "rainwater and PV cells". No other guidance has been provided.

Environmentally Sustainable Design has been emphasised by the Project Team as a high priority consideration at every opportunity in this exercise. Clearly, CCA paid little attention.

Part Three – Outstanding issues requiring further study

§G3-01 There is a need to improve the statistical reliability of the benchmarks. This will involve**:**

- preparing a sample of facilities that are more representative of the Denmark case;
- differentiating between wet and dry usage in each member of the sample;
- liasing closely with key DAC and DRC user groups – schools, sportingclubs etc;
- finding the most representative user profile for Denmark.

§G3-02 There is a need to take a closer look at the DAC/DRC staffing structure. This will involve**:**

- preparing some specific operational scenarios;
- defining additional staff required;
- costing the scenarios and examining options for varying levels of service provision.

§G3-03 There is a need to review the hydrotherapy component of the facility. This will involve**:**

- indetifying user groups;
- preparing some specific operational scenarios;
- defining additional staff required;
- costing the scenarios and examining options for varying levels of service provision.

§G3-04 There is a need to reconsider the proposed floor plan. This will involve**:**

- engaging architectural input to review the draft ;
- determing the layout that ensures optimal functionality for wet and dry operations;
- examining the options for reducing the capital cost;
- defining the key factors fundamental to an evironmetally sensitive design.

§G3-05 There is a need to develop an comprehensive ESD strategy. This will involve**:**

- engaging with architects, engineers, and air-conditioning profesionals etc as required;
- preparing a concept plan having pre-determined environmental sustainability credentials ;
- submitting the revised concept plan to a quantity surveyor for analysis.

§G3-06 The revised concept plan needs to be subjected to rigorous risk analysis.

The purpose of this work would be to produce a well defined set of specifications that would form the basis of a the next step – detailed design and, hopefully, construction. Normally this would be left to the architect selected to build the facility. However, an architect can only be appointed once a decision to proceed has been made. If, in the opinion of the Project team, there is not enough information available for the decision to be made sensibly, then it is preferable to fill in the missing information so the architect's brief can be both clearer and more robust.

To the best of our knowledge, no aquatic facility anywhere in Australia has yet achieved a 'green-star' rating. The Denmark Shire is proud of its forward-looking record in sustainability – here is a possibility to add significantly to its list of achievements.

Questions and Comments from DACCI members and the Project Team on the CCA Draft Report, 9 Nov 2010

Cyril Edwards

1 Background

§1.1 The implication that Shire residents are only 55 km from Albany – a city which already has a modern (competing?) Aquatic Centre – is misleading. The western boundary of the Shire may be less than 40 km away, but the eastern boundary is closer to 120 km from Albany's facilities. Residents of Walpole may be formally counted within the catchment area of the aquatic centre at Manjimup, but would almost certainly be more likely to travel to Denmark (66 km) to swim rather than to go to Manjimup (119 km).

Text has been altered to reflect this

§1.4. Damian and Gregg's names need to be corrected – i.e. Damian Schwarzbach and Gregg Harwood

Text has been altered to reflect this - apologies

2 Contextual Background

§2.2 While the Council words quoted in this are correct, they actually followed the noting of comments from DACCI on the report. DACCI had recommended that the report not be proceeded with because various concerns with the report's methodology.

The point is that the 11 September 2006 quote in the CCA FS Report will, as presently written, perpetuate the myth that the conclusions reached in the Mumford feasibility study could be relied upon. DACCI argued that they could not and demonstrated that the study could **not** provide a useful guide to Council because of its flawed methodology. Council accepted DACCI's view – we should not reopen Pandora's Box by even the slightest suggestion that the Mumford study has any authority.

Could we change this to read: "The recommendation noted comments received from DACCI regarding its concerns with the methodology of the report and its preference that the study not be proceeded with. It went on to state that given the projected ….."?

Text has been altered to reflect this

§2.5 Page 7 – DRC hours of operation should read 3200 hours per year.

