

BALLINA SHIRE COUNCIL AQUATIC FACILITIES STRATEGIC FINANCIAL PLAN DISCUSSION PAPER (2011)



Table of Contents

- Background**..... 4
- Financial Information** 5
- Patronage** 7
 - Ballina Swimming Pool Facility 7
 - Alstonville Swimming Pool Facility 7
- Section 1 - Ballina Swimming Pool** 9
 - Current Position 9
 - Amenity and Kiosk Facilities 9
 - Plant Room 11
 - Pool Heating..... 12
 - Pool Grounds 13
 - Shade 14
 - Flood Lighting..... 14
 - Current Maintenance Issues 15
 - Pool Coping and Tiling..... 15
 - Pool Boundary Fence 17
 - Spectator Viewing Stands..... 18
 - Plant Room 19
 - Coffs Harbour Pool Plant Room Filter Area (November 2010)..... 20
 - Essential Maintenance 21
 - Budget Estimates – Impending Maintenance..... 21
 - Desired development..... 22
 - Access Ramp and Steps 50 Metre Pool..... 22
 - Covered Spectator Seating..... 23
 - Children’s Wet Play Area..... 24
 - Enclosed Pool Area 25
 - Pool Heating..... 26
 - Budget Estimates – Desired Development..... 26

Section 2 – The Alstonville Aquatic Centre	27
Current Position.....	27
Amenities	27
Access to the Pools and Amenities	28
Plant Room	28
Pool Heating.....	29
Pool Grounds	29
Shade	30
Flood Lighting.....	30
Current Maintenance Issues	31
Pool Coping.....	31
Pool Leaks and Existing and Optional Pool Linings.....	32
Backwash Water Disposal	34
Spectator Viewing Stands.....	34
Plant Room Piping	35
Essential works.....	36
Budget Estimates – Impending Maintenance.....	36
Desired development.....	37
Multipurpose Pool	37
Enclosed 50 Metre Pool.....	38
Budget Estimates	38
Conclusion	40

Background

At the 19 April 2010 Finance Committee meeting, Councillors requested that a forward financial plan be prepared for infrastructure replacement and upgrade for both Alstonville and Ballina Pools, including heating of the Ballina Pool as per the Alstonville Pool model. This document provides information on the current status of each of the pool facilities, current maintenance issues and a selection of remedial and development options. The intent of the document is to generate discussion that will put both direction and boundaries on the future of the swimming pool facilities and enable the establishment of a specific forward strategic financial plan.

The Ballina and Alstonville pool facilities were opened in 1975. Both facilities are showing major signs of age from a maintenance, aesthetics and contemporary lifestyle perspective. In terms of pool heating the Ballina facility has an existing area of solar heating covering the roof of the amenities/kiosk building however this has a minimal affect on the water temperature. The lack of heating limits the length of the pool season to approximately 33 weeks per, the season beginning at the end of September and ending late April each year. The Alstonville facilities pool water is heated by LPG heaters to around 27 Degrees Celsius and therefore the pool season at that facility is able to extend to approximately 37 weeks beginning September ending mid May. The pool season is further restricted by the cooler weather in late autumn and early spring as neither facility offers patrons large areas of protection from the elements in the way of shelter from rain and wind. The Alstonville facility does not have an enclosed pool area therefore does not have the ability to maintain pool water temperature at a suitable level efficiently during cooler weather.

This report is divided into two main sections providing information on the current status, short to long term needs and the desired development as envisaged by patrons and contractors of the Ballina and Alstonville Pool facilities. The intention of this document is to provide the reader with an understanding of the current status of the pool facilities in terms of maintenance requirements, together with options to modify and enhance the facilities in line with contemporary design and current and future operational requirements. The outlined strategies for each of the facilities are not intended to exclude other options for the future provision of swimming pool facilities to the Ballina Shire. In fact an understanding of the current condition of the facilities should prompt the need for a research study that encompasses options outside the status quo, which endeavours to support the current and future needs of the community as a whole.

Financial Information

Typical of Council operated swimming pools both Ballina Council pool facilities operate at a substantial deficit. Both facilities rely on water only activities for cost recovery and therefore do not generate substantial funds to put toward new work or major maintenance initiatives. Unfortunately due to the ageing facilities the annual maintenance expenditure continues to elevate.

The 2009 – 2010 Swimming Pool Financial Summary set out in *table 1* below is typical of the operations of the facilities for a complete financial year in their current arrangement. The kiosks are operated by the contracted pool managers and all revenue is retained by them. Council sub-leases the area of land at the Ballina swimming pool facility that the water slide is situated on to the owners of the water slide. All revenue from the water slide is retained by the owner. However Council receives revenue from the pool gate income collected from water slide customers.

Financial modelling of the pools in terms of redevelopment is subject to an understanding of the direction in which Council wishes to go forward with the sites. The demographics and societal needs of the Ballina Shire have changed substantially in the 36 years since the swimming pools were constructed and therefore investment in a study that encompasses not only the needs of the community but also the direction of the organisation would provide the information required for a more specific financial strategy.

Financial Summary

Table 1 - 2009 / 2010 – Swimming Pool Financial Summary (Alstonville and Ballina)

