# AQUATIC FACILITY FEASIBILITY STUDY MARCH 2004

UNDERTAKEN FOR AND WITH THE ASSISTANCE OF MISSION BEACH AQUATIC & RECREATION CLUB, CARDWELL SHIRE COUNCIL AND JOHNSTONE SHIRE COUNCIL

# Mission Beach



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## **1.** INTRODUCTION

## **1.1 MISSION BEACH**

This is a study of the feasibility of constructing and operating an aquatic facility in Mission Beach, North Queensland. Mission Beach describes a group of small communities on a 20 Km strip of coast between Innisfail and Tully (refer Map 1). Two Councils - Cardwell Shire and Johnstone Shire Councils, serve the town.

Mission Beach's first inhabitants were the members of the Jirrabul tribe. In the late 1800s the Cutten family settled at Bingil Bay and were successful for many years at timber getting and farming coffee, tea, pineapples and coconuts. Chinese farmers cleared the South Mission area for bananas. Many of the aboriginal people were living in a mission (at South Mission Beach) hence the name 'Mission' Beach.

The First World War together with an enormous cyclone in 1918 halted progress. Many left the area to go to war and the cyclone's destruction caused most of those remaining to leave. The area slowly recovered through banana farming. In 1953 the first government school was established. This tiny school grew quickly in the 1980's so a new primary school was built in 1993. The area has rapidly grown from a small static rural farming community into a budding tourist destination.

The Mission Beach population (residents and visitors) in 2003 is 4,800. The resident population in 2003 is 3,400 with 60% living in Cardwell Shire and 40% in Johnstone Shire. The visitor population varies from as low as 500 in monsoon months to over 3,000 in peak periods. Population is growing quickly - 5% pa over the last 15 years. This study assumes a conservative 4% growth rate for the future. Based on this, the population of Mission Beach will be 5,200 in 2005 (projected construction year) rising to 7,700 in 2015 and 15,500 by 2035 (life expectancy of the facility).

The town has little sports and recreation infrastructure - less than smaller towns nearby. The aquatic facility attracts consistent high levels of community support. Several sports and recreation reviews have been conducted over the years and the 'swimming pool' issue is always at the top of the community's wish list. A needs survey eliciting 406 respondents in late 2001 demonstrated over 90% support for an aquatic facility with only 7% against the proposal.

In May 2001 a community group incorporated as Mission Beach Aquatic & Recreation Club (MBARC). The group is highly active and committed. They have raised over \$42,000 locally, completed a needs analysis, won preliminary funding (\$4,000 Sports & Recreation Queensland 2002 for Development Plan; \$3,050 Dept of Innovation & Information Economy 2003 for Committee Training; \$6,629 Gambling Community Benefit Fund 2004 - Office Equipment), kept the community informed with bimonthly public meetings and met regularly with both Councils.

The committee, the community and their two Councils are now as one; focused resolutely on their goal to successfully fund, construct, manage and market an aquatic facility in Mission Beach.

## **1.2 IS AN AQUATIC FACILITY FEASIBLE?**

The project is feasible on all counts - financial, social and environmental.

The population and population growth will readily support a small modern and well-managed aquatic complex. The need is potent in many ways. High levels of community support, urgent safety need, strong climate factors and large inequities make an aquatic facility a must for this community. Whilst, as for almost every community, the facility will not stand alone financially the subsidy should be considerably less than subsidies for most pools in the area.

Prompt implementation of planning, design and construction is recommended. Now that Councils have funding and plans for Mission Beach sewerage well advanced no significant barriers stand in the way of this long overdue facility.

### **1.3 ACKNOWLEDGEMENTS**

Many people in other Shires and States have enthusiastically offered expertise and advice now and for the continuation of this project. Special thanks to Doug Green, Manager Environmental Health Services, Cardwell Shire Council for his untiring support and provision of vital advice and information all along the feasibility path.

Special thanks also to Ron Smith, Manager Business Development Branch, Maroochy Shire for sharing with us his extensive experience from recent years installing aquatic facilities and running them to maximum potential. Ron's information on the Eumundi project helped cement together all the disparate knowledge we gathered and eliminated areas of doubt.

The person in Mission Beach who has put this project before all else is Maureen Norris. Maureen started it all and got the community to this point. Maureen and her team at MBARC (Paul Roxby now the President, Coralie Kemp, Shane Thorogood, Phil Porter, Shane Holmes, Lisa Noonan & Paula Gilbard) made every effort to assist the feasibility study - nothing was too difficult. Shane Thorogood kindly provided site design roughs on Rotary Park at no cost to the project.

Many others helped with data, specifications, costs, ideas and advice. They are listed in Appendix 4. Finally, a special thanks to those who took time to read the detail of the report at every draft and to contribute ideas and revisions - Doug Green and Paul Roxby put in the effort every time.