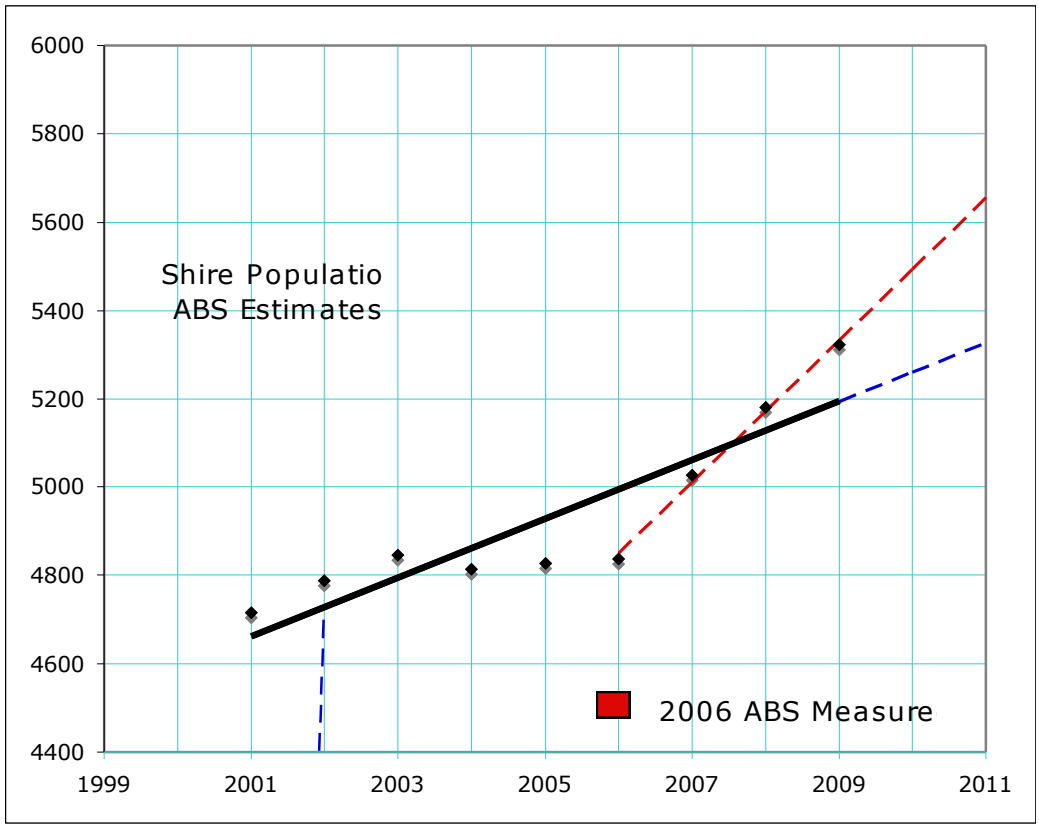
Text has been altered to reflect this

3 Demographic Overview

§3.1 The 2006 ABS census gives the observed population of Denmark Shire as 4509.

In addition to such 'hard numbers' that appear only every five years (2001, 2006, 2011 etc) ABS also makes population *estimates* and these may be

couched in annual terms. The latest available for Denmark Shire were issued 30 March 2010 and is available as a time series from 2001-2009. All such ABS estimates come with the caveat that they are not very reliable in populations as small as 5000.



The solid black line (above) shows the best-fit linear trend line (R^2 = 78%) for the ABS estimates (small black diamonds) and its extrapolation to 2011 (blue dashed line). The red dashed line shows the best-fit trend (R^2 = 99%) if the data is restricted to the 2006-9 estimates, extrapolated to 2011.

Note that that these *model-dependent* estimates do not come very close to the actual measurements in the census year. For example the estimate is 4837 for 2006, rather than the measured 4509 (the large red rectangle above). It is also worth noting that the nine-year average of estimates puts the annual growth at 1.45% over the nine year span although the three year average growth for 2006-2009 has picked up to 3.24% annually (but remember – these are still *estimates*, not *measurements*).

It is clear from this analysis that the most optimistic ABS estimate would be unlikely to exceed 5655 in 2011. Bearing in mind that the actual measured population in 2006 was lower than that estimated by about 330, it might be argued that ABS estimates (extrapolated) are most unlikely to be higher than about 5.3k – a figure falling far short of the 6228 used as the Base figure for 2011 in Appendices D, E & F. See further comment under §12.1.

WA tomorrow estimates were used for the purpose of the report. The Department Of Planning produce this data which is based on anticipated

changes to natural increase, immigration and interstate and intrastate migration. Local economic intelligence and multiplier affects from known development projects.

§3.4 The final paragraph of this section (top of page 12) asserts that "the low levels of weekly individual and household income would however indicate that there is less disposable income for expenditure on leisure pursuits and paid access to facilities."

This observation fails to consider the contrary effect that, along with the relatively high proportion of retirees in the community, there is a similar high proportion of professionals (retired or otherwise) with zero or very low levels of debt. These people are not struggling to pay off inflated mortgages and are in fact "well-off" in terms of disposable income.

It may not be possible to determine which of these opposing trends is dominant. It follows that, in the interest of fairness, the report should mention neither or both.

See section 3.2 – reference to potential high disposable income is referenced at this point. The report therefore mentions both opposing trends.

§3.5 Would it be worth including the 2010 enrolments for the Primary and High Schools?