		Budget	Actual	
22270	<i>Ballina Pool</i>	(149,850)	(138,500)	108
	6629 Entrance Fees	(111,071)	(100,000)	111
	6630 Rent Water Slide	(7,056)	(6,500)	109
	6632 Season Tickets	(31,723)	(32,000)	99
22271	<i>Alstonville Pool</i>	(131,232)	(135,000)	97
	6629 Entrance Fees	(71,172)	(75,000)	95
	6632 Season Tickets	(60,060)	(60,000)	100
<i>Operating Expense</i>		742,020	632,300	117
32330	<i>Ballina Pool Operations</i>	405,641	300,800	135
	390 Chemicals	23,486	20,000	117
	415 Rates (Internal)	40,053	30,000	134
	680 Depreciation	88,182	0	
	6649 Working Expenses	72,297	70,800	102
	6650 Contract	150,134	144,000	104
	6651 Lifesaving Contractors	30,436	36,000	85
	6652 Interest On Loans	1,053	0	
32331	<i>Alstonville Pool Operations</i>	336,379	331,500	101
	390 Chemicals	18,824	20,500	92
	415 Rates (Internal)	29,726	20,000	149
	6649 Working Expenses	85,322	83,000	103
	6650 Contract	132,248	131,000	101
	6651 Lifesaving Contractors	47,033	51,000	92
	6672 Gas Heating	23,226	26,000	89
<i>Capital Expense</i>		0	41,300	0
2220	<i>Swimming Pools Capital</i>	0	0	
	6450 Alstonville Pool Plant Room / Heater	0	0	
5007	<i>Loan Principal Repaid</i>	0	41,300	0
	945 Loan Repayments	0	41,300	0
<i>Reserve Transfers</i>		0	0	
4069	<i>Transfer from Unrestricted</i>	0	0	
	6696 Transfer fr Revolving Energy Alst Turbi	0	0	
		460,938	400,100	115

Patronage

Ballina Swimming Pool Facility

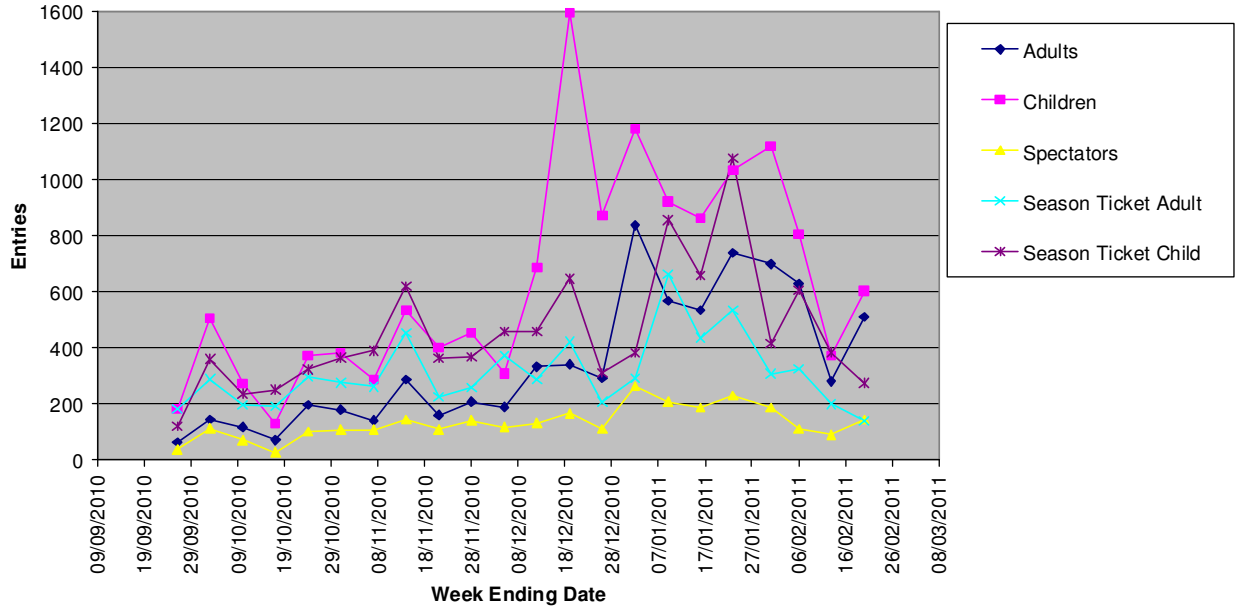
The Ballina swimming pool facility is well utilised by both locals and visitors to the area, many holiday makers utilise the facility particularly over the summer period. The water slide is a main draw card to the facility for families during those times. The facility is also well utilised by the Ballina schools, swimming club and a number of learn to swim programs are also run at the facility over the pool season. The lack of any substantial pool heating has a strong impact on patronage during the shoulder periods of the season and also during any sustained inclement weather conditions during summer. The patronage data for the current pool season is set out in the graph on the next page and indicates the peak period as December to mid February. Pool entries across all user types totalled 41,458 at 20 February 2011 for the Ballina facility.

Alstonville Swimming Pool Facility

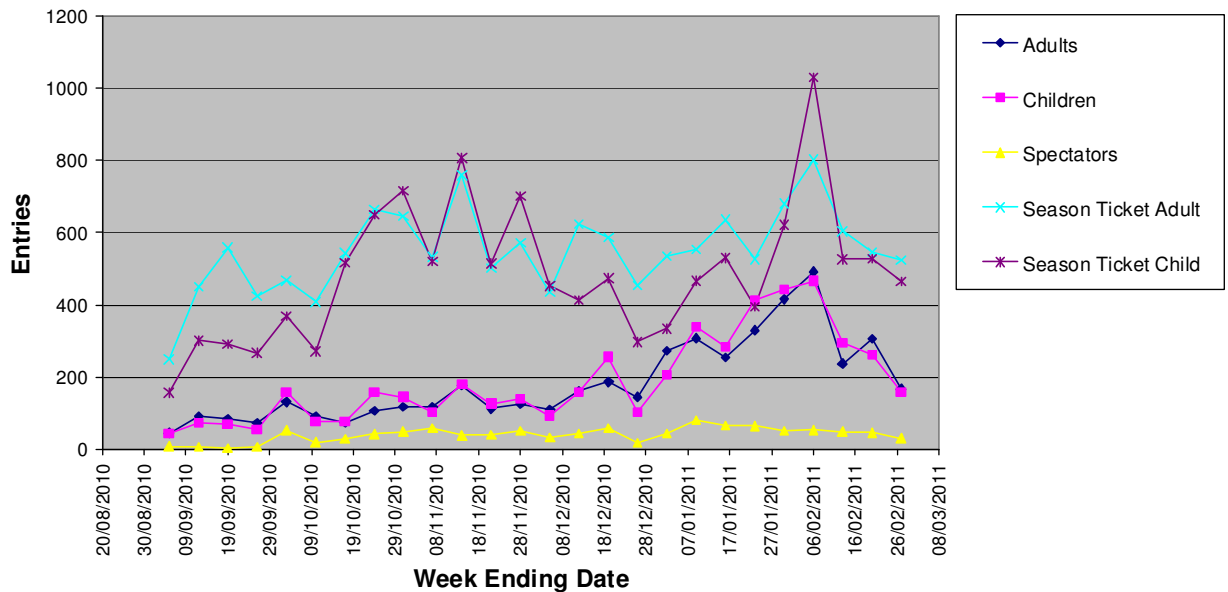
The Alstonville swimming pool facility has a strong sports program and swimming club usage. The pool is popular as a sports venue from not only schools and sporting groups in the Alstonville Wollongbar area but also further a field from Lismore and surrounding areas. The facility maintains a water temperature of 27 degrees and therefore is well utilised by lap swimmers and the general public in the area. The warmer water temperatures are very suitable for learn to swim and stroke correction programs run at the pool. However, like the Ballina facility there is little protection from the elements in inclement weather for spectators or patrons when they are not in the pool water and this can be strong deterrent for families. The graph on the next page of the patronage data illustrates the high proportion of season ticket patronage typical of the pools orientation towards sporting programs. Pool entries across all user types totalled 38,276 at 27 February 2011 for the Alstonville facility.

