Fraser Coast Regional Council

Urban Open Space Strategy:

Gap Analysis, Strategies and Indicative Costs

Stage 3 Report

Revised March 06, 2011

Prepared by John Wood

John Wood Consultancy Services

TABLE OF CONTENTS

COMMONLY USED ABBREVIATIONS

The following terms and abbreviation are used throughout this report with the meanings indicated.

Term	Meaning
Council	Fraser Coast Regional Council
CW	Council wide
DERM	Department of Environment and Resource Management
Dist	District
DSS	Desired service standards
Est	Established
FCRC	Fraser Coast Regional Council
GST	Goods and Services Tax
HB	Hervey Bay
JWCS	John Wood Consultancy Services
MB	Maryborough
PIFU	Planning Information and Forecasting Unit (PIFU) within the Office of Economic and Statistical Research (OESR)
UOS	Urban open space

PREFACE

This individual planning study report was commissioned by the Fraser Coast Regional Council (Council) as part its Sustainable Growth Strategy project to assist and inform in the development of a new planning scheme for the entire local government area. It is important to understand that while the study report and its recommendations are a significant input, it does not necessarily represent the final integrated policy position of Council. Rather, the information will be used to assist the drafting of elements of the new planning scheme. The integration and balancing of a range of project inputs, community and State government engagement and other information which becomes available to Council will also influence the final policy content of the new planning scheme. Following an initial review by the State, a statutory public consultation process will occur where formal submissions are considered by Council and the State government before the planning scheme is finally adopted.

1. INTRODUCTION

1.1 METHODOLOGY

This gap analysis is based on information supplied by FCRC in regards to parks owned and managed by Council in the Fraser Coast Council Area. All accessible parks above 1 ha (and many smaller than this) were inspected, photographed and classified according to their purpose(s). The estimated percentage of each park used for each purpose was assigned by reference to a Google air photo of the park. The percentages were then used to calculate the area of each park for each purpose and summed for all parks in each of the planning catchments. This provided a good estimate of existing urban open space by type in each catchment. It should be noted that no information was available regarding the length of existing linear parks within each catchment (as distinct from pedestrian/cycle paths within recreation parklands).

Population predictions, at 5 year intervals between 2011 and 2031, are based on the "small change PIFU medium series" projections for each catchment (supplied December 1, 2010). These population predictions have been used with the recommended DSS for urban open space (total of 4.6ha / 1000 population) to calculate the theoretical amount of urban open space required in each catchment for recreation, sport and linear park types. The anticipated amount of new parkland by park type was calculated by subtracting the area of existing parks from that theoretically required to service the population in the each catchment for each of the 5 year periods between 2011 and 2031.

1.2 ASSUMPTIONS

The gap analyses are based on the following assumptions:

1. A draft performance figure of 4.6 ha per 1000 people for urban areas, and 2.25ha per 1000 for rural areas, split as follows:
    - Urban - 1.6ha/1000 for recreation; 1.5ha/1000 for sport; and 1.5ha /1000 for linear parks.
    - Rural - - 0.25 ha/1000 for recreation; 2.0ha/1000 for sport; and 0 ha /1000 for linear parks.
2. It is assumed that Indoor Sport and Recreation facilities (land allocation of 0.2 ha / 1000) will be covered in the Community Facilities report.
3. Population predictions for the Fraser Coast Planning area were drawn from the DOCSHBCC-#1965532-v2-SGS_Population_table.XLS supplied December 1, 2010.
4. An assignment of park type and apportioned use based on field checking and airphoto interpretation undertaken by John Wood, as detailed in the Excel spreadsheet Combined gap analysis V2a 170710.xls".
5. The gap analysis focuses only on those urban park types which will be included in an infrastructure charges scheme. Costs associated with other urban open space (e.g. waterways, environmental parks, amenity parks, roadside stops, vacant or undeveloped parklands) have not been considered.
6. Where there is sufficient existing parkland to meet projected demand within a catchment, it is assumed that there will be no additional land or embellishment costs to be incurred by Council. This assumption may not be valid and is beyond the scope of this strategic assessment to clarify.
7. No account has been taken of non-Council facilities (e.g. Maryborough Motorsports Park, private club facilities, fitness centres; educational facilities (school sports facilities); private golf courses and bowling greens etc).

2. HERVEY BAY URBAN – PIALBA

Includes the suburbs of Point Vernon, Pialba, Eli Waters, Urraween and Nikenbah.

2.1 PIALBA GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 1: Pialba gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	28,164			33,449			40,696			49,991			60,822		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Urban Benchmark	Ha / 1000	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50
	Predicted ha required	45.06	42.25	42.25	53.52	50.17	50.17	65.11	61.04	61.04	79.99	74.99	74.99	97.32	91.23	91.23
	Existing park ha.	53.82	0.00	6.24	53.82	0.00	6.24	53.82	0.00	6.24	53.82	0.00	6.24	53.82	0.00	6.24
	Surplus / deficit ha.	+8.76	-42.25	-36.00	+0.30	-50.17	-43.93	-11.29	-61.04	-54.80	-26.16	-74.99	-68.74	-43.49	-91.23	-84.99
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of +8.76 ha. This figure becomes negative in 2012, with the total deficit in 2031 of -43.49 ha. The foreshore reserves comprise a large component of this parkland. NB: During the tourist season, the population increases dramatically along the foreshores and many park areas will be used well beyond a sustainable capacity.
2. **Sporting parkland**: In 2011 there is a deficit of -42.25 ha. By 2031 this deficit will grow to -91.23ha.
3. **Linear parkland**: In 2011 there is a deficit of -36.00 ha. By 2031 this deficit will grow to –84.99. (NB: Linear parkland has been poorly documented in the past and this figure is indicative only).
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

2.2 PIALBA URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Establish 2 district sporting facilities (10 ha+) to service the catchment as a matter of priority. ii). Create additional linear parks and circuits (many of these can be through existing reserves and waterways or along park streets). iii). Require all new residential estates to make a parkland contribution as per DSS. iv). Maintain and improve the quality of existing parks, especially those without any facilities.
Recreational Parks	v). Continue to improve existing local parks particularly with addition of shade structures and facilities. vi). Require local parks in all new developments as per DSS.
Sports Parks	vii). Urgent identification and establishment of 2 new district sporting facilities to service the expanding Pialba population. Investigate all possible locations including the multi-use of educational facilities.
Linear Parks	viii). Establish "park streets"*1 connecting with foreshore path to provide safe pedestrian/cycle access and circuits particularly in the Point Vernon and Pialba localities. ix). Extend the rail trail to the south west from the city passing through Urraween to Nikenbah and beyond. x). Establish "park streets" connecting with the rail trail spine to provide safe pedestrian/cycle access and circuits particularly in the Urraween and Nikenbah Localities.
City Parks	xi). Continue to provide quality facilities in the city centre.
Regional Parks	xii). Continue to provide quality facilities along the foreshore.

*1 For an explanation of "parks streets" refer http://www.jwcs.info/ and click on Documents and select Park Streets.