## **1.4 COSTS OF THE STUDY**

Consulting Timesheets = 273 hours @ min charge (\$80/hour)	\$21.8K
Travel 615 Km @ 60c/Km	\$ 0.4K
Stationary, cartridges for printing	\$ 0.2K
Phones, faxes, emails, post	\$ 0.9K
Overheads @ 10% of direct costs (including Thelma Gray's time)	\$ 2.3K
Total Costs incurred to 21 Mar 2004	\$25.6K

## **1.5 STUDY METHOD**

The MBARC was encouraged by both Councils to conduct a Feasibility Study and sought quotes to do so. Prices were in the range \$10K to \$60K. MBARC had very limited funds to apply to a study so faced more delays and uncertainty unless they could conduct the study effectively at very low cost.

July 2003, Johnstone Shire Council Mayor, Barry Moyle, approached Ken Gray of the Customer Connection (based in Mission Beach) to initiate this study. Johnstone and Cardwell Council's had previously used the Customer Connection for Project Management work (e.g. Mission Beach Sewerage Environment and Community Study and Johnstone Rivers Flood Study). These projects were successfully managed to agreed budgets and timetables.

The advantages of using this consulting firm are the low ('honorarium') fees often applied to local community work and the savings made on consultant travel and accommodation costs. The disadvantage is that the Customer Connection is a market research and consulting organisation with experience in feasibility studies but no qualifications or experience specifically in Sports and Recreation studies. This means much more time has to be spent researching issues and gathering data that Sports and Recreation professionals are able to 'cut and paste'.

The Customer Connection offered to conduct the study on a voluntary (no fees) basis if the MBARC and both Councils consented to this appointment and to providing necessary support for the study. Ken Gray met with the MBARC and agreed terms of reference including a method, a flexible completion date (aim end November 2003) a vision and objectives. He then met with groups from each Council to discuss the project and the terms. The Cardwell Shire Council consented at a Council meeting subject to any community survey being agreed prior its application. Johnstone Shire Council's Mayor and CEO also agreed to the terms proposed.

#### **MBARC VISION**

To create and maintain an outstanding aquatic facility in Mission Beach that will increase participation in aquatic activity and enhance the health and well being of our community by:

- Providing a safe environment for <u>all</u> the community to swim, exercise and relax in;
- Meeting the main aquatic activity needs of all ages and all community groups including families, toddlers, youth, aged, disabled, locals and tourists;
- Meeting a wide range of unmet recreational, sporting and educational needs;
  - Providing a range of alternative aquatic activities that will be used enthusiastically and regularly by a high portion of locals and visitors;
- Generating a great deal of pride and satisfaction in our wonderful community;
  - Creating much synergy with other sports and recreational facilities;
    - Providing cost effective services without undue financial burden.

#### **MBARC OBJECTIVES**

To enhance community participation in physical aquatic activities by:

- Providing safe year-round swimming for all the community and its visitors;
- Providing the necessary change rooms and toilets within the area, optimally shared with other sports or recreation facilities;
  - Providing a variety of modern water activity facilities especially for children;
    Meeting the needs of a school swim program;
    - Providing a modern meeting place and activity centre for youth;
    - Providing options for aquatic activities for the aged and disabled;
    - Providing a facility for swimming lessons and water exercise activities;
      - Providing an outdoor community recreation and functions area;
        - dding options for visitors to Mission Beach;
        - B Including a kiosk and shaded recreation areas nearby.

#### BACKGROUND

The Customer Connection initially proposed to use the method outlined in a WA Government proforma for Sports and Recreation Feasibility Studies. After consultation with Queensland Sports and Recreation professionals (Cairns Office) this was modified somewhat to ensure that reporting was akin to good practices adopted by Cooktown for its Sports and Entertainment Centre Study.

#### POPULATION

#### SOURCES OF DATA

- Australian Bureau of Statistics 1986 2001 Census data, census night, resident estimates and demographics, collection area maps;
- ♦ Area maps;
- Past Sports and Recreation Needs Analysis and related reports;
- Queensland Department of Local Government;
- Two Council building and development applications records;
- ✤ Street by street survey of homes in Carmoo area;
- Mission Beach Sewerage Report;
- Tourism Study 1998;
- Ray White Mission Beach Home Rentals/Holiday Rentals;
- Mission Beach Tourism visitor numbers/accommodation growth;
- ✤ School student numbers records;
- ✤ Local builder Ken Fox Homes.

This component of the study involved a review of existing data and reports relating to Sports and Recreation, tourism and other studies (e.g. Sewerage) with special reference to population and demographics in the area. This data was updated, mathematically extrapolated, challenged and modified by accessing the most recent Australian Bureau of Statistics data records. Flaws in past assessments of population were identified and eliminated (area definition and forecast assumptions), additional estimations were made and further studies undertaken (e.g. residential housing study of Carmoo area, study of private pool numbers). Visitor numbers and trends were determined (accessing previous Tourism studies). Comparisons of current and forecast populations were made with Tully data because of issues raised in previous studies regarding location and equity and because the most reliable local pool cost and use-data available are from the Tully pool.