Text has been altered to reflect this

§3.6 "Future Population" gives the WA DPI projections published in November 2005 (so the data is frozen at an even earlier date) and are taken from the Needs Assessment Report (Jill Powell). This report projected a population of 5394 in 2006 and, as Jill's report ***warned***, this is nearly 20% higher than the (latest ABS data file on the) actual census data taken in 2006 (4509). These DPI numbers form the basis for the 2011 projection (6096) and the 2031 projection (8094). Presumably they are also too high.

Even these DPI estimates fall short of the 6228 used as the Base figure for 2011 in Appendices D, E & F.
So where does this important number come from?

The number is the projected figure using WA tomorrow for 2012 (the estimated opening date for the facility). Department of Planning have consistently stressed that over time the projections contained within WA Tomorrow generally hold true for growth. Whilst all population estimates have a degree of inaccuracy inbuilt and are subject to the vagaries of seasonal migration, prevailing economic conditions and development opportunities.

The final paragraph in this section claims that the population will increase by approximately 32% in the twenty years between 2011 and 2031. This corresponds to an average annual growth rate of 1.40%.
Where does this figure come from?

WA Tomorrow projections 8094/6096 x 100 = 32.8%

4 Sports Participation Trends

5 Consultation and Demand Assessment

§5.2.2 A statement attributed to the Royal Life Saving Society appearing at the bottom of page 21 claims that "The single problem with the majority of pools in WA is that they provide the same service. There is a need to avoid replication." This statement invites the following response.

Why should it be regarded as a problem that the majority of pools in WA provide the same service? This seems to be like complaining that most Petrol Stations are problematic because they provide the same service – i.e. making fuel available to customers – or that IGAs are a problem because they provide groceries!

In densely populated metropolitan areas with good public transport, the market place may be ripe for providers offering added variety – whether supplementing fuel, groceries or recreation – but communities *without* fuel stations, without supermarkets and without recreational facilities have quite a different perspective. Residents are more interested in having access to the service – albeit conventional - rather than having variety thrust upon them for variety's sake.

The statement does no justice ether to CCA or RLSS and would best be withdrawn as a casual one-liner rather than a considered and properly argued position. It is not relevant to the Denmark situation. It may account in part for the unfortunately worded nature of the community questionnaire which appears biased in favour of a 'niche' pool configuration rather than a conventional one.

Analogy is inappropriate. Perhaps I should clarify, in the text that the provision of the same service provides little choice and has resulted in a wider variety of aquatic experiences being ignored. i.e. essentially an over-provision of the same service and if they operated in a commercial market, they would either go bankrupt or cease to exist (market forces). RLSS are merely seeking to state that a traditional lap facility (and perhaps dead water space) is not always the desired solution to meet a community need in every location irrespective of whether they are based in a metropolitan or regional market.

§5.3 In the table on page 22, does the abbreviation "tbc" (entered against Physiotherapy) mean "to be confirmed"? If it does, when might this confirmation take place?

When a facility is open – they do not know at present how often regular would be and would be dependent on demand.

§5.5. We have pointed out previously that the survey (Appendix A) failed to give an authoritative answer to the question of a preferred pool configuration. The wording of Question 2 suggested that **only** the L-shaped layout would be multifunctional whereas in fact *all three* options are multifunctional. Thus it is highly likely that many respondents would have thought that the 8-lane and

6-lane options were dedicated only to lap swimming – and may then have chosen the L-shaped layout believing it to be most useful all round. This unintentional error in the design of the survey question casts serious doubts on the layout preferences data.

In other words, we believe that the wording of the question impacts on the survey findings to the extent that any conclusion reached in favour of the L-shaped configuration would be unsupportable.

The survey also failed to make clear that the hydrotherapy pool was not in competition with the swimming space.

It is impossible to correct for these misunderstandings retrospectively without appearing to colour the data to suit particular choices. We must therefore face the difficult choice between taking this risk or concluding that the survey results should be discarded altogether as far as choice of pool configurations is concerned.

In July this year, I circulated a draft analysis that re-interpreted the raw data. Some of the ideas there have been accepted and are reflected in the paragraph immediately preceding Table 10 in §5.5. However, no conclusions were reached in the draft. DACCI discussed the various options, but I failed to summarise that discussion. I suggest that the draft should be read again with a view to improving Table 10 or excluding it altogether.

This is merely one aspect of the assessment process and provides an indication of resident's thoughts/views – it is not the sole determining tool, but one of a number. The questionnaire was drafted and redrafted to take into account the views of dacci. It should remain.

§5.6 The opening paragraph suggests that there was more than one community meeting – i.e. it refers to the 22 July meeting as "additional". Although it had originally been agreed that there would be a public meeting before any community survey, this did not eventuate. The July meeting was the only one involving the community at large. (This no doubt contributed to the confusion evident in §5.5)

I have removed the word additional.