3. PIALBA - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 01 HB Pilaba worksheet. Table 2 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 2: Pialba - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	60,822				53,911			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**-43.49**	**-91.23**	**-84.99**		**-32.44**	**-80.87**	**-74.62**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	21.75	15.22	6.52		16.22	11.35	4.87	
Estimated # of parks	21.75	3.81	1.09		16.22	2.84	0.81	
Total $	$1,826,580	$3,433,209	$1,961,834	$7,221,623	$1,362,480	$2,560,895	$1,463,368	$5,386,743
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	68.42	22.81		0.00	60.65	20.22	
Estimated # of parks		6.84	2.28			6.07	2.02	
Total $		$58,576,058	$39,050,705	$97,626,763		$51,924,211	$34,616,141	$86,540,352
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		84.99	0.00		0.00	74.62	0.00	
Estimated km		84.99				74.62		
Total $		$13,598,400		$13,598,400		$11,939,200		$11,939,200
			Tot new	**$118,446,786**			**Tot new**	**$103,866,295**

3.1 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 3: Pialba - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	53,911			• **Population:** There will be a significant reduction in the anticipated population in 2031 of 6,911 people. • **Recreation Parkland:** 11.05 ha less will be required. • **Sporting Parkland:** 10.36 ha less will be required. • **Linear Parkland:** 10.37 km less will be required. • **Total cost:** There will be an overall saving of $14,580,491.
	Park Type	Rec	Sp	Lin	
Urban Benchmark	**Ha / 1000**	**1.60**	**1.50**	**1.50**	
	Predicted ha required	86.26	80.87	80.87	
	Existing park ha.	53.82	0.00	6.24	
	Surplus / deficit ha.	-32.44	-80.87	-74.62	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

4. HERVEY BAY URBAN – URANGAN

Includes the suburbs of Scarness, Kawungan, Wondunna, Torquay and Urangan

4.1 URANGAN GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 4: Urangan gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	18,533			19,966			21,509			23,171			24,962		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Urban Benchmark	Ha / 1000	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50
	Predicted ha required	29.65	27.80	27.80	31.95	29.95	29.95	34.41	32.26	32.26	37.07	34.76	34.76	39.94	37.44	37.44
	Existing park ha.	27.72	12.38	0.00	27.72	12.38	0.00	27.72	12.38	0.00	27.72	12.38	0.00	27.72	12.38	0.00
	Surplus / deficit ha.	-1.94	-15.42	-27.80	-4.23	-17.57	-29.95	-6.70	-19.89	-32.26	-9.36	-22.38	-34.76	-12.22	-25.07	-37.44
	Legend	+ = Surplus		- = Deficit				Rec = Recreation; Sp = Sport; Lin = Linear								

Observations

1. **Recreation parkland**: In 2011, there is a deficit of -1.94 ha. This figure increases with the total deficit in 2031 of - 12.22 ha. The foreshore reserves comprise a large component of this parkland. NB: During the tourist season, the population increases dramatically along the foreshores and many park areas will be used well beyond a sustainable capacity.
2. **Sporting parkland**: In 2011 there is a deficit of - 15.4 to ha. By 2031 this deficit will grow to - 25.07 ha.
3. **Linear parkland**: In 2011 there is a deficit of - 27.80 ha. By 2031 this deficit will grow to – 37.44. (NB: Linear parkland has been poorly documented in the past and this figure is indicative only).
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

4.2 URANGAN URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Create additional linear parks and circuits. ii). Maintain and improve the quality of existing parks. iii). Require any new residential estates to make a parkland contribution as per DSS.
Recreational Parks	iv). Continue to improve existing local parks particularly with addition of shade structures. v). Require local parks in all new developments as per DSS.
Sports Parks	vi). Continue to improve the quality of existing sporting facilities. vii). Establish a district level sports facility in Kawungan in the vicinity of the junction of Main Street and Doolong Road.
Linear Parks	viii). Establish "park streets" and waterway corridors connecting with the rail trail spine to provide safe pedestrian/cycle access and circuits particularly in the Scarness, Torquay and Urangan localities. ix). Extend the foreshore trail to the south east toward Booral and beyond.
City Parks	x). No additional City Parks required.
Regional Parks	xi). Continue to provide quality facilities along the foreshore and within the Botanic Gardens.

5. URANGAN - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 02 HB Urangan worksheet. Table 5 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 5: Pialba - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	24,962				29,910			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**-12.22**	**-25.07**	**-37.44**		**-20.14**	**-32.49**	**-44.87**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	6.11	4.28	1.83		10.07	7.05	3.02	
Estimated # of parks	6.11	1.07	0.31		10.07	1.76	0.50	
Total $	$513,240	$964,677	$551,244	$2,029,162	$845,880	$1,589,902	$908,515	$3,344,297
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	18.80	6.27		0.00	24.37	8.12	
Estimated # of parks		1.88	0.31			2.44	0.81	
Total $		$16,096,698	$5,365,566	$21,462,264		$20,860,858	$13,907,239	$34,768,097
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		37.44	0.00		0.00	44.87	0.00	
Estimated km		37.44				44.87		
Total $		$5,990,400		$5,990,400		$7,179,200		$7,179,200
			Total new	**$29,481,826**			**Total new**	**$45,291,595**

5.1 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 6: Pialba - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	29,910			• **Population:** There will be a significant increase in the anticipated population in 2031 of 4,948 people. • **Recreation Parkland:** 7.92 ha more will be required. • **Sporting Parkland:** 7.42 ha more will be required. • **Linear Parkland:** 7.43 km more will be required. • **Total cost:** There will be an overall increased cost of $15,809,769.
	Park Type	Rec	Sp	Lin	
Urban Benchmark	**Ha / 1000**	**1.60**	**1.50**	**1.50**	
	Predicted ha required	47.86	44.87	44.87	
	Existing park ha.	27.72	12.38	0.00	
	Surplus / deficit ha.	-20.14	-32.49	-44.87	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

6. HERVEY BAY URBAN SURROUNDS – EAST

Includes Booral and River Heads.

6.1 HB URBAN SURROUNDS (EAST) GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 7: HB East - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	2,389			2,486			2,549			2,601			2,653		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.60	4.78	0.00	0.62	4.97	0.00	0.64	5.10	0.00	0.65	5.20	0.00	0.66	5.31	0.00
	Existing park ha.	1.28	0.00	0.00	1.28	0.00	0.00	1.28	0.00	0.00	1.28	0.00	0.00	1.28	0.00	0.00
	Surplus / deficit ha.	+0.69	-4.78	0.00	+0.66	-4.97	0.00	+0.65	-5.10	0.00	+0.63	-5.20	0.00	+0.62	-5.31	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of +0.69 ha. This figure decreases slightly in 2031to a surplus of +0.62 ha. Many of the residential lots in this catchment are larger than normal, thus local recreational needs tend to be accommodated on private land. NB: During the tourist season, the population increases significantly and existing park facilities will be used well beyond a sustainable capacity.
2. **Sporting parkland**: In 2011 there is a deficit of -4.78 ha. By 2031 this deficit will grow to -5.31 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for foreshore walking trails to Mary River Heads Park are developed as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

6.2 HB URBAN SURROUNDS (EAST) URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Maintain and enhance existing parks. ii). Require any new residential estates to make a parkland contribution as per DSS for rural areas.
Recreational Parks	iii). Enhance Booral and River Heads Community Parks with additional facilities. iv). Do not provide any additional local parks in rural residential areas.
Sports Parks	v). Develop a multi-purpose oval with recreation facilities at a central location for both Booral and River Heads communities (possibly on the flats to the west of River Heads Road).
Linear Parks	vi). Reserve land for a foreshore path to be developed as demand necessitates.
City Parks	vii). Not relevant.
Regional Parks	viii). Maintain and enhance the quality of facilities within Mary River Heads Park.