Assumptions on population growth were challenged using data from other sources (e.g. school student populations, housing approvals numbers from both Councils, tourism research and real estate rental data). Any apparent anomalies were analysed and reconciled to ensure maximum confidence in key estimations and extrapolations of population.

Appropriate demographics data was captured and analysed and relevant comparisons were drawn. As with all sections of the study, drafts were presented to the steering committee and selected expert parties for scrutiny and change.

#### TRENDS

General trends in Sports and Recreation were documented by previous studies (1997-2001). These were updated by interviewing a host of people in Councils (local and others, mainly pool-experienced people but also senior people with wider views of trends). Pool constructors, designers and operators and Government bodies were also vital sources of research. These contacts (phone, face to face interview and email dialogue) were followed up several times for various parts of the study. People with aquatic facilities expertise, like most experts, have widely varying views so this was an iterative process with data being constantly gathered then tested.

Trends were captured firstly on 'wide angle' (regional success factors, changes in Sports and Recreation issues and behaviours) then narrowed down to specific Aquatic Facilities issues. Finally, the impacts of these issues on planning, design and feasibility were explored.

#### NEEDS, DESIGNS & SITES

The Sports and Recreation Needs of Mission Beach has been the subject of five previous studies since 1997. The two main reports are the 2001 Mission Beach Community Pool Needs Analysis and the 2000 Sports and Recreation Facilities Plan for Cardwell Shire. The latter report was comprehensive and included a specific plan for Mission Beach. Whilst there are some differences of opinion between the two Councils on many issues, for Sports and Recreation in Mission Beach the only significant difference is who pays for what. There is good alignment of the two Councils plans and much useful information on what the community need is for Sports and Recreation facilities in general and for an Aquatic Facility in particular.

The 2001 Needs Analysis defined a broad level of support for a pool and quantified fees and usage but did not tease out the types of facilities that were most acceptable to the community. Fortunately, it did gather and report on qualitative feedback from the survey conducted. On analysis this revealed much on the communities needs.

The second phase of the needs analysis was to research sites, options and costs of facilities at other Councils and others involved in recent aquatic facility construction and operation. This gave us a broad definition of what facilities would be best fit the needs identified and what sites would best meet these needs.

From this analysis, three potential sites were identified and strengths and weaknesses assessed and were listed. Six design concepts were postulated with costs and a macro analysis of pros and cons. These were then presented to a community group at the bimonthly MBARC meeting. The information was presented visually on walls (butchers paper lists with some concept and site drawings) and on PowerPoint digital projection.

The community group was invited to provide feedback on the lists (add and challenge) and vote on the best site (some chose to also vote on concepts despite it being a little early for this step). This feedback was analysed and new issues were researched. The Needs were then fine tuned together with Design Roughs and Site Analysis.

A Consultant Engineer (Project Design, Brisbane) was then invited to visit each site with Council and MBARC to challenge the findings, add issues for further consideration and highlight any relative cost or environmental differences for each site.

The third phase of this component of the study was to revisit the community first using a survey then challenging the findings at a bimonthly community meeting advertised and arranged by MBARC. The survey sought opinion on site of choice, facilities of choice and facilities relative demand.

The final phase is to be completed after this study. A Specialist Pool Architect is to assess each site over three days, provide sketches of Concepts on each site and workshop the data and sketches with focus groups - stakeholders selected from a broad range of Community Groups/Interest Areas. The Architect will recommend one site and draw up a Concept Design after Council's determine the site of choice.

#### VIABILITY

Questions of economic, social and environmental viability were investigated again by a wide spread search for perceptions and data from other community's aquatic facilities. No community can exactly replicate the Mission Beach situation but information was gathered on:

- ✤ Costs of construction;
- ♦ Costs of operation;

- ♦ User numbers;
- $\oplus$  Fees and income generated;
- ♦ Contract conditions;
- ✤ Marketing programs;
- ✤ Factors affecting costs, usage and income;
- ✤ Social and environmental impacts.

This information was then related to local information including the needs analysis and applied to generate the most likely Mission Beach responses to an Aquatic Facility. This led to a financial, social and environmental assessment of likely outcomes for the previously identified best-fit concept and sites.