The first bullet point in CCA's choice of "main comments" is unfortunate. **One** member of the audience expressed a strong view in favour of a 50m pool, but most speakers were content with 25 metre pools – arguing only about whether it should have 6 or 8 lanes. (Gregg's notes should confirm this recollection). What the questions and comments from the audience did clearly reveal was that the community had not been well informed about options prior to completing the pool survey.

The first bullet point has been removed. My recollection of the meeting and Gregg's notes don't substantiate the latter claim, although it was clear that the attendee's were in favour of a 25m option.

§5.7 On Page 26, could the content of the bullet point on community say what the community demand for aquatic facilities is? (It currently says what the community uses in the absence of a pool)

Amended comment included.

6 Site Analysis

7 Industry Benchmarks

§7.1 Table 14 quotes the Leisure Institute of Western Australia as a relevant source of Aquatic Facility Benchmarking. The reference is unspecific, but leads the reader to a LIWA report by Leaversuch, P "Aquatic Recreation Centres in Western Australia – Industry Profile 2010". (September, 2010)
What is the precise reference (within LIWA) used in Table 14?

This was information supplied direct from Peter Leaversuch and Tony Head of LIWA which benchmarked a number of facilities within WA and which has been presented to the Industry. This was provided in March 2010 and related to survey data collected in 2008/2009. The September report to which you refer is the latest information which relates to updated survey information collected in 2009/10 and does contain significant variations and labelling of the regions. This may be attributable to a further refining of the data. I have updated the chart to reflect the outcomes of the latest report.

Both Table 14 and the LIWA report divide the state into regions and although the labels for each differ from one to the other (i.e. 'Wheatbelt' rather than 'Midland'), there can be no doubt that both summaries refer to the same data because the regional populations are identical.

The remaining data in the two summaries appear to be in conflict – in one case, the Great Southern, seriously so.
What is the source of the discrepancy?

The variations with the figures relate to different years (see above) and following further modification of data and data capture by LIWA. The overall impact on the bottom line is not significant as the data merely provides a benchmark against which the financial analysis and potential throughput can be assessed. Reference is made in the report to the limitations in using the information, but it must be stressed that this is the only source available within WA available through the industry.

Great Southern Region	Table 14	Leaversuch	Comment
Population	72,868	72,868	OK –match
Number of pools	7	**17**	Serious conflict
Annual patronage	930,666	716,895	Serious conflict
Patronage per head	12.80	9.84	Serious conflict
Total ann expenditure	$5,385,055	$4,952,174	Conflict
Av expend per pool	$769,294	$291,304	Serious conflict
Cost per swim		$6.91	Not given

The text accompanying Table 14 warns the reader that "*the information contains a wide range of facilities including indoor and outdoor pools, seasonal and all year round facilities and pools of different configurations. As a result, limitations exist in comparing this information to the proposed DAC* ***however it has relevance in determining appropriate parameters***". [DACCI's emphasis]
In what way is Table 14 relevant as claimed?
Where and how has it been used in §12 and Appendices D, E & F?

It is contextual information and should be read together with 7.2, 7.3 and 7.4. The writer has accepted the constraints with the information provided by LIWA. However this is the most significant and broad based state based information. As a result of the limitation in available information, Coffey have conducted extensive primary research which has also been documented in the report.

§7.5 Is there a reason why Albany was not included under Hours of Operation?

We took a selection of facilities across the portfolio to be reflective of the variances experienced.

§7.6 Is there a reason why Albany was not included under Pricing Structure?

We took a selection of facilities across the portfolio to be reflective of the variances experienced.

§7.7 Could we add to Bullet Point 1 "and an average for the Great Southern Region of 12.8" (NB this info comes from the last note on P 34)

The revised benchmark has been referenced

§7.7 The second bullet point under Financial Performance hard to understand at first. It is badly worded and should read:
"The above figure assumes a cost recovery rate of 80% (i.e. revenue covers 80% of expenditure)

Do not agree – the figure equates to a cost recovery of 80% - revenue accounts for 80% of expenditure. This figure is consistent with cca's intellectual property of like facilities and industry based benchmarks (i.e. cerm and yardstick plus information provided in the report).

this figure is fundamental to financial projects at a macro level. By comparison the micro financial data is somewhat secondary.

8 Industry Trends

§8.3.2 Can we amend the second bullet point to take account of the fact that mains gas is NOT available in Denmark? `

Yes

§8.4.2.and §8.4.5 –

Can we remove the photos? They add no substance given that flow riders and pool enclosures are not recommended.

They have been removed

9 Facility Development Options

§9.4 Can this be expanded to provide some idea of the **real** costs? It is currently very thin.