Patronage Data Ballina and Alstonville Pool Facilities – For the Current 2010 – 2011 Season

Ballina Pool Weekly Patronage 2010 - 2011



Alstonville Pool Weekly Patronage 2010 - 2011



Section 1 - Ballina Swimming Pool

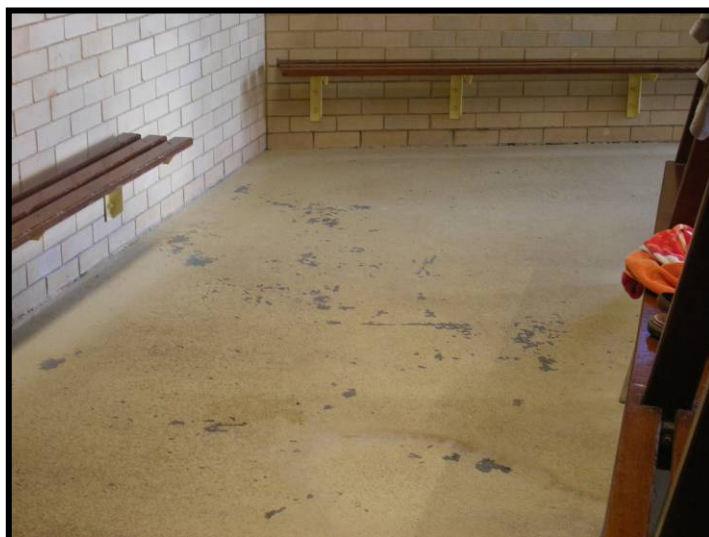
Current Position

The Ballina Swimming Pool Facility was opened in 1975. The facility consists of an amenity kiosk building, plant room, three swimming pools and a water slide. The water slide is owned and operated as a separate business on an area of land leased from Ballina Council within the facility. The public swimming pools themselves consist of one 50 metre Olympic size pool, one 12 x 9 metre training pool and one hexagonal toddler's pool, all tile lined. Since construction the pools have only undergone routine maintenance and remedial repairs particularly in regard the coping and pool lining tiles.

Amenity and Kiosk Facilities

The amenity and kiosk buildings are in relatively good condition and meet current access and user requirements. The kiosk area is suitable to the current operations. The floor coating in the male and female amenities has lifted in areas and will require re-surfacing the short term. The contracted pool managers have provided timber tables and seating around the toddlers pool / kiosk area to accommodate for parental supervision close to the kiosk area and within the shaded area.

Kiosk Area Photos



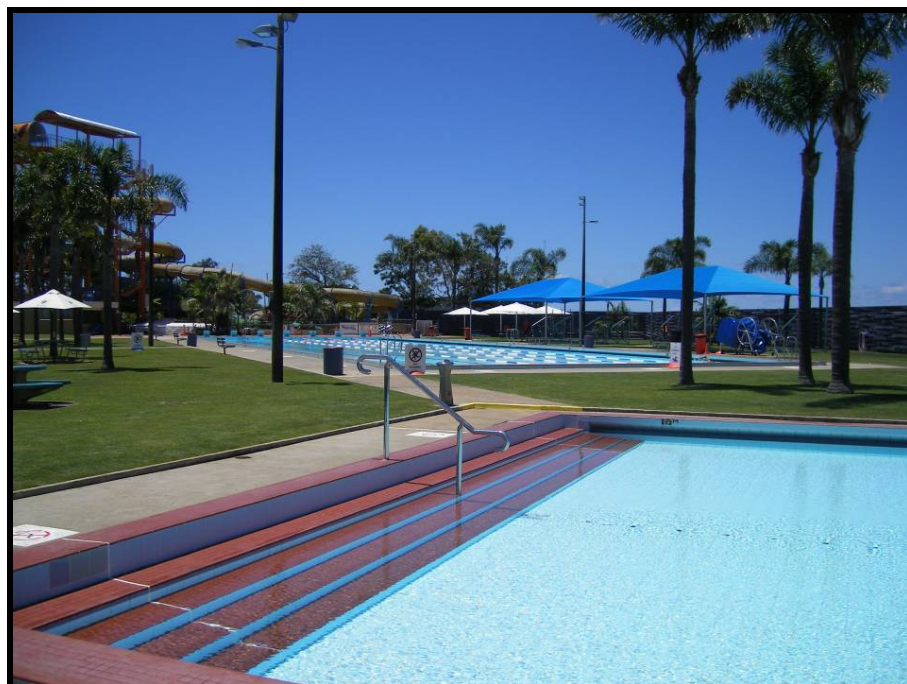
Patron Access to the Pools and Amenities

Toilet and shower facilities are provided for both male and female patrons that have special access requirements. Access to the 50 metre and training pools for patrons with mobility restrictions is provided by a mobile chair lift. The mobile chair lift is operated by pool staff and requires a reasonable amount of careful manual handling. The training pool has steps and a hand rail for patrons that require extra security to increase stability when entering the water.