6.3 HB EAST - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 03 HB East worksheet. Table 8 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 8: HB East - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	2,653				3,281			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**+0.62**	**-5.31**	**0.00**		**+0.46**	**-6.56**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.62	0.00		0.00	0.46	0.00	
Estimated # of parks	0.00	0.16	0.00		0.00	0.12	0.00	
Total $	$0	$139,841	$0	$139,841	$0	$103,753	$0	$103,753
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	5.31	0.00		0.00	6.56	0.00	
Estimated # of parks		0.53	0.00			0.66	0.00	
Total $		$4,545,856	$0	$4,545,856		$5,615,973	$0	$5,615,973
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	$4,685,697			**Total new**	**$5,719,726**

6.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 9: HB East - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	3,281			
	Park Type	Rec	Sp	Lin	
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	• **Population:** There will be an increase in the anticipated population in 2031 of 628 people. • **Recreation Parkland:** 0.16 ha more will be required. • **Sporting Parkland:** 1.25 ha more will be required. • **Linear Parkland:** 0 km more will be required. • **Total cost:** There will be an overall increased cost of $1,034,029.
	Predicted ha required	0.82	6.56	0.00	
	Existing park ha.	1.28	0.00	0.00	
	Surplus / deficit ha.	+0.46	-6.56	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

7. HERVEY BAY URBAN SURROUNDS – SOUTH

Includes the localities of Sunshine Acres and Bunya Creek.

7.1 HB URBAN SURROUNDS (SOUTH) GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 10: HB South - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	911			934			957			976			986		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.23	1.82	0.00	0.23	1.87	0.00	0.24	1.91	0.00	0.24	1.95	0.00	0.25	1.97	0.00
	Existing park ha.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Surplus / deficit ha.	-0.23	-1.82	0.00	-0.23	-1.87	0.00	-0.24	-1.91	0.00	-0.24	-1.95	0.00	-0.25	-1.97	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a deficit of -0.23 ha. This figure increases slightly in 2031to a deficit of -0.25 ha. Many of the residential lots in this catchment are larger than normal, thus local recreational needs tend to be accommodated on private land.
2. **Sporting parkland**: In 2011 there is a deficit of - 1.82. By 2031 this deficit will grow to - 1.97 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

7.2 HB URBAN SURROUNDS (SOUTH) URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Reserve land for a multi-purpose community common in a central location for future embellishment. ii). Require any new residential estates to make a parkland contribution as per DSS.
Recreational Parks	iii). Do not provide local parks in rural residential areas
Sports Parks	iv). Reserve land for a multi-purpose community common in a central locality (possibly near the junction of the Old Rifle Range Road and Boral Road) and provide facilities in line with demand.
Linear Parks	v). Explore the feasibility of reserving the former Maryborough/Hervey Bay rail corridor as a linear, multipurpose recreation corridor for pedestrians, cyclists and horses. vi). Reserve land to connect with multipurpose recreational corridor from the east and the west
City Parks	vii). Not relevant.
Regional Parks	viii). Not relevant.

7.3 HB SOUTH - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 04 HB South worksheet. Table 11 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 11: HB South - anticipated 2031 new park requirements and costs

Small change PIFU medium series				
Year	2031			
Base pop	986			
Park Function	**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**-0.25**	**-1.97**	**0.00**	
New Recreation Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.25	0.00	
Estimated # of parks	0.00	0.06	0.00	
Total $	$0	$56,388	$0	$56,388

PIFU Medium Series			
2031			
1,196			
Recreation	**Sport**	**Linear**	
-0.30	**-2.39**	**0.00**	
Local	**Dist**	**City / CW**	
0.00	0.30	0.00	
0.00	0.08	0.00	
$0	$67,665	$0	$67,665

Small change PIFU medium series				
New Sports Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	1.97	0.00	
Estimated # of parks		0.20	0.00	
Total $		$1,686,504	$0	$1,686,504
New Linear Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00	
Estimated km		0		
Total $		$0		$0
			Total new	**$1,742,892**

PIFU Medium Series			
Local	**Dist**	**City / CW**	
0.00	2.39	0.00	
	0.24	0.00	
	$2,046,063	$0	$2,046,063
Local	**Dist**	**City / CW**	
0.00	0	0.00	
	0		
	$0		$0
		Total new	**$2,113,728**

7.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 12: HB South - anticipated implications of higher growth scenario in 2031

	Year	**2031**			**Likely Implications**
	Base pop	1,196			
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be an increase in the anticipated population in 2031 of 210 people. • **Recreation Parkland:** 0.05 ha more will be required. • **Sporting Parkland:** 0.42 ha more will be required. • **Linear Parkland:** 0 km more will be required. • **Total cost:** There will be an overall increased cost of $370,837.
	Predicted ha required	0.30	2.39	0.00	
	Existing park ha.	0.00	0.00	0.00	
	Surplus / deficit ha.	-0.30	-2.39	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

8. HERVEY BAY URBAN SURROUNDS - WEST

Includes the localities of Takura and Walligan.

8.1 HB URBAN SURROUNDS (WEST) GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 13: HB West - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	785			804			825			841			957		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.20	1.57	0.00	0.20	1.61	0.00	0.21	1.65	0.00	0.21	1.68	0.00	0.24	1.91	0.00
	Existing park ha.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Surplus / deficit ha.	-0.20	-1.57	0.00	-0.20	-1.61	0.00	-0.21	-1.65	0.00	-0.21	-1.68	0.00	-0.24	-1.91	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a deficit of -0.20 ha. This figure increases slightly in 2031to a deficit of -0.24 ha. Many of the residential lots in this catchment are larger than normal, thus local recreational needs tend to be accommodated on private land.
2. **Sporting parkland**: In 2011 there is a deficit of - 1.57. By 2031 this deficit will grow to - 1.91 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

8.2 HB URBAN SURROUNDS (WEST) URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Reserve land at a central location suitable for a community common to service the community. ii). Require any new residential estates to make a parkland contribution as per DSS.
Recreational Parks	iii). Do not provide local parks in rural residential areas.
Sports Parks	iv). Reserve land for a multipurpose community common to service the locality and progressively develop as population expands
Linear Parks	v). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with the wider regional network.
City Parks	vi). Not relevant
Regional Parks	vii). Not relevant.

8.3 HB WEST - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 05 HB West worksheet. Table 14 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 14: HB West - anticipated 2031 new park requirements and costs

Small change PIFU medium series					**PIFU Medium Series**			
Year	2031				2031			
Base pop	957				1,030			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**-0.24**	**-1.91**	**0.00**		**-0.26**	**-2.06**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.24	0.00		0.00	0.26	0.00	
Estimated # of parks	0.00	0.06	0.00		0.00	0.07	0.00	
Total $	$0	$54,132	$0	$54,132	$0	$58,643	$0	$58,643

Small change PIFU medium series				
New Sports Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	1.91	0.00	
Estimated # of parks		0.19	0.00	
Total $		$1,635,139	$0	$1,635,139
New Linear Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00	
Estimated km		0		
Total $		$0		$0
			Total new	$1,689,271

PIFU Medium Series			
Local	**Dist**	**City / CW**	
0.00	2.06	0.00	
	0.21	0.00	
	$1,763,553	$0	$1,763,553
Local	**Dist**	**City / CW**	
0.00	0	0.00	
	0		
	$0		$0
		Total new	$1,822,196

8.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 15: HB West - anticipated implications of higher growth scenario in 2031

	Year	**2031**			**Likely Implications**
	Base pop	1,030			
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be an increase in the anticipated population in 2031 of 73 people. • **Recreation Parkland:** 0.02 ha more will be required. • **Sporting Parkland:** 0.15 ha more will be required. • **Linear Parkland:** 0 km more will be required. • **Total cost:** There will be an overall increased cost of $132,925.
	Predicted ha required	0.26	2.06	0.00	
	Existing park ha.	0.00	0.00	0.00	
	Surplus / deficit ha.	**-0.26**	**-2.06**	**0.00**	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

9. HERVEY BAY COASTAL

Includes the coastal towns of Burrum Heads, Toogum, Craignish, Dundowran Beach and Dundowran.