This section should include indicative additions for GST (10%?) sustainable building options (10% + - see second para of §8.3), and arguably "Post construction make good and fit-for purpose works associated with works or design issues" (5% - see eighth bullet point on Page 67) and establishment/pre-opening budget (5% - see ninth bullet point on P 67). If we add all these things the total for Option 1 is just over $11m! This should be clear in the report

The report is clear in referencing the exclusions and actual costs to council. As the gst component is rebated to council it is appropriate to cite this as exclusion. It is not the intent of the report to provide a cash flow figure for a construction project.

10 Management Options

11 Operational Overview

§11.2 Why is the cost for in term swimming different for Terms 1&4 and 2 & 3? Why is a Senior's N-Visit Voucher more expensive than the equivalent N individual visits (10x$3.20 = $32 cf $35 Voucher and 20x$3.20 = $6 cf $66.50)?

Traditional school swim lessons are in terms 1 &4. In an attempt to maximise usage in terms 2 & 3 a reduced price is offered to encourage use.

The voucher prices haven't been used in the financial modelling – there is a typographical error which will be corrected.

12 Financial Projections

§12.1 General assumptions relevant to all financial scenarios:-

Paragraph 2 confirms that the benchmarking information in §7.1 is the basis for the three scenarios to be modelled. See earlier comments which shake the reader's confidence in the reliability of §7.1.

See above: this has been revised with updated LIWA figures – reference should be to section 7 rather than 7.1 (i.e. all benchmarking provided).

Paragraph 6 states that the "***catchment*** *population for the Shire is assumed to be 6k in 2011 and 8k in 2031*." It is not clear where these estimates come from. As discussed earlier, (§7.1), neither the ABS observations nor estimates come close to 6k.

Is the *catchment* population taken to be different from the *Shire* population? If the two differ, where in the CCA document is this difference defined and how is it calculated?

Shire population as indicated by WA Tomorrow is assumed to be the catchment population for the purposes of the report

See however Table 6 in §3.6 that refers to a Western Australian DPI forecast of 6096 in 2011. Page 48 of this report shows error estimates which appear to be ±200 … a large enough span to include the CCA figure of 6228.
If it is the Shire population that determines the detailed financials, where does the precise number 6228 come from?

WA Tomorrow projected to 2012

Paragraph 14 (the seventh bullet point on P67) says that depreciation is not included in the models. However, the Shire's brief to CCA clearly requires depreciation to be included.
Why has depreciation been excluded?

This can be included for the building as a separate line. A straight line depreciation over 30 years life would be the basis for consideration.

13 Potential Funding Sources

§13.1.2

Can CCA elaborate on what would constitute "sound justification" and what they mean by "a significant financial commitment" ? We need much more clarity on whether or not we have much chance of getting capital funding and which factors would be of assistance and which would militate against us.

The other aspect of this is that we need to be aware that having to borrow large amounts for the capital costs would involve interest payments that would need to be factored into the running costs.

I have expanded this aspect to include dsr standard comments "the emphasis of the assessment factors is on a planned approach to facility provision and will require the applicant to demonstrate need and to consider planning, design, and management issues to substantiate the need for the proposed project." The process is identified in the grant application process and subject to independent assessment. At this stage it would be inappropriate to suggest the likely chances of success or otherwise. Reference can be made to the component parts of an application:

- Project justification
- Planned approach
- Community consultation
- Management planning
- Access and opportunity
- Design
- Financial viability
- Co-ordination

- Potential to increase physical activity levels

The amount of money to be borrowed is not a required output of this report, but a consideration by the shire.

14 Conclusion

Appendix A – Additional Questionnaire

Appendix B – Denmark Aquatic Centre Design Option 1

The revised Patterson design ignores an earlier observation that any new design should acknowledge that space in the existing DRC will be available so that not all the new rooms originally proposed may be necessary.

The arrangement in this new layout follows a suggestion (from CE) that the Male Change Room (Dry) might be relocated. However, subsequent discussion leads to the conclusion that this would be viewed as impractical by some existing sporting clubs (and therefore by CE) – retaining front access to the Oval is more important than had been recognised.

The revised plan was finalised following DACCI's comments (a number of variations were tabled). Consideration was given to the impact of the recreation centre, but we cannot consider a redesign of the centre, which goes well beyond the brief. I would re-iterate previous comments made with regard to the level and detail of design at a feasibility stage – the architects have provided a level of detail which goes beyond what would normally be required.

Appendix C – Indicative Order of Cost for Option 1

Where has DL allowed for the new parking to the south-east of the building.?

Car parking to the south east of the building is assumed to be on current land and not formalised for the purpose of the feasibility study. As the facility will not generally experience a high throughput of traffic and the incidence of the need to provide overspill parking would be limited, the costing of this element would not be appropriate at this stage. The opportunity does exist to make this a formal space and as part of any future redevelopment of the recreation centre, this may be considered.