Wheelchair Accessible Amenities



Training Pool Access



Plant Room

The plant room is for the most part as constructed however it is deteriorating from age and the corrosive environment produced by the pool chemicals. There have been various modifications to the chemical dosing arrangements since the facilities construction. The swimming pool water is currently filtered by the original sand bed filters and then treated with chlorine, CO₂ and acid as necessary. The CO₂ injection system was installed in 2005 and mostly reduces the need for pool acid and other additives. The plant room brick work, pipes and fixtures are all exhibiting deterioration from 35 years of exposure to the harsh chemical environment. Currently the pool backwash water is slowly fed to sewer via a storage tank behind the plant room. Approximately 40,000 litres of backwash water is fed to sewer each week.

Pool Plant Room



Pool Plant Room Electrical Controls



Pool Heating

The Ballina pool facility has approximately 300 square metres of existing solar heating installed on the amenity building roof. The black tubing, joints and baffles that make up the solar water heating system are deteriorating from age. Heat retention blankets have also been provided to assist in retaining any heat provided by the solar system during operational hours. The sites exposure to wind dramatically reduces any heating affect from the existing solar heating system whilst the pool water is exposed during operating periods, particularly during the cooler shoulder periods at the beginning and end of the pool season.

Pool Heating on Amenities Roofing



Pool Grounds

The grounds of the facility are very well presented much of the landscaping is as constructed with a few changes to pathways and general access. As per the Alstonville Pool facility there is a continuing Cocos Palm tree replacement program. No barbeque facilities are provided on the site however there are 14 picnic sets available for use by the patrons. There are four ageing spectator stands which are situated along the Southern side of the 50 metre pool. The stands were provided with shade in 2004.



Shade

Shade structures were installed at the Ballina facility in 2004. The structures installed around the kiosk and toddlers pool area provide for adequate shading. Shade structures were also installed to cover the spectator stands adjacent the 50 metre pool and also the Southern end of the training pool for spectators and approximately 15 percent of the pool for swimmers. No shade is provided over any part of the 50 metre pool. The shading at the Ballina pool facility is enhanced by large umbrellas on a number of the picnic tables.



Flood Lighting

The Ballina pool facility has purpose flood lighting around the 50 metre pool and general flood lighting around the grounds. The lighting is inefficient in terms of energy and maintenance in comparison to contemporary lighting available. The light poles are of concrete construction have undergone concrete cancer repairs in the last 5 years. Any proposed major upgrade of the pool facility would incorporate the installation of purposed designed energy efficient flood lighting.

Current Maintenance Issues

Pool Coping and Tiling

The pool coping varies from 100 to 160mm above the pools surrounding concrete concourse/deck area. The coping's surface is finished with the original ceramic tiles installed in 1975 which are showing signs of 36 years of wear. The raised coping and the wear on the tile surfaces increases the risk of cuts, slipping and tripping and is not complimentary to a modern pool environment.

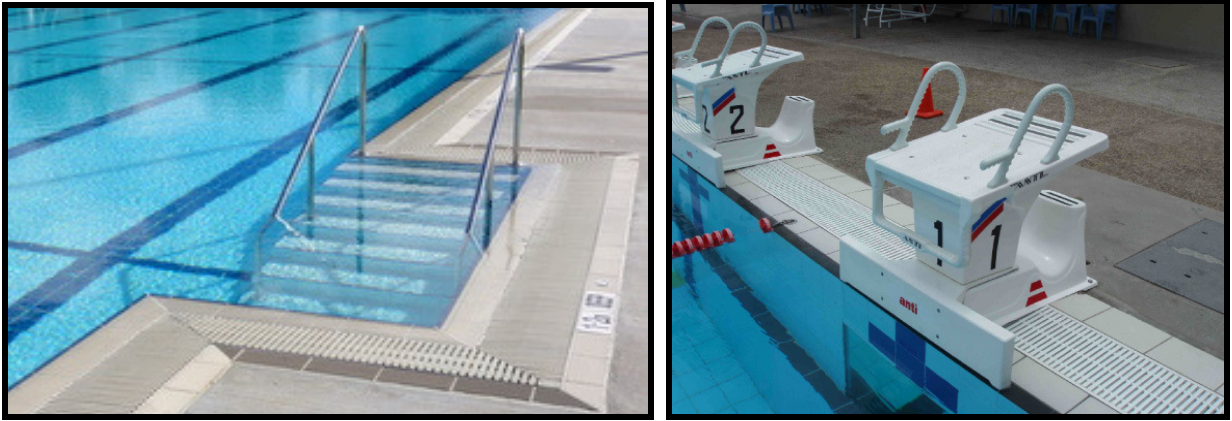
Pool Coping Tiling



During the post 2009/10 pool season, inspection of the pool coping found many areas of the rendering which encompasses the tiling around the perimeter of the pool are beginning to loose adhesion (are drummy) similar to areas found at the Alstonville Pool and it is therefore expected that sections of the render will come away from the concrete pool structure at some time in the future. The problem exists primarily to the age of the pool structure and the long term exposure to the chemical environment.

The practical approach to remedy the coping problem is to remove the pool coping in its entirety and create a wet deck entrance into the pool thus also removing the hazard of a step and this risk of limb being stuck in the scum gutter. Examples of wet deck pool surrounds can be viewed in the images below.

Example Wet Deck Pool and Step Access



The three pools are all of concrete construction and all three pools are lined with tiles. The Ballina pool facility is losing a considerable amount of water from leaks of unknown origin however they are believed to be either through the pool basin or the water reticulation lines to and from the pools or a combination of both.

The tiling within the pools has been patched over the years since opening and replacement tiles no longer match the size and colour of the original tiling. The grouting of the 50 metre pool was partially replaced during the 2010-2011 off season. It is inevitable that the lining of the pools in their current form will need to be replaced in order to repair leaks. The relining of the pools and replacement of the pool coping would be congruent projects and therefore maximise on economies of scale. The relining of the tiled pools can be done utilising a vinyl liner. Forming part of any relining works on the pools would be the replacement of reticulation lines and certification of the water integrity of the pools and pipe work.