9.1 HB COASTAL GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 16: HB Coast - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	6,693			7,390			7,961			8,367			8,707		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	1.67	13.39	0.00	1.85	14.78	0.00	1.99	15.92	0.00	2.09	16.73	0.00	2.18	17.41	0.00
	Existing park ha.	7.03	5.60	0.00	7.03	5.60	0.00	7.03	5.60	0.00	7.03	5.60	0.00	7.03	5.60	0.00
	Surplus / deficit ha.	5.36	-7.79	0.00	5.18	-9.18	0.00	5.04	-10.32	0.00	4.94	-11.13	0.00	4.85	-11.81	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 5.36 ha. This figure decreases slightly in 2031to a surplus of + 4.85 ha. NB: During the tourist season, the population increases significantly and existing park facilities will be used well beyond a sustainable capacity.
2. **Sporting parkland**: In 2011 there is a deficit of - 7.79 ha. By 2031 this deficit will grow to - 11.81 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for foreshore walking trails are reserved and developed as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

9.2 HB COASTAL URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Continue to improve and enhance the multipurpose community sport and recreation facilities located at Toogoom, Burrum Heads and Dundowran to service surrounding communities ii). Require any new residential estates to make a parkland contribution as per DSS.
Recreational Parks	iii). Provide facilities and shade structures in existing local parks as demand dictates. iv). Continue to enhance the quality of existing facilities within foreshore parks and reserves at Toogoom, Burrum Heads, Craignish and Dundowran Beach
Sports Parks	v). Continue to enhance the quality of existing multi-sports facilities at Burrum Heads and Dundowran as demand dictates. vi). Establish a new multi-purpose sports facility to service the Toogoom community, possibly in the vicinity of the junction of Morris and O'Reagan Creek Road, near the waste water treatment facility.
Linear Parks	vii). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with the wider regional network.
City Parks	viii). Not relevant
Regional Parks	ix). Encourage and support the development of appropriate recreational facilities within national parks and forest reserves

9.3 HB COAST - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 06 HB Coast worksheet. Table 17 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 17: HB Coastal - anticipated 2031 new park requirements and costs

Small change PIFU medium series				PIFU Medium Series		
Year	2031			2031		
Base pop	8,707			9,377		
Park Function	**Recreation**	**Sport**	**Linear**	**Recreation**	**Sport**	**Linear**
Surplus / deficit x function	**+4.85**	**-11.81**	**0.00**	**+4.68**	**-13.15**	**0.00**
New Recreation Parks (Urban)						
Pk hierarchy	**Local**	**Dist**	**City / CW**	**Local**	**Dist**	**City / CW**
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00	0.00	0.00	0.00

Small change PIFU medium series					PIFU Medium Series			
Estimated # of parks	0.00	0.00	0.00		0.00	0.00	0.00	
Total $	$0	$0	$0	$0	$0	$0	$0	$0
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	11.81	0.00		0.00	13.15	0.00	
Estimated # of parks		1.18	0.00			1.32	0.00	
Total $		$10,110,464	$0	$10,110,464		$11,257,630	$0	$11,257,630
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	**$10,110,464**			**Total new**	**$11,257,630**

9.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 18: HB Coast - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	9,377			
	Park Type	Rec	Sp	Lin	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be an increase in the anticipated population in 2031 of 670 people. • **Recreation Parkland:** Existing recreational parkland will be used. • **Sporting Parkland:** 1.34 ha more will be required. • **Linear Parkland:** 0 km more will be required. • **Total cost:** There will be an overall increased cost of $1,147,165.
	Predicted ha required	2.34	18.75	0.00	
	Existing park ha.	7.03	5.60	0.00	
	Surplus / deficit ha.	**+4.68**	**-13.15**	**0.00**	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

10. HERVEY BAY HINTERLAND

Includes the rural towns of Howard and Torbanlea and hinterland areas including the Robinson Range, Lake Lenthall and Wongi National Park

10.1 HB HINTERLAND GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 19: HB Hinterland - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	3,981			4,590			5,143			5,734			6,394		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	1.00	7.96	0.00	1.15	9.18	0.00	1.29	10.29	0.00	1.43	11.47	0.00	1.60	12.79	0.00
	Existing park ha.	4.93	7.75	0.00	4.93	7.75	0.00	4.93	7.75	0.00	4.93	7.75	0.00	4.93	7.75	0.00
	Surplus / deficit ha.	3.93	-0.21	0.00	3.78	-1.43	0.00	3.64	-2.54	0.00	3.49	-3.72	0.00	3.33	-5.04	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 3.93 ha. This figure decreases slightly in 2031to a surplus of + 3.33 ha. NB: A large proportion of the sporting parkland is incorporated into the Torbanlea Recreation Reserve.
2. **Sporting parkland**: In 2011 there is a deficit of -0.21 ha. By 2031 this deficit will grow to -5.04 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for future trails are reserved and developed as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

10.2 HB HINTERLAND URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Continue to enhance the existing facilities in parks at Howard and Torbanlea in line with demand.
Recreational Parks	ii). Continue to enhance existing local parks particularly with shade structures. iii). Do not provide local parks in rural residential areas.
Sports Parks	iv). Continue to enhance existing multipurpose town parks and riverside parks. v). Reserve land for future multipurpose sports park in the vicinity of Howard and Embellish in line with demand.
Linear Parks	vi). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with the wider regional network.
City Parks	vii). Not relevant.
Regional Parks	viii). Encourage and support the development of appropriate recreational facilities and trails within national parks and forest reserves.

10.3 HB HINTERLAND - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 07 HB Hinter worksheet. Table 20 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 20: HB Hinterland - anticipated 2031 new park requirements and costs

Small change PIFU medium series				
Year	2031			
Base pop	6,394			
Park Function	**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**+4.85**	**-11.81**	**0.00**	
New Recreation Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00	
Estimated # of parks	0.00	0.00	0.00	
Total $	$0	$0	$0	$0

PIFU Medium Series				
2031				
5,357				
Recreation	**Sport**	**Linear**		
+4.68	**-13.15**	**0.00**		
Local	**Dist**	**City / CW**		
0.00	0.00	0.00		
0.00	0.00	0.00		
$0	$0	$0	$0	

Small change PIFU medium series				
New Sports Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	5.04	0.00	
Estimated # of parks		0.5	0.00	
Total $		$4,314,711	$0	$4,314,711
New Linear Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00	
Estimated km		0		
Total $		$0		$0
			Total new	**$4,314,711**

PIFU Medium Series			
Local	**Dist**	**City / CW**	
0.00	2.97	0.00	
	0.30	0.00	
	$2,542,598	$0	$2,542,598
Local	**Dist**	**City / CW**	
0.00	0	0.00	
	0		
	$0		$0
		Total new	**$2,542,598**

10.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 21: HB Hinterland - anticipated implications of higher growth scenario in 2031

	Year	**2031**			**Likely Implications**
	Base pop	5,357			
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be a decrease in the anticipated population in 2031 of 1,037 people. • **Recreation Parkland:** Existing recreational parkland will be used. • **Sporting Parkland:** 2.07 ha less will be required. • **Linear Parkland:** 0 km more will be required. • **Total cost:** There will be an overall decreased cost of $1,772,114
	Predicted ha required	1.34	10.71	0.00	
	Existing park ha.	4.93	7.75	0.00	
	Surplus / deficit ha.	3.59	-2.97	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

11. MARYBOROUGH COASTAL

Includes the Localities of Maaroom, Boonooroo, Poona and Tinnanbar.