Access to this new car park is incorrectly described as existing.

The Aerial View drawing has a note "service access at rear to pool plant" the extent of which has not been detailed on the drawing and apparently not included in the cost indication.

Why is this so?

A cost has now been incorporated to take account of this requirement

All building estimates and contracts allow for Preliminaries which include the builder's supervision, insurances, scaffolding, site sheds, site fencing, power & water use during construction, rubbish removal, etc, etc. The new building rate of $2200 must include an allowance for Preliminaries as this is not shown separately. However the various line items that make up Alterations & Demolitions and External Works & Services do not include Preliminaries and this is the separate sum of $102,158 (being 15% of $681,050).

Building works have prelim works included. External works have a prelim figure added

Can it be assumed the estimate is a price for constructing in Denmark (rather than a Perth price to which a locality allowance for Denmark is added)?

Price is related to construction in Denmark assuming that it is a competitive tendering process (5-6 named tenders). Currently the market is competitive

A building contract tender date of the 4th quarter of 2010 is clearly unachievable.

This is merely a baseline against which costs can be measured and projected. Currently escalation is generally projected at 5% per annum.

FFE includes items of Furniture, Fittings and Equipment outside a building contract but needed for the operation of the facility. FFE should be allowed for.

FFE is a variable cost which will need to be factored in post feasibility and will be dependent on the approach the shire decide to adopt.

Appendix D, E and F – 10 Year Financial Projections

Questions are mainly raised in the context of re Appendix D but it will become apparent in places that they apply to E & F also.

In the Boxed Header :

Line 2 (Population Variations) start with a Base Level B = 6228 in 2011 (presumably).
Where does this number originate?

WA Tomorrow population projection to 2012

Line 3 (Lifecycle Adjustment) needs more explanation in the text. In particular there should be a literature reference so that the reader may form an independent view of how robust this scaling factor is.
Will CCA provide this reference?

It is representative of the normal variations in the utilisation as a consequence of the facility aging and product and service lifecycles. This information is based on extensive operational and management experience of the consultants

and is consistent with the modelling of other major consultants within the industry.

The boxed header would be improved if it added a fourth line giving the estimated attendances. However, depending on which scenario is used these should be 9, 6 or 12 times the Base Level i.e.

Usage Scenario	Multiplier f	Base Level B	Product f x B	CCA	Delta CCA-fB
Realistic	9	6228	56,052	55,986	-66
Conservative	6	6228	37,368	37,287	-81
Optimistic	12	6228	74,736	74,629	-107

Why is there a discrepancy between the quoted figures and the given formula?

The discrepancy in the figures arises from the financial model building from the bottom up providing a cumulative total of the different visitation options. As a result insignificant variations of up to 0.2% have occurred. The 6, 9 and 12 are not absolute figures and hence going to the absolute rounded up figure does not provide any further accuracy in the report.

Estimated Operating Income:

No matter which *usage scenario* (scenario factor f = 9, 6 or 12) is used, all three *Options* describing the three possible configurations (6-lane+, 8-lane+, or 3-lane+) are assumed to have the **same** income producing capability. This appears to be a fundamental flaw in the modelling since it asserts that usage is independent of the pool configuration.
What, if any, is the justification for this assumption?

Due to the small population and relatively low level of usage for this type of facility, capacity constraints do not impact on financial performance.

There are 3 income groups. The first two of these, 'Casual Swim' with 3 line, and 'Aquatic Programs' with 4 line items. Attendances are apportioned between these 7 line items so that their sum equals the total attendances for each particular scenario.
Where are these proportions justified and how have they been calculated?

Based on the demographics of the population as provided in section 3 and in particular section 3.1 has been used as a guide for projected visitations by different categories.

They are also based on the primary research in table 17. These findings have been applied to the financial modelling.

The third income group, 'Ancillary' has 3 line entries (Retail, Café, and Leases) without attendances but which are assumed to produce income appear without explanation. The income for Retail and Café scales with the scenario factor f = 9, 6 or 12, but the third line entry – leases – does not.
How have these entries been calculated?

Because they are secondary spend there are no visitations associated with these income categories. Standard industry benchmarks have been adopted.

There appears to be no reference to income generated by the hydrotherapy pool – unless this is included under the third line entry under 'Ancillary - Leases'. The reader should not have to guess.
Where is income from hydrotherapy included?

It is included within casual swimming – there is no tracking of users for hydrotherapy as they would fall within the casual swimming input.

Denmark has a significant number of tourists each year, many of whom ask where they may find the Aquatic Centre. It should be possible to make an estimate of potential income from this source - perhaps based on typical visitor numbers and an industry profile of holiday use of pools (if this statistic exists). Failing a specific industry benchmark it might be enough to use the percentages in Table 7, §4.1.1
Could such a term be included in the estimated operating income?