The tiles in the toddler's pool are original, stained and showing their age, some of the edges of the tiles are worn and cracking. Any proposed upgrade of the toddler's pool would most certainly look at more contemporary features meeting safety and user requirements for small children.

Toddlers Pool Coping



Pool Boundary Fence

The boundary fence around the pool facility consists of standard weldmesh security fence on the Northern and Western boundaries and a timber fence on the Southern and Eastern Boundaries. Both fences are in poor condition, the weld mesh fence will require replacement in the medium to long term. The timber fence requires regular maintenance due to its poor condition will require replacement in the short term, refer to the photos below.

The timber fence was originally designed as a break from the cooler Southern winds however it has proven to be ineffective as protection from the wind is mainly achieved on the grass area closer to the fence. The timber fence obstructs one of Ballina's best views across the Richmond River. One option for the replacement of the existing fences would be to install a black aluminium powder coated fence similar to those installed around NSW schools (*illustrated in the photo below*). This would not only enhance security and aesthetics of the site but also enable a view of the River across the facility.

Photos of the Ballina Pool Timber Boundary Fence



Existing Weldmesh Security Fencing

Example Powder Coated Fencing



Spectator Viewing Stands

There are four viewing stands along the Southern side of the 50 metre pool. These stands are aging and do not comfortably cater for the spectator numbers at larger sporting and school events. The existing stands are illustrated in the image below.

Existing Spectator Stands



There are a variety of options for the replacement of the existing stands including aluminium stand alone units similar to the existing structures. These options are discussed below in the section “Desired Development”.

Plant Room

To provide for continued uninterrupted business the pool plant room will require modifications in the short to medium term. The existing plant is operational and effective however it is ageing and reaching the end of its useful life. The electrical switchboard and wiring systems also require replacement in order to be in line with current technology and standards to reduce the possibility of breakdown and other electrical related risks.

The long term scenario to maintain pool operations in the existing configuration would be to refurbish the plant room and replace the filter system with modern technology. If the facilities were to be redeveloped refurbishment of the existing plant room and filtering equipment would be an essential component. Coffs Harbour's 2010 refurbishment has shown that existing plant room building structures similar to this Council's can be utilised to create a modern plant room.

Refer to the photographs of the Coffs Harbour Pool plant room taken in November 2010 on the next page.

Coffs Harbour Pool Plant Room (November 2010)



Coffs Harbour Pool Plant Room Filter Area (November 2010)



Essential Maintenance

The following list contains items that are viewed as essential maintenance required in the short to medium term, if the pool facility is to continue to function in its present arrangement.

- Removal of pool coping
- Repair of pool leaks – Pool relining and replacement of reticulation piping
- Plant Room Piping and electrical systems renewal

Budget Estimates – Impending Maintenance

For the purpose of this discussion paper Swimplex Aquatics Pty Ltd has been able to provide estimates to Ballina Council for the essential and desired works at Ballina Pool. The estimates in the table below are intended to be budget guidelines to be used for strategic planning. Swimplex Aquatics Pty Ltd has a strong background in swimming pool facility redevelopment; recent sites include Evans Head and Coffs Harbour Pools.

Work Required Short to Medium Term – Current Layout

Description	Location	Approximate Cost
Remove coping and relining	50 metre pool	\$940,000
Remove and reinstate concourse around pool	50 metre pool	\$115,500
New water reticulation piping	50 metre pool	\$ 42,000
Remove coping and relining	Training Pool	\$224,000
Remove and reinstate concourse around pool	Training Pool	\$ 33,000
New water reticulation piping	Training Pool	\$ 20,000
Plant Room – full upgrade	Existing location	\$500,000
Storm water drainage to concourse	All pools	\$ 23,000
Replacement boundary fence	Around whole site	\$ 95,000
Ancillary services		\$ Unknown

Desired development

The Ballina pool site offers great potential for a range of redevelopment strategies. Discussions with the pool managers have highlighted some of the major areas of desired development for the Ballina facility, from their perspective as managers of the facility and from information they have collected from the discussions held with the regular patrons of the pool. The site offers a multitude of options for future use and development, therefore the list below should be treated as an indication of user preference when considering the future direction of pool facilities for the Ballina Shire community.

Desired Development:

- Wet deck pool surround and an access ramp and steps into 50 metre pool
- Cover spectator tiered seating
- Children's wet play area
- Enclosed heated pool area – Preferred 25 metre training/program pool
- Pool Heating
- BBQ and picnic facilities

Access Ramp and Steps 50 Metre Pool

The current access to the pool for persons with mobility restrictions requires the use of a mobile hoist. Contemporary pool design allows for an access ramp and pool steps. This is usually achieved by the additional of the equivalent of half a pool lane. Any proposal to replace the pool coping and pool lining would be enhance by the addition of the steps and ramp. In terms of cost effectiveness this would also be the most appropriate time for these modifications.

Access Ramp Coffs Harbour Indoor Pool



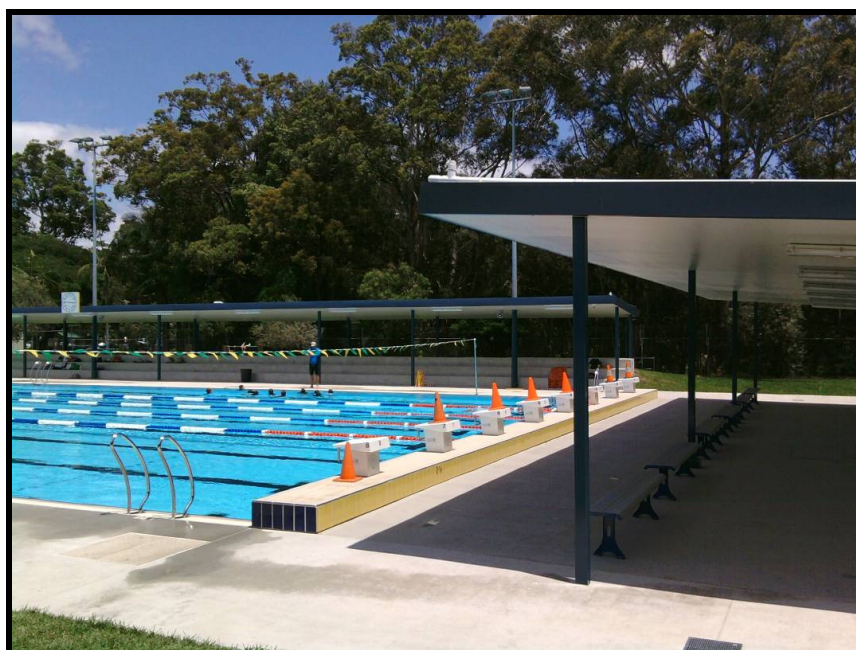
Example Pool Steps and Wet Deck Surround