11.1 MARYBOROUGH COASTAL GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 22: MB Coastal - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	958			998			1,031			1,073			1,116		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.24	1.92	0.00	0.25	2.00	0.00	0.26	2.06	0.00	0.27	2.15	0.00	0.28	2.23	0.00
	Existing park ha.	6.38	2.80	0.00	6.38	2.80	0.00	6.38	2.80	0.00	6.38	2.80	0.00	6.38	2.80	0.00
	Surplus / deficit ha.	+6.14	+0.88	0.00	+6.13	+0.80	0.00	+6.12	+0.73	0.00	+6.11	+0.65	0.00	+6.10	+0.56	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 6.14 ha. This figure decreases slightly in 2031to a surplus of + 6.10 ha. NB: During the tourist season, the population increases significantly and existing park facilities will be used well beyond a sustainable capacity.
2. **Sporting parkland**: In 2011 there is a surplus of +0.88 ha. By 2031 this surplus will drop to +0.56 ha.
3. **Linear parkland**: The coastal rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for foreshore walking trails are reserved and developed as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

11.2 MARYBOROUGH COASTAL URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Continue to improve and enhance the multipurpose recreation facilities located along the foreshore at Maaroom, Boonooroo, Poona and Tinnanbar. ii). Require any new residential estates to make a parkland contribution as per DSS.
Recreation Parks	iii). Provide facilities and shade structures in existing parks as demand dictates. iv). Continue to enhance the quality of existing facilities within foreshore parks and reserves at Maaroom, Boonooroo, Poona and Tinnanbar.
Sporting Parks	v). Reserve a central location for the future establishment of a multipurpose sporting facility, possibly in the vicinity of the turnoff to Poona from the Cooloola Road to service all coastal communities.
Linear Parks	vi). Establish foreshore walking trails where appropriate servicing each coastal community. vii). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with Maryborough and the wider regional network
City Parks	viii). Not relevant.
Regional Parks	ix). Encourage and support the development of appropriate recreational facilities and trails within national parks and forest reserves

11.3 MB COAST - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 08 MB coast worksheet. Table 23 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 23: MB Coast - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	1,116				1,030			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**+6.10**	**+0.56**	**0.00**		**+6.12**	**+0.74**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	
Estimated # of parks	0.00	0.00	0.00		0.00	0.00	0.00	

Small change PIFU medium series					PIFU Medium Series			
Total $	$0	$0	$0	$0	$0	$0	$0	$0
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Estimated # of parks		0.0	0.00				0.0	0.00
Total $		$0	$0	$0			$0	$0
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	**$0**			**Total new**	**$0**

11.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 24: MB Coast - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	1,030			
	Park Type	Rec	Sp	Lin	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be a decrease in the anticipated population in 2031 of 86 people. • **Recreation Parkland:** No additional recreational parkland will be required. • **Sporting Parkland:** No additional sporting parkland will be required. • **Linear Parkland:** No additional linear parkland will be required. • **Total cost:** Costs will not change.
	Predicted ha required	0.26	2.06	0.00	
	Existing park ha.	6.38	2.80	0.00	
	Surplus / deficit ha.	+6.12	+0.74	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

12. MARYBOROUGH URBAN SURROUNDS

Includes Maryborough West, Tinana South, Aldershot, Dundathu, Bidwill, Beaver Rock and Great Sandy Conservation Park.

12.1 MARYBOROUGH URBAN SURROUNDS GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 25: MB Urban Surrounds- gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	3,111			3,270			3,610			4,607			5,880		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.78	6.22	0.00	0.82	6.54	0.00	0.90	7.22	0.00	1.15	9.21	0.00	1.47	11.76	0.00
	Existing park ha.	13.67	44.93	0.00	13.67	44.93	0.00	13.67	44.93	0.00	13.67	44.93	0.00	13.67	44.93	0.00
	Surplus / deficit ha.	+12.89	+38.71	0.00	+12.85	+38.39	0.00	+12.76	+37.71	0.00	+12.52	+35.72	0.00	+12.20	+33.17	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 12.89 ha. This figure decreases slightly in 2031 to a surplus of + 12.20 ha. Many of the residential lots in this catchment are larger than normal, thus local recreational needs tend to be accommodated on private land. NB: Town and village residential areas should be treated as urban residential, particularly on the outskirts of Maryborough.
2. **Sporting parkland**: In 2011 there is a surplus of +38.71 ha. By 2031 this surplus will be reduced to +33.17 ha. NB: The amount of recreational and sporting parklands for this catchment is skewed by the amount of regional open space (52.75 ha) provided by the Maryborough Park (Showgrounds and Equestrian Park) and a better distribution of sporting facilities to service small towns and communities is required.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for walking trails particularly along the Mary River and the wider regional trail network are developed as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

12.2 MARYBOROUGH URBAN SURROUNDS URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Require any new residential estates to make a parkland contribution as per DSS. ii). Continue to improve and enhance the multipurpose recreation facilities at Aldershot, Bidwill and Dundathu
Recreational Parks	iii). Continue to enhance existing parks particularly with shade structures. iv). Do not provide local parks in rural residential areas.
Sports Parks	v). Continue to enhance existing multipurpose district (rural) parks. vi). Establish a multipurpose common in a central location to service the Tinana South community
Linear Parks	vii). Explore the feasibility of creating a multipurpose recreation corridor along road reserves and other public lands linking with the wider regional network and to the Maryborough urban trail network.
City Parks	viii). Not relevant
Regional Parks	ix). Encourage and support the development of appropriate recreational facilities within national parks and forest reserves

12.3 MB URBAN SURROUNDS- ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 09 MB Urban Surr worksheet. Table 26 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 26: MB Urban Surrounds - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	5,880				3,777			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**+6.10**	**+0.56**	**0.00**		**+6.12**	**+0.74**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	
Estimated # of parks	0.00	0.00	0.00		0.00	0.00	0.00	

Small change PIFU medium series					PIFU Medium Series			
Total $	$0	$0	$0	$0	$0	$0	$0	$0
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Estimated # of parks		0.0	0.00				0.0	0.00
Total $		$0	$0	$0			$0	$0
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	**$0**			**Total new**	**$0**

12.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 27: MB Urban Surrounds - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	3,777			
	Park Type	Rec	Sp	Lin	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	• **Population:** There will be a decrease in the anticipated population in 2031 of 2,103 people. • **Recreation Parkland:** No additional recreational parkland will be required. • **Sporting Parkland:** No additional sporting parkland will be required. • **Linear Parkland:** No additional linear parkland will be required. • **Total cost:** Costs will not change.
	Predicted ha required	0.94	7.55	0.00	
	Existing park ha.	13.67	44.93	0.00	
	Surplus / deficit ha.	+12.72	+37.38	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

13. MARYBOROUGH URBAN

Includes Maryborough City, St Helens, Granville, and Tinana.