This can be assumed of a number of pools across both metropolitan and regional areas – casual swim numbers would account for this figure which would have a nominal impact on throughput.

Casual Swim: Casual Swimming (Line 1) predicts an income of $239,567 from 44,126 visits – an average of $5.43 per visit. If the proposed pricing structure in §11.2 is accepted, it should then be a simple matter to compute this total provided the percentages apply to each pricing category ($5.00 for Adults; $3.20 for children, seniors, concessions and early birds; $14.00 for families of 4; and $1 for spectators) is given.
What percentages of the casual swim visits have been assigned to each of the four pricing rates and why

Based on the demographics of the population as provided in section 3 and in particular section 3.1 has been used as a guide for projected visitations by different categories.

They are also based on the primary research in table 17. These findings have been applied to the financial modelling.

Whatever the breakdown, "families" count as 4 persons – that is, each family visit accounts for 4 members of the population. Since the average cost per family member in this category is $14/4 = $3.50, the cost of every one of the four categories is ≤ $5.00. It follows that the average cost across all categories cannot exceed $5.00 and would always be less if there were to be at least one spectator (@$1), one child, senior or concession holder (@$3.20) or one entering on a family ticket (@$3.50). Only if *all* visits were by adults would the equality sign apply.
How is the average of "$5.43 per visit" calculated
(i.e. $239,567 divided by 44,126 = $5.43 per visit)?

Total visitations are based on the relevant scenarios (i.e. 6, 9 and 12 visits per head), working backwards, specific visitations per category have been estimated.

Having said this, the above point is valid and an amendment to the price in the financial model has been made to address this error.

Casual Swim: Pool Bookings (Line 2). This entry is not explained in the next, but it appears to be evaluated at roughly $$1.82 per booking.
Please will you explain the basis for this calculation?

Group discount for large booking

Casual Swim: Carnivals/Events (Line 3) revenue should be removed from Option 3 because the facility would not allow this activity.
Does CCA challenge this statement?

It is now removed.

Aquatic programs: Learn to Swim (Line 1). It is unlikely that 100% of the child population could be counted here.
Will CCA explain the basis for this calculation?

100% of the child population is not included – the figure is a visitation figure.

Aquatic programs: Squad swimming (Line 2) should be done privately and not at a loss to DAC. Strip out both the revenue and associated costs for this activity.

Both delivery options of running in-house and outsourcing are used in community facilities throughout australia.

The assumption that the squad is run by the centre is reasonable for a feasibility study. Given the size of the swim squad, the difference between each management option would be negligible hence any change would not have any material impact on the overall findings.

Aquatic programs: Birthday Parties (Line 3) are charged at@$10 whereas Table 23m §11.2 suggests that they should be charged at $12 each.

This has been amended in the financials report.

Ancillary revenue: Retail & Café (Lines 1 & 2) Table 16, §7.3 indicates that the Manjimup base line secondary spend makes up just over 25% of total spend or about one third of the 'Activities Revenue per Visit".

As an example, we might take Option 1 (Realistic Scenario). This would yield approximately one third of $(338 – 20)k or $308k/3 ~ $100k across café and retail. This differs significantly from the estimated $10k.

The Manjimup example is for cafe, retail and other secondary spend revenue only (i.e. No expenses) while the denmark figure in the financial projections is

a net figure (i.e. less expenses). The financial projections are updated to state net café and retail income.

Ancillary revenue: Other Revenue [Leases] (Line 3). There seems to be no explanation of what is intended here anywhere in the report.

This is an allocation for potential leases, sponsorships or other forms of ancillary revenue.

For all three Options, the Total Operating Income Forecast falls $10k short of the actual sum of the numbers in the preceding table in the Optimistic scenario. … i.e. the total should be $447k not $437k

This has been updated for the optimistic scenarios.

Estimated Operating Expenditure

The questions here are similar to those above in that they are typical of all three Options and Scenarios, and that they usually arise from inadequate explanations of the assumptions underlying the estimates.

Expenditure on some items should certainly vary along with the Option chosen (the pool configuration). In particular, electricity, gas, water, cleaning, chemicals, aquatic chemicals, plant maintenance, building maintenance and refurbishment might all be expected to be most expensive for the 8-lane (Option 2) and least expensive for the 3-lane (Option 3). As presented, the numbers show that the total expenditure forecasts are relatively insensitive i.e. 6-lane $556k; 8-lane $602k; and 3-lane $530k. Putting this another way, all three configurations fall within the average ± one standard deviation ($563k ±$36k) – that is to say the annual running cots are the same within within ±6.4% - in a set of forward estimates that are likely to be reliable to only ±15-20%. This should put the debate about which configuration is affordable into an appropriate perspective.