Covered Spectator Seating

There are a variety of options for the replacement of the existing stands including aluminium stand alone units similar to the existing structures. During a site visit to the newly refurbished Coffs Harbour Pool facility (November 2010) it was noted that they had affectively incorporated a purpose built shaded concrete tiered seating area along entire length of the 50 metre pool and management of the facility has found this to be extremely effective. A section of the Coffs Harbour spectator seating area can be seen in the image below.

Coffs Harbour Pool - 2011



Children's Wet Play Area

Contemporary aquatic facility designs now incorporate wet play areas that safely accommodate small children. These new play areas attract young families and contribute to the health and well-being of the community. The play area designs generally incorporate soft features, water sprinklers, sprays and paddling type areas.

A wet play area would be best located at and around the existing toddler's pool area. This area is close to the kiosk and amenities which enables comfortable supervision by both guardians and staff. The existing toddler's pool would require major work to be modernised and therefore a wet play area presents itself self as a contemporary alternative.

There is evidence from other Councils that the inclusion of a wet play area at their facilities has substantially increased patronage of toddler's and their parents and guardians at the facilities.

Evans Head Wet Play Area – 2010



Enclosed Pool Area

The existing pools at the Ballina facility are un-enclosed apart from shade sails. The disadvantages of having no enclosed pool area include:

- Water heat loss
- No dry spectator area
- Restricted pool usage in bad weather conditions
- Reduced pool season

The incorporation of an indoor heated 25 metre pool on the Ballina site would allow for usage in inclement weather, including all year round programs such as learn to swim. The facility could also be utilised for rehabilitation if the pool water was heated to acceptable levels.

The existing training pool has the potential to be expanded to a 25 metre x 25 metre pool and then enclosed by a weatherproof building structure. The redevelopment would incorporate the installation of the pool's own filtration and heating system allowing for operation as a stand alone facility throughout the year.

Coffs Harbour 25 metre Indoor Swimming Pool November 2010



Pool Heating

The current solar water heating system does not adequately provide any meaningful increase to the pool water temperature during normal operations due to the size of the system and the effects of the wind. A number of alternative water heating options are available, however to provide stable water temperatures and to enable an extension of the pool season at the Ballina Site the most energy efficient water heating system available is a heat pump system. These systems can both operate as a stand alone heating system or can be utilised to work along side solar heating systems. The introduction of additional roof areas such as indoor pools or covered spectator seating could make further solar heating systems a viable supplement to a heat pump system.

Budget Estimates – Desired Development

The table below sets out indicative pricing for some of the desired development requested by the contract managers and users of the pool facility. The pricing is intended to give Council an understanding of the associated costs of this type of infrastructure and therefore assist in the decision making process as to strategic development of the site. Some of the estimates in the table below are supplementary to the core element pricing indicated in the previous table - *Work Required Short to Medium Term – Current Layout page 21*.

Indicative Pricing for Desired Development

Description	Location	Approximate Cost
Access ramp and steps into 50 metre pool	50 metre pool	\$ 83,000
Optional additional lane	50 metre pool	\$150,000
25 metre training/program pool	Extension of existing training pool including external disabled access ramp	\$450,000
Enclosure for 25 metre training/program pool	Existing training pool area	\$500,000
Balance tank and new reticulation	25 metre pool	\$ 55,000
New Pool Plant	25 metre pool	\$275,000
Pool Heating – Heat Pump	50 metre pool	\$195,000
Pool Heating – Heat Pump	25 metre pool	\$ 96,000
BBQ and picnic facilities		\$ 30,000
Cover spectator tiered seating	50 metre pool	\$120,000
Children’s wet play area	Existing toddlers pool area	\$240,000
Aquatic engineering and other professional fees		\$ 50,000
Ancillary services		\$ Unknown

Section 2 – The Alstonville Aquatic Centre

Current Position

The Alstonville Swimming Pool Facility was opened in 1975. Changes or modification in the 35 years since the opening of the facility include a major upgrade of the amenities kiosk building in 1995, the installation of LPG pool heating in 1996 and the installation shade sails in 2005. Apart from these modifications, reactive repairs and programmed maintenance, there have been no major alterations or modifications to the buildings, plant room, water reticulation or surrounding grounds of the facilities to date. The swimming pools themselves consist of one 50 metre Olympic size pool, one 12 x 9 metre training pool and one hexagonal toddler's pool, which since construction have only undergone routine maintenance and remedial repairs specifically in regard the coping tiles and the painting of the internal lining of the Olympic and training pools.



Amenities

The amenity and kiosk buildings are in relatively good condition and meet current access and user requirements. The kiosk area is small however it is still functional. The contracted pool managers have provided timber tables and seating around the toddlers pool area to accommodate for parental supervision close to the kiosk area and within the shaded area.



Access to the Pools and Amenities

Toilet and shower facilities are provided for both male and female patrons with special access requirements. Access to the 50 metre and training pools for patrons with mobility restrictions is provided by a mobile chair lift. The mobile chair lift is operated by pool staff and requires a reasonable amount of careful manual handling. The training pool also has steps and a hand rail for patrons with that require extra security to increase stability.