13.1 MARYBOROUGH GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 28: MB - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	24,725			25,986			27,583			29,278			30,772		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Urban Benchmark	Ha / 1000	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50	1.60	1.50	1.50
	Predicted ha required	39.56	37.09	37.09	41.58	38.98	38.98	46.84	43.92	43.92	46.84	43.92	43.92	49.24	46.16	46.16
	Existing park ha.	44.60	27.75	0.00	44.60	27.75	0.00	44.60	27.75	0.00	44.60	27.75	0.00	44.60	27.75	0.00
	Surplus / deficit ha.	+5.04	-9.34	-37.09	+3.02	-11.23	-38.98	-2.24	-16.17	-43.92	-2.24	-16.17	-43.92	-4.63	-18.41	-46.16
	Legend	+ = Surplus		- = Deficit				Rec = Recreation; Sp = Sport; Lin = Linear								

Observations

1. There are considerable areas of vacant parkland which could be recruited for parkland without additional acquisition costs to Council.
2. **Recreation parkland**: In 2011, there is a surplus of + 5.04 ha. This figure becomes negative in 2021, with a deficit in 2031 of - 4.63 ha.
3. **Sporting parkland**: In 2011 there is a deficit of - 9.34 ha. By 2031 this deficit will grow to - 18.41 ha. (NB: There are a number of privately owned sports fields which are not included).
4. **Linear parkland**: In 2011 there is a deficit of - 37.09 ha. By 2031 this deficit will grow to – 46.16. (NB: Linear parkland has been poorly documented in the past and this figure is indicative only).
5. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

13.2 MARYBOROUGH URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Rationalise the use of existing, single purpose, sporting facilities. ii). Create additional linear parks and circuits linking existing recreational and sporting facilities. iii). Require any new residential estates to make a parkland contribution as per DSS. iv). Maintain and improve the quality of existing parks.
Recreational Parks	v). Continue to improve existing parks particularly with addition of shade structures and facilities as appropriate. vi). Require local parks in all new developments as per DSS
Sports Parks	vii). Rationalise the use of existing, single purpose, sporting facilities. viii). Do not establish additional sports facilities until all existing Council vacant land has been assessed.
Linear Parks	ix). Create "park streets"[*1] to connect the city centre and major parks with residential areas to provide safe pedestrian/cycle access and circuits north and south of the Mary River. x). Create a multi-purpose recreational corridor linking Maryborough, Oakhurst, West Maryborough industrial estate and Aldershot. xi). Establish a riverside pedestrian / cycle path linking Anzac Park with Queens Park
City Parks	xii). Continue to provide quality facilities in the city centre and Anzac Park.
Regional Parks	xiii). Continue to provide quality facilities along the river foreshore.

[*1] For an explanation of "parks streets" refer http://www.jwcs.info/ and click on Documents and select Park Streets.

13.3 MB URBAN - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 10 MB Urban worksheet. Table 29 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 29: MB Urban - anticipated 2031 new park requirements and costs

Small change PIFU medium series				
Year	2031			
Base pop	30,772			
Park Function	**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	-4.63	-18.41	-46.16	

PIFU Medium Series			
2031			
29,283			
Recreation	**Sport**	**Linear**	
-2.25	-16.17	-43.92	

Small change PIFU medium series					PIFU Medium Series			
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	2.32	1.62	0.69		1.13	0.79	0.34	
Estimated # of parks	2.32	0.41	0.12		1.13	0.20	0.06	
Total $	$194,460	$365,504	$208,859	$768,823	$94,500	$177,621	$101,498	$373,618
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	13.81	4.60		0.00	12.13	4.04	
Estimated # of parks		1.38	0.23			1.21	0.20	
Total $		$11,820,511	$3,940,170	$15,760,681		$10,382,274	$3,460,758	$13,843,032
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		46.16	0.00		0.00	43.92	0.00	
Estimated km		46.16				43.92		
Total $		$7,385,600		$7,385,600		$7,027,200		$7,027,200
			Total new	**$23,915,104**			**Total new**	**$21,243,850**

13.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 30: MB Urban - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	29,283			• **Population:** There will be a decrease in the anticipated population in 2031 of 1,489people. • **Recreation Parkland:** 2.38 ha less will be required. • **Sporting Parkland:** 2.24 ha less will be required. • **Linear Parkland:** 2.24km less will be required. • **Total cost:** There will be an overall saving of $2,671,254.
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	
	Predicted ha required	46.85	43.92	43.92	
	Existing park ha.	44.60	27.75	0.00	
	Surplus / deficit ha.	**-2.25**	**-16.17**	**-43.92**	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

14. MARYBOROUGH RURAL - SOUTH WEST

Includes Oakhurst, Yengarie, Aramara, North Aramara, Brooweena and Teebar.

14.1 MARYBOROUGH RURAL (SOUTH WEST) GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 31: MB Rural South West - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	2,111			2,388			2,650			2,969			3,278		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.53	4.22	0.00	0.60	4.78	0.00	0.66	5.30	0.00	0.74	5.94	0.00	0.82	6.56	0.00
	Existing park ha.	5.49	9.98	0.00	5.49	9.98	0.00	5.49	9.98	0.00	5.49	9.98	0.00	5.49	9.98	0.00
	Surplus / deficit ha.	+4.97	+5.76	0.00	+4.90	+5.20	0.00	+4.83	+4.68	0.00	+4.75	+4.04	0.00	+4.67	+3.42	0.00
	Legend	+ = Surplus		- = Deficit	Rec = Recreation; Sp = Sport; Lin = Linear											

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 4.97 ha. This figure decreases slightly in 2031 to a surplus of + 4.67 ha. Many of the residential lots in this catchment are larger than normal, thus local recreational needs tend to be accommodated on private land.
2. **Sporting parkland**: In 2011 there is a surplus of + 5.76 ha. By 2031 this surplus will be reduced to + 3.42 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed with links to the wider regional trail network.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

14.2 MARYBOROUGH RURAL (SOUTH WEST) URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Continue to enhance the existing town facilities in parks at Oakhurst, Yengarie, Aramara, North Aramara, Brooweena and Teebar in line with demand
Recreational Parks	ii). Continue to enhance existing park facilities particularly with shade structures where appropriate. iii). Do not provide local parks in rural residential areas.
Sports Parks	iv). Continue to enhance existing multipurpose town parks.
Linear Parks	v). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with the wider regional trail network. The possibility of incorporating the disused rail corridor as a component of the regional trail network should be investigated.
City Parks	vi). Not relevant
Regional Parks	vii). Encourage and support the development of appropriate recreational facilities within national parks and forest reserves

14.3 MB RURAL SOUTH WEST - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 11 MB Rural SW worksheet. Table 32 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 32: MB Rural SW - anticipated 2031 new park requirements and costs

Small change PIFU medium series				
Year	2031			
Base pop	3,278			
Park Function	**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**+6.10**	**+0.56**	**0.00**	
New Recreation Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00	
Estimated # of parks	0.00	0.00	0.00	
Total $	$0	$0	$0	$0

PIFU Medium Series				
2031				
3,202				
Recreation	**Sport**	**Linear**		
+6.12	**+0.74**	**0.00**		
Local	**Dist**	**City / CW**		
0.00	0.00	0.00		
0.00	0.00	0.00		
$0	$0	$0	$0	

Small change PIFU medium series					PIFU Medium Series			
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Estimated # of parks		0.0	0.00				0.0	0.00
Total $		$0	$0	$0			$0	$0
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	**$0**			**Total new**	**$0**

14.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 33: MB Rural SW - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	3,202			• **Population:** There will be a decrease in the anticipated population in 2031 of 76 people. • **Recreation Parkland:** No additional recreational parkland will be required. • **Sporting Parkland:** No additional sporting parkland will be required. • **Linear Parkland:** No additional linear parkland will be required. • **Total cost:** Costs will not change.
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	
	Predicted ha required	0.80	6.40	0.00	
	Existing park ha.	5.49	9.98	0.00	
	Surplus / deficit ha.	+4.69	+3.57	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

15. MARYBOROUGH RURAL – SOUTH

Includes Glenwood, Bauple, Tiaro and Gundiah localities.