As identified in appendices d, e and f, variations have been made to relevant expense items based on design options.

It is important to note that approximately 50% of the total expense amount is variable based on design (i.e. water, gas, electricity, etc). Other expenses such as salaries and wages, administration expenses etc remain unchanged.

Within the variable expense component, over a 10 year period, option 1 is 10% greater than option 3 while option 2 is 27% greater than option 3. CCCA advises that this is a reasonable reflection of variations in costs for each design option.

Swim School Staff: Admin/Reception/Instructors (Lines 1 & 2). DAC may be able to outsource this.

The swim school model is based on an in-house operation which is the norm for the industry as it is a profitable business unit.

Swim School Staff: Squad Coaches (Line 3). See the earlier suggestion that this may be best to farm out.

As above.

Aquatic Operations: Operations Coordinator (Line 1)

This position requires specialist skills. As a smaller facility it has been allocated as a 1/2 position.

Aquatic Operations: Life Guards (Line 2). It is not clear how this estimate is calculated. Table 23, §11.2 gives an hourly rate of $35 – and this is claimed to cost a total of $91,104 in all options and all scenarios. In the first place this is a surprising assertion since it implies that the need for lifeguards is *independent* of the pool configuration. This seems to defy common sense.

Table 23 refer to the pricing structure (i.e. not actual staffing expenses). The $35 for qualified lifeguard for events incorporates a margin for the facility which is standard practice.

The actual lifeguard hourly rate is $16 per hour. This equates to approximately 109 lifeguarding hours per week. This allocation meets the Royal Life Saving Society guidelines for safe pool operation.

Whilst water space for the 3 options vary, it is important to note that the design variations as not substantial enough to result in changes to staffing levels for pool supervision.

The arithmetic indicates that lifeguards are employed for 2,603 hours out of a total of 4000 hours of operation annually (§11.3).

Refer above.

Operations: Electricity (Line 1). As might be expected, this cost increases with the size of the pool configuration ($26.35k; $31k; and $37k for the 3-lane, 6-lane and 8lane configurations respectively.)

These projections are based on industry benchmarks.

Of all the factors likely to impact on both income and expenditure, the cost of energy might appear to be the most likely to rise the most quickly. There is much speculation about the way that energy costs will change in the next three decades, but it would seem prudent to consider this lie item as worthy of modelling (insofar as this is possible).

An adjustment has been made to the original projections so that increase is approximately 1% greater than CPI per annum.

Operations: Gas (Line 2). Much the same questions arise for gas as an energy source as those that applied to electricity. However, there is a further question:

An adjustment has been made to the original projections so that increase are approximately 1% greater than CPI per annum.

Operations: Water (Line 3). In the same way that power costs seem likely to rise faster than the general CPI, it is predicted that water will become an increasingly scarce and therefore more expensive commodity. This places special emphasis on the intelligent use and conservation of water.

It would be reasonable to assume that the costs associated with water loss/replacement might be essentially proportional to the surface area of the pool configuration. This does not appear to be the case since the costs assigned (%10k, $12k and $8.5k) are not in the ratio of the number of lanes (6, 8 and 3 in Options 1, 2 &3).

Water consumption levels are a result of a range of factors including: utilisation rates, backwash, water volume, etc. Hence water consumption for each option is relative but not a straight line relationship to surface area.

Apart from water, gas, electricity, aquatic chemicals – all other expenditure should be the same across all options.

As capital costs, plant design and building design vary for each option, expenses associated with these items (i.e. maintenance) will also vary for each option.

Operations: Cleaning/Chemicals - Cleaning (Lines 4 & 5). Cleaning costs should be same across all options.

As building footprint sizes vary for each option, cleaning costs also vary.

Operations: Aquatic Chemicals (Line 6).

Industry benchmarking and CCA database on financial performance of facilities.

Operations: Insurance (Line 7).

Yes

Operations: Plant Maintenance (Line 9). This cost is only 50% of the norm in the first year – which seems to imply that routine maintenance (i.e. that is quite properly an appropriate annual expense).
Is it industry standard practice to consider maintenance to be unimportant in the first year?

No – it recognises that maintenance will be covered by contractual arrangements with the supplier and that in the first year costs will be significantly reduced.

It wouldn't be unreasonable to expect that plant maintenance costs should be essentially the same across all options.

Do the assumptions that lead to the variation in maintenance costs across the options acknowledge the reality that plant comes in quantised capacities?

As capital costs, plant design and building design vary for each option, expenses associated with these items (i.e. maintenance) will also vary for each option.

Administration: Admin/Mgmt salaries (Line 1).
Is this shared with DRC – and if so, is this double counting?

The costs associated with admin/mgmt have been further reviewed and revised down.

Appendix E & F – 10 Year Financial Projections (DAC Option 2)