Plant Room

The plant room is mostly as constructed however it is deteriorating from age and the corrosive environment that is produced by the pool chemicals. There have been some alterations to the chemical dosing arrangements since the facilities construction. The swimming pool water is filtered by the original sand bed filters and then treated with chlorine, CO₂ and acid as necessary. The CO₂ injection system was installed in 2005 and mostly reduces the need for pool acid and other additives. The pool backwash water is drained across the Crawford Park soccer fields adjacent the pool facility. The amount of backwash water leaving the facility is approximately 45,000 litres per week. The plant room brick work, rendering, electrical equipment, pipes and fixtures are all exhibiting damage from 35 years of exposure to the harsh chemical environment.

Alstonville Swimming Pool Plant Room



Pool Heating

The swimming pools are currently heated by three Liquid Petroleum Gas (LPG) heating units. These units were installed in 1996 and are now at the end of their useful lives. Maintenance of these units in terms of running costs and repairs is expensive because of the age of the units. At least one of the gas heating units will be required to be replaced during the 2010/2011 pool season to maintain the pool temperature during the shoulder (autumn) period of the season. Current technology offers alternative options for pool heating that can deliver improvements across the triple bottom line. However, entering into any of these options requires planning in line with the future direction of the pool facility.

Alstonville Swimming Pool – Existing LPG Pool Water Heaters



Pool Grounds

The grounds of the facility are very much as constructed with the main changes since construction being to the vegetation including a Cocos palm tree replacement program. There are 11 picnic sets available for use by the patrons however there are no barbeque facilities. Six ageing spectator stands are situated along the South-Eastern sides of the pool.



Shade

The shading at the Alstonville pool facility is adequate for swimmers in the main pool and more than adequate for the younger users of the pool facility around the toddlers and training pools. Shade sails were installed over the pools in 2004-2006 and are in good condition. The toddlers pool is approximately 70 percent covered, the training pool is approximately 50 percent covered and the 50 metre pool is approximately 10 percent covered. The only short-fall is shade for spectators around the 50 metre pool.



Flood Lighting

The Alstonville pool facility has purpose flood lighting around the 50 metre pool and general flood lighting around the grounds. The lighting is mostly halogen fittings and is inefficient in terms of energy and maintenance in comparison to contemporary lighting available. Any proposed major upgrade of the pool facility would incorporate the installation of purposed designed energy efficient flood lighting.

Current Maintenance Issues

Pool Coping

The pool coping varies from 100 to 160mm above the pools surrounding concrete concourse/deck area. The coping's surface is finished with the original ceramic tiles installed in 1975 which are showing signs of 36 years of wear. The raised coping and the wear on the tile surfaces increases the risk of cuts, slipping and tripping and is not complimentary to a modern pool environment.

Sample of the Alstonville Pool Coping and Tiles



During the post 2009/10 pool off season, a large section of the pool coping rendering and the tiling attached collapsed into the 50 metre pool (*refer to the photo next page*). Remedial repairs were carried out just prior to the opening of the 2010 / 2011 season. Inspection of the coping found that many areas of the rendering which encompasses the tiling around the perimeter of the pool have lost adhesion (are drummy) and it is therefore expected that further sections of the render will come away from the concrete pool structure. If further sections of the pool coping come away during the current or later pool seasons the pool facility may need to be closed down so that the pool can be drained for temporary repairs.



The practical approach to remedy the coping problem is to remove the pool coping in its entirety and create a wet deck entrance into the pool thus also removing the hazard of a step and this risk of limb being stuck in the scum gutter. Examples of wet deck pool surrounds were provided in the earlier in sections of this report discussing the Ballina Pool.

Pool Leaks and Existing and Optional Pool Linings

The three pools at the Alstonville Facility are of concrete construction. The 50 metre and training pools have a vulcanised rubber paint lining and the toddler's pool is tiled lined. There is a large amount of unexplained water loss throughout the pool season at Alstonville pool facility this can only be attributed to leaks in the pool structures or the reticulation lines circulating to and from the pools.

Rectification of the water leaks will be an invasive process requiring replacement of the reticulation lines and re-lining of the swimming pools. This work would be automatically included in any upgrade of the facilities and should be looked upon as a major influencing agent to progress Council's swimming pool facility planning process.

The painted pools have a build up of paint layers from the many re-coats they have received over the years and air pockets have begun forming around the basin. This causes areas to break away leaving sharp edges and exposed concrete. The most practical and cost effective remedy given the age of the pools would be to have the painted surface removed and to then reline the pools with an alternative membrane such as a vinyl lining. The relining of the pools and replacement of the pool coping would be run as congruent projects to maximise on economies of scale. Forming part of any relining works on the pools would be the replacement of reticulation lines and certification of the water integrity of the pools and pipe work.

Current Painted Surface – 50 metre and Training Pool



The tiles in the toddler's pool are original, stained and showing their age, some of the edges of the tiles are worn and cracking. Any proposed upgrade of the toddler's pool would include resurfacing as a minimum.

Toddler's Pool Coping



Backwash Water Disposal

As previously stated the backwash water from the pools is currently distributed across the soccer fields at Crawford Park. This process creates a number of social and environmental issues which could be alleviated by disposal of the backwash water through the sewerage system.

To allow sustainable disposal of the backwash water to the sewerage system, the water would be held in storage tanks on the pool site and then slowly fed to the sewerage system so as not to overload the sewerage network. The Alstonville sewerage treatment facility incorporates a re-use water treatment system, therefore sending the backwash water to the facility via the sewerage network would provide immediate environmental benefits when compared to the current disposal method.

Spectator Viewing Stands

There are six viewing stands along the Eastern side of the 50 metre pool. These stands are aging and do not comfortably cater for the spectator numbers at larger sporting and school events. The existing stands can be seen in the photo below. The options for spectator seating and shading are the same as discussed in the earlier Ballina Pool section of this report.

Existing Spectator Stands



Plant Room Piping

The cement lined cast iron piping within the pool plant room has begun to decay and has resulted in urgent repairs already during the 2010 / 2011 season. The electrical switchboard and wiring systems are also suffering from the corrosive effects of the chemical environment and require replacement in order to reduce the possibility of breakdown and other electrical related risks and further to be in line with current energy efficient technology and electrical standards.