15.1 MARYBOROUGH RURAL (SOUTH) GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 34: MB Rural South - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	3,496			3,964			4,406			4,937			5,531		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.87	6.99	0.00	0.99	7.93	0.00	1.10	8.81	0.00	1.23	9.87	0.00	1.38	11.06	0.00
	Existing park ha.	2.45	6.49	0.00	2.45	6.49	0.00	2.45	6.49	0.00	2.45	6.49	0.00	2.45	6.49	0.00
	Surplus / deficit ha.	+1.57	-0.50	0.00	+1.46	-1.44	0.00	+1.35	-2.32	0.00	+1.21	-3.38	0.00	+1.06	-4.57	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a surplus of + 1.57 ha. This figure decreases slightly in 2031to a surplus of + 1.06 ha.
2. **Sporting parkland**: In 2011 there is a deficit of -0.50 ha. By 2031 this deficit will grow to - 4.57 ha.
3. **Linear parkland**: The rural character of this catchment and the low population numbers would not support an off-road linear park network. However it would be wise to ensure a safe on-road cycle network is developed where feasible and corridors for future trails are reserved and developed in each town as demand dictates.
4. Some areas designated as environmental parklands could also serve a recreational function and portions of waterways could serve a linear park function if designed and managed appropriately.

15.2 MARYBOROUGH RURAL (SOUTH) URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Continue to enhance the existing town facilities in parks at Glenwood, Bauple, Tiaro and Gundiah in line with demand.
Recreational Parks	ii). Continue to enhance existing park facilities, particularly with shade structures over play facilities where appropriate. iii). Do not provide local parks in rural residential areas.
Sports Parks	iv). Continue to enhance existing multipurpose town parks. v). Reserve land for future multipurpose sports facility at a central location to service the catchment surrounding Tiaro.
Linear Parks	vi). Explore the feasibility of creating a multipurpose recreation corridor for pedestrians, cyclists and horses along road reserves and other public lands linking with the wider regional trail network.
City Parks	vii). Not relevant.
Regional Parks	viii). Encourage and support the development of appropriate recreational facilities and trails within national parks and forest reserves.

15.3 MB RURAL SOUTH - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 12 MB Rural South worksheet. Table 35 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 35: MB Rural South - anticipated 2031 new park requirements and costs

Small change PIFU medium series					PIFU Medium Series			
Year	2031				2031			
Base pop	5,531				5,531			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**1.06**	**-4.57**	**0.00**		**1.06**	**-4.57**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.00	0.00		0.00	0.00	0.00	
Estimated # of parks	0.00	0.00	0.00		0.00	0.00	0.00	

Small change PIFU medium series					PIFU Medium Series			
Total $	$0	$0	$0	$0	$0	$0	$0	$0
New Sports Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	4.57	0.00		0.00	4.57	0.00	
Estimated # of parks		0.46	0.00			0.46	0.0	
Total $		$3,912,347	$0	$3,912,347		$3,912,347	$0	$3,912,347
New Linear Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00		0.00	0	0.00	
Estimated km		0				0		
Total $		$0		$0		$0		$0
			Total new	**$3,912,347**			**Total new**	**$3,912,347**

15.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 36: MB Rural South - anticipated implications of higher growth scenario in 2031

	Year	2031			Likely Implications
	Base pop	5,531			• **Population:** There will be no change in the anticipated population in 2031 of 76 people. • **Recreation Parkland:** No additional recreational parkland will be required. • **Sporting Parkland:** No additional sporting parkland will be required. • **Linear Parkland:** No additional linear parkland will be required. • **Total cost:** Costs will not change.
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	
	Predicted ha required	1.38	11.06	0.00	
	Existing park ha.	2.45	6.49	0.00	
	Surplus / deficit ha.	+1.06	-4.57	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

16. FRASER ISLAND

16.1 FRASER ISLAND GAP ANALYSIS

Based on small change PIFU medium series population projections as at December 1, 2010

Table 37: Fraser Island - gap analysis

	Year	2011			2016			2021			2026			2031		
	Base pop	385			401			414			431			449		
	Park Type	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin	Rec	Sp	Lin
Rural Benchmark	Ha / 1000	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00	0.25	2.00	0.00
	Predicted ha required	0.10	0.77	0.00	0.10	0.80	0.00	0.10	0.83	0.00	0.11	0.86	0.00	0.11	0.90	0.00
	Existing park ha.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Surplus / deficit ha.	-0.10	-0.77	0.00	-0.10	-0.80	0.00	-0.10	-0.83	0.00	-0.11	-0.86	0.00	-0.11	-0.90	0.00
	Legend	+ = Surplus		- = Deficit			Rec = Recreation; Sp = Sport; Lin = Linear									

Observations

1. **Recreation parkland**: In 2011, there is a deficit of -0.10 ha. By 2031 this deficit will increase slightly to – 0.11 ha.
2. **Sporting parkland**: In 2011 there is a deficit of -0.77 ha. By 2031 this deficit will increase slightly to -0.90 ha.
3. **Linear parkland**: The natural character of this catchment and the low population numbers would not support an off-road linear park network on Council lands. .

16.2 FRASER ISLAND URBAN OPEN SPACE STRATEGIES

Based on the above gap analysis and site observations, the following actions are proposed for Council consideration:

	Proposed Actions
Overall Catchment	i). Liaise with DERM and Fraser National Park management regarding the location of a community common at a central location (possibly Central Station) to serve the recreational and sporting needs of residents and Island visitors.
Recreational Parks	ii). The vast majority of the Island is a National Park and world heritage area.
Sports Parks	iii). Reserve land for a multi-purpose community common at a central location.
Linear Parks	iv). Support the establishment of an Island wide trail network.
City Parks	v). Not relevant.
Regional Parks	vi). The vast majority of the Island is a National Park and world heritage area.

16.3 FRASER ISLAND - ESTIMATED COST TO PROVIDE NEW UOS REQUIREMENTS

The area of new urban open space provision resulting from the anticipated population increase to 2031 within this catchment was obtained from Table 1 in Section 2.1 (i.e. any deficits for recreation, sport or linear parks after the area of existing parkland were deducted). Using the percentage distribution for each park type and hierarchy recommended in Table 7, Section 2.3 of the FCRC Urban Open Space: Desired Service Standards (Version 2b as at December 8, 2010), the number, type and hierarchy of each new park was calculated. Unit costs were then assigned based on the cost estimates detailed in Appendix 1 and as calculated in the Excel file "*Combined gap analysis V2b 101206.xlsx*" in the 13 Fraser Island worksheet. Table 38 summarises the anticipated 2031 requirements for new parks by type and hierarchy, together with the estimated cost for embellishments for both population scenarios.

Table 38: Fraser Island - anticipated 2031 new park requirements and costs

Small change PIFU medium series					**PIFU Medium Series**			
Year	2031				2031			
Base pop	449				396			
Park Function	**Recreation**	**Sport**	**Linear**		**Recreation**	**Sport**	**Linear**	
Surplus / deficit x function	**-0.11**	**-0.90**	**0.00**		**-0.10**	**-0.79**	**0.00**	
New Recreation Parks (Urban)								
Pk hierarchy	**Local**	**Dist**	**City / CW**		**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.11	0.00		0.00	0.10	0.00	
Estimated # of parks	0.00	0.03	0.00		0.00	0.03	0.00	
Total $	$0	$24,811	$0	$24,811	$0	$22,555	$0	$22,555

Small change PIFU medium series				
New Sports Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)	0.00	0.9	0.00	
Estimated # of parks		0.09	0.00	
Total $		$770,484	$0	$770,484
New Linear Parks (Urban)				
Pk hierarchy	**Local**	**Dist**	**City / CW**	
Predicted area allocation x hierarchy (ha)		0	0.00	
Estimated km		0		
Total $		$0		$0
			Total new	**$795,295**

PIFU Medium Series			
Local	**Dist**	**City / CW**	
0.00	0.79	0.00	
	0.08	0.0	
	$676,314	$0	$676,314
Local	**Dist**	**City / CW**	
0.00	0	0.00	
	0		
	$0		$0
		Total new	**$698,869**

16.4 LIKELY IMPLICATIONS OF A HIGHER GROWTH SCENARIO

Based on PIFU medium series population projections as at December 1, 2010.