## 2. MAPS & APPENDICES LIST

MAP 1: MISSION BEACH LOCATION

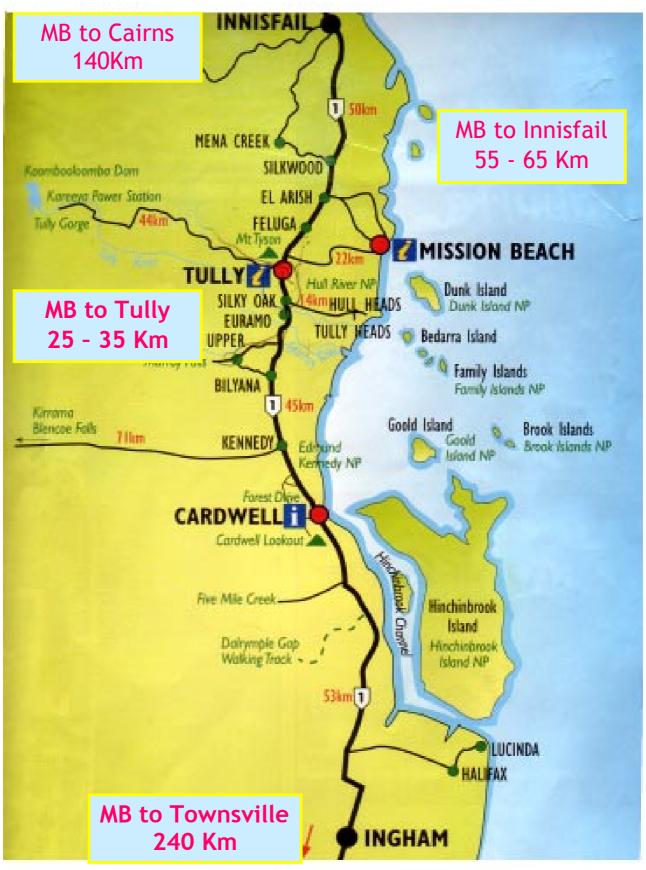
MAP 2: MISSION BEACH DEFINITION

MAP 3: STREET MAP BINGIL BAY-MISSION BEACH

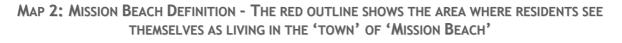
MAP 4: STREET MAP MISSION BEACH-WONGALING BEACH

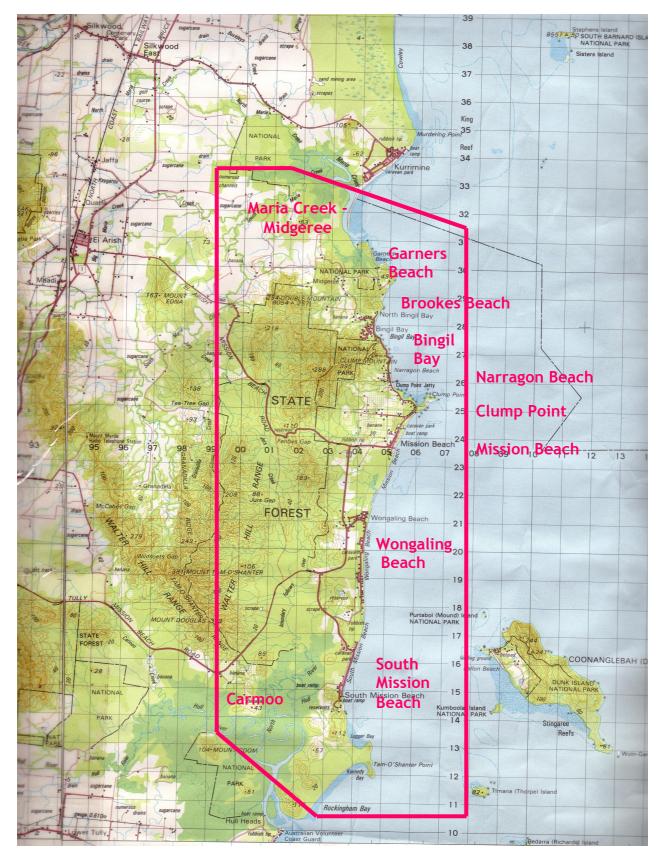
MAP 5: STREET MAP WONGALING BEACH-SOUTH MISSION BEACH

APPENDIX 1: SURVEY FORMAT - SITE AND FACILITIES PREFERENCES APPENDIX 2: SITE SELECTION AND CONCEPT DESIGN PROPOSAL APPENDIX 3: SITE SELECTION CRITERIA CHECKLIST APPENDIX 4: CONTRIBUTORS



 $$\mathrm{MAP}\,1$$  Mission Beach Location and Distances to Region Towns







#### MAP 3: STREET MAP BINGIL BAY - MISSION BEACH



#### MAP 4: STREET MAP MISSION BEACH - WONGALING BEACH SHOWING THREE SITE OPTIONS



#### MAP 5: STREET MAP WONGALING - SOUTH MISSION BEACH SHOWING TWO OF THREE SITE OPTIONS