To provide for continued uninterrupted business the plant room piping will need to be replaced in the short to medium term. The long term scenario would be to refurbish the plant room and replace the filter system with modern technology. As discussed and illustrated earlier in the Ballina section of this report, this Council's existing plant room structure can be utilised to create a modern plant room.

Alstonville Swimming Pool Plant Room



Essential works

To summarise the current status of the Alstonville pool facility in terms of operational condition the following should be seen as key essential works to maintain the current infrastructure.

- Removal of pool coping and relining of the pools
- Replacement of reticulation piping
- Backwash water disposal to sewer
- Pool heater replacements
- Renewal of the plant room piping and electrical equipment

Budget Estimates – Impending Maintenance

Swimplex Aquatics Pty Ltd has provided estimates to Ballina Council for the essential and desired works at the Alstonville pool facility. The estimates in the table below are intended to be budget guidelines only to be used for strategy discussion.

Indicative Pricing for Work Required Short to Medium Term

Description	Location	Approximate Cost
Remove coping and relining	50 metre pool	\$940,000
Remove and reinstate concourse around pool	50 metre pool	\$124,000
New water reticulation	50 metre pool	\$ 42,000
Remove coping and relining	Training Pool	\$175,000
New water reticulation	Training Pool	\$ 33,000
Plant room full upgrade	Existing location	\$500,000
Pool Heating replacement with heat pump system		\$195,000
Backwash water disposal to sewer	Behind existing plant room area	\$ 45,000
Ancillary services		\$ Unknown

Desired development

The Alstonville pool site similar to the Ballina pool site offers great potential for a range of redevelopment strategies. Discussions had with the pool managers have highlighted some of the major areas of desired development for the facility, which they as pool operators have envisage themselves and also information they have collated from discussions held with the regular patrons of the pool.

A number of the areas of desired development similar to those at Ballina included:

- Disabled access ramp and steps into the 50 metre pool *
- Covered spectator tiered seating*
- BBQ and picnic facilities*
- Expansion of the training pool into a multi purpose pool
- Enclosed 50 metre pool
- Children's wet play area*

** Common to both Alstonville and Ballina Pools*

Items noted in the list above have already been discussed earlier in Section 1 of this report.

Multipurpose Pool

Similar to the Ballina facility the existing pools at the Alstonville are un-enclosed apart from shade sails. As previously stated the disadvantages of having no enclosed pool area are:

- Water heat loss
- No dry spectator area
- Restricted pool usage in bad weather conditions
- Shortened pool season

There have been a number of requests from members of the Alstonville Community for Council to provide a hydrotherapy pool at the Alstonville Facility. The ageing population and the lack of such facilities for the aged and for rehabilitation in the Alstonville area have identified a need for such a facility. Utilising the existing training pool as a multipurpose pool was one suggestion offered to accommodate some of the issues raised above.

The existing training pool can be expanded to approximately 16 metre x 16 metres, this along with its own heating system to provide higher water temperatures would offer a multi-purpose pool with

higher water temperatures which would be more suitable for rehabilitation, learn to swim and other special needs. The ideal facility would be enclosed or at least encompass some form of protection from the weather to achieve maximum benefits from an extended season.

Enclosed 50 Metre Pool

Another option raised by pool management for consideration is to enclose the 50 metre pool. The benefits of enclosing the 50 metre pool would include the facilities availability for year round water sports, training, competition and school use. It is important to note that any pool enclosure should incorporate the ability to open up to the outside environment (e.g. retractable roof and wall sections), to facilitate the open environment that is very important to many of the patrons of our pool facilities.

The estimates provided in this report for pool enclosures are intended to provide the reader with an understanding of the broader costs associated with such a large undertaking. There are multitudes of designs and building techniques available for large enclosures and building structures. If the strategic plan was to adopt the concept of enclosing the 50 metre pool or any of the pools, a thorough consultation and design process would enable true costing to be included in the strategic financial planning for the site.

Budget Estimates

The estimates in the table below are intended to be budget guidelines only, to be used for strategic planning. Some of the items and estimates listed are supplementary to the core element pricing already provided in the previous table *Work Required Short to Medium Term – Current Layout page 36*.

Indicative Pricing for Desired Facilities

Description	Location	Approximate Cost (ex GST)
Install access ramp and steps as additional part lane	50 metre pool	\$87,000
Install additional pool lane	50 metre pool	\$150,000
Enclosure for pool	50 metre pool	\$700,000 - \$1,000,000
Expand existing pool to a 50 x 25 metre pool for competition and programs -	50 metre pool	\$2,000,000
Expand the training pool to enable a multipurpose pool to 16m x 16m	Existing training pool area	\$400,000
Enclosure for pool	Multipurpose/Training pool	\$350,000 - \$500,000
Pool Heat – Heat pump	Multifunction/Training pool	\$ 85,000
Install covered spectator seating	Along the length of the 50 metre pool	\$120,000
Install a children's wet play area	In lieu of existing toddlers pool	\$240,000
Install BBQ facilities	In appropriate area of the pool grounds	\$30,000
Engineering and design work		\$50,000
Ancillary services		\$ Unknown

Conclusion

The Ballina Shire Council swimming pool facilities were opened approximately 36 years ago and have served the community well. It is inevitable however that the sites undergo major remedial maintenance or that a strategy is put in place that focus's on the community needs and the direction of the organisation in regard the future of swimming pool facilities in the Ballina Shire.

This discussion paper has endeavoured to highlight current maintenance issues at the Ballina Council pool facilities and offers options for remediation and redevelopment to aid in the decision making process. The desired outcome of discussion surrounding this document is a direction from Council that will set boundaries on the future of the swimming pool facilities and enable the procurement of focused consultation specific to the forward financial strategy desired by Council the community and the organisation.

Pricing specific to Council's needs will enable the development of an accurate forward financial plan for infrastructure replacement and upgrade for both Alstonville and Ballina Pools.