Table 39: Fraser Island - anticipated implications of higher growth scenario in 2031

	Year	**2031**			**Likely Implications**
	Base pop	396			• **Population:** There will be a slight decrease in the anticipated population in 2031 of 53 people. • **Recreation Parkland:** 0.01 ha less will be required. • **Sporting Parkland:** 0.11 ha less will be required. • **Linear Parkland:** No change. • **Total cost:** There will be an overall saving of $96,426.
	Park Type	**Rec**	**Sp**	**Lin**	
Rural Benchmark	**Ha / 1000**	**0.25**	**2.00**	**0.00**	
	Predicted ha required	0.10	0.79	0.00	
	Existing park ha.	0.00	0.00	0.00	
	Surplus / deficit ha.	-0.10	-0.79	0.00	
	Legend	+ = Surplus	- = Deficit		Rec = Recreation; Sp = Sport; Lin = Linear

17. TOTAL ORDER OF COST ESTIMATES FOR NEW UOS PROVISION TO 2031.

17.1 TOTAL COST FOR NEW UOS X CATCHMENT AND SCENARIO

The information presented in Table 40 has been extracted from the analysis of each catchment as presented in the preceding chapters.

Table 40: Total order of cost estimates to provide new UOS by 2031

Catchment / Sub-catchment	Small change PIFU medium series	PIFU medium series	Implications of high-growth scenario (additional +$, reductions -$)
	Order of cost estimate to provide new UOS	Order of cost estimate to provide new UOS	
1) Hervey Bay Urban - Pialba	$118,446,786	$103,866,295	-$14,580,491
2) Hervey Bay Urban - Urangan	$29,481,826	$45,291,595	+$15,809,769
3) Hervey Bay – Surrounds East	$4,685,697	$5,719,726	+$1,034,029
4) Hervey Bay - Surrounds South	$1,742,892	$2,113,728	+$370,837
5) Hervey Bay - Surrounds West	$1,689,271	$1,822,196	+$132,925
6) Hervey Bay - Coast	$10,110,464	$11,257,630	+$1,147,165
7) Hervey Bay - Hinterland	$4,314,711	$2,542,598	-$1,772,114
8) Maryborough - Coast	$0	$0	$0
9) Maryborough - Urban Surrounds	$0	$0	$0
10) Maryborough Urban	$23,915,104	$21,243,850	-$2,671,254
11) Maryborough Rural South-West	$0	$0	$0
12) Maryborough Rural South	$3,912,347	$3,912,347	$0
13) Fraser Island	$795,295	$698,869	-$96,426
Totals	**$199,094,393.00**	**$198,468,834.00**	**-$625,559**

From Table 40 it can be seen that the likely cost implication of adopting the high cost scenario in regards to urban open space is a reduction in cost of $625,559.

18. APPENDIX 1: INDICATIVE PARK INFRASTRUCTURE CHARGES

The order of cost estimates for facilities proposed for each park type are shown in Table 1. The costs were based on rates from the Rawlinson's Australian Construction Handbook (2009) and Landscape Queensland Costing Guide (edition 6). These cost estimates are based on the following assumptions:

- Costs are preliminary only and subject to detailed scoping, analysis and site investigation;
- Estimates include contingency sum of 20%;
- Cost estimates exclude GST;
- No allowance has been made for the provision of trunk services to each site, nor for the upgrade of services where current infrastructure is inadequate (e.g. water, electricity, sewer or roads);
- Sport lighting is to training standard only;
- An allowance has been made for minimal landscaping only;
- No allowance has been made for existing latent site conditions, connection to services, or for remoteness from Brisbane suppliers.

Table 41: Order of cost estimates to provide a standard park as described below (as at 01/04/10)

Note: Full item costs are contained in Excel spreadsheet "FCRC Indicative Park Infrastructure Charges V2a 101208"

Park Type / Facility	Items included	Order of Cost
Local Recreation Park Standard Unit 1 ha Average population serviced – 1,000	Sign x 1; Bollards x 200; Landscape rehabilitation 100m^2; Seating x 2; Shelter / shade structure x 1; Play facility (2 play items) x 1; Tap / bubbler x 1.	$84,000
District Recreation Park Standard unit 10ha Average population serviced – 10,000	Roads internal 300 m; Signs x 2; Parking bays x 50; Bollards x 1000; Paths - walking concrete 750mm width x 500m; Paths - cycling concrete 2000mm width x 1200m; Landscape rehabilitation x 500m^2; Security lighting x 5; Toilet 25m^2 x 1; Seating x 10; Shelter / shade structure x 2; Play facility (5 play items) x 1; Tap / bubbler x 4; BBQ (electric / gas) x 4; Rubbish bins x 4; Fitness stations x 8; Skate bowl (intermediate level in concrete) x 1; BMX dirt jump circuit x 1; Half basket ball court x 1	$902,200
City / Council Wide Recreation Park Standard unit 20ha Average population serviced – 50,000+	Assume 2 x District Recreation Park	$1,804,400
Industrial Parklands Standard unit 0.25 ha Average population serviced – 1,000 workers	Signs x 2; Parking bay x 10; Bollards x100; Paths - walking 750mm width x 50m; Landscape rehabilitation 100m^2; Night lighting x 2; Toilets 25m^2 x 1; Seating x 2; Shelter / shade structure x 1; Tap / bubbler x 1; BBQ facilities (electric / gas) x 1; Rubbish bin x1	$138,200
Linear Park Standard unit 1 km Average population serviced – 1,000	Corridor 10m wide containing 2000mm pedestrian / cycle path	$160,000 per km
District Sports Park Standard unit 10 ha	Roads (internal) / 500m; Signs x 6; Parking bays x 200; Bollards x 1000; Landscape rehabilitation 1000m^2; Security lighting x 6; Lighting AFL oval x 1; Lighting - hockey/rugby/soccer x 2; Lighting tennis court x 2; Lighting netball courts x 4; Toilets 25m^2 x 2; Seating x 12; Shelter / shade structure x 2; Tap / bubbler x 10; Rubbish bins x 12; Club facility 2000m^2 x 1; Change rooms 100m^2 x 4;	$8,560,935

Park Type / Facility	Items included	Order of Cost
Average population serviced – 10,000	AFL & cricket senior oval 3.2 ha x 1; AFL & Cricket junior oval 1.7 ha x 1; RL / RU / hockey, /soccer senior oval 0.9 ha x 1; RL / RU /Hockey, soccer junior 0.6 ha x 1; Netball courts x 8 0.7 ha; Irrigation 6ha; Tennis courts artificial x 4; Multiple purpose community hall 500 m^2 x 1.	
City / Council Wide Sports Park Standard unit 20ha Average population serviced – 50,000+	Assume equivalent to 2 x District Sports Park	$17,121,870
Discretionary items for larger population centres. Average population serviced – 50,000	Indoor sports centre (2 basketball courts) 6000 m^2	$7 million
	Indoor sports centre (4 basketball courts) 12,000 m^2	$13 million
	Equestrian facility (medium size)	$7-10 million
	Aquatic leisure centre (small)	$6-8 million