

**Redland**  
CITY COUNCIL

# **AGENDA**

## **GENERAL MEETING**

**Wednesday, 20 January 2021  
commencing at 9.30am**

**The Council Chambers  
91 - 93 Bloomfield Street  
CLEVELAND QLD**

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## 1 DECLARATION OF OPENING

On establishing there is a quorum, the Mayor will declare the meeting open.

### Recognition of the Traditional Owners

Council acknowledges the Quandamooka people who are the traditional custodians of the land on which we meet. Council also pays respect to their elders, past and present, and extends that respect to other indigenous Australians who are present.

## 2 RECORD OF ATTENDANCE AND LEAVE OF ABSENCE

Motion is required to approve leave of absence for any Councillor absent from today's meeting.

## 3 DEVOTIONAL SEGMENT

Member of the Ministers' Fellowship will lead Council in a brief devotional segment.

## 4 RECOGNITION OF ACHIEVEMENT

Mayor to present any recognition of achievement items.

## 5 RECEIPT AND CONFIRMATION OF MINUTES

General Meeting - 16 December 2020

## 6 DECLARATION OF PRESCRIBED CONFLICT OF INTERESTS AND DECLARABLE CONFLICT OF INTERESTS

Councillors are reminded of their responsibilities in relation to a Councillor's Prescribed Conflict of Interest and Declarable Conflict of Interest at a meeting. For full details see Chapter 5B of the *Local Government Act 2009*.

In summary:

### **Obligation of Councillor with Prescribed Conflict of Interest**

Section 150EL of the *Local Government Act 2009* requires Councillors to declare a Prescribed Conflict of Interest in a matter as soon as they become aware of their interest in the matter, either:

- (1) *at a local government meeting, or*
- (2) *as soon as practicable, by giving the Chief Executive Officer written notice of the prescribed conflict of interest.*
- (3) The declaration must include the following particulars:
  - (a) *For a gift, loan or contract – the value of the gift, loan or contract;*
  - (b) *For an application for which a submission has been made – the matters the subject of the application and submission;*
  - (c) *The name of any entity, other than the Councillor, that has an interest in the matter;*
  - (d) *The nature of the Councillor's relationship with the entity mentioned in (c) above;*
  - (e) *Details of the Councillor's, and any other entity's, interest in the matter.*



**Dealing with Prescribed Conflict of Interest at a Meeting**

Pursuant to Section 150EM of the *Local Government Act 2009*, if a Councillor declares a Prescribed Conflict of Interest in a matter, ***the Councillor must leave the place at which the meeting is being held, including any area set aside for the public, and stay away from the place while the matter is discussed and voted on.***

**Obligation of Councillor with Declarable Conflict of Interest**

Section 150EQ of the *Local Government Act 2009* requires Councillors to declare a Declarable Conflict of Interest in a matter as soon as they become aware of their interest in the matter, either:

- (1) *at a local government meeting, or*
- (2) *as soon as practicable, by giving the Chief Executive Officer written notice of the declarable conflict of interest.*
- (3) The declaration must include the following particulars:
  - (a) *The nature of the declarable conflict of interest;*
  - (b) *If the declarable conflict of interest arises because of the councillor's relationship with a related party:*
    - (i) *The name of the related party; and*
    - (ii) *The nature of the relationship of the related party to the Councillor; and*
    - (iii) *The nature of the related party's interests in the matter;*
  - (c) *If the Councillor's or related party's personal interests arise because of the receipt of a gift or loan from another person:*
    - (i) *The name of the other person; and*
    - (ii) *The nature of the relationship of the other person to the Councillor or related party; and*
    - (iii) *The nature of the other person's interests in the matter; and*
    - (iv) *The value of the gift or loan, and the date the gift was given or loan was made.*

**Procedure if Councillor has Declarable Conflict of Interest**

Pursuant to Section 150ES of the *Local Government Act 2009*, *eligible Councillors at the meeting must, by resolution, decide whether the Councillor who has declared the interest:*

- (1) *May participate in a decision about the matter at the meeting, including by voting on the matter; or*
- (2) *Must leave the place at which the meeting is being held, including any area set aside for the public, and stay away from the place while the eligible Councillors discuss and vote on the matter.*

**Duty to report another Councillor's Prescribed Conflict of Interest or Declarable Conflict of Interest**

Pursuant to section 150EW of the *Local Government Act 2009*, a Councillor who reasonably believes or reasonably suspects another Councillor has a Prescribed Conflict of Interest or a Declarable Conflict of Interest in a matter must:

- (1) *Immediately inform the person who is presiding at the meeting about the belief or suspicion; or*

*(2) As soon as practicable, inform the Chief Executive Officer of the belief of suspicion.*

*The Councillor must also inform the person presiding, or the Chief Executive Officer, of the facts and circumstances forming the basis of the belief or suspicion.*

### **Record of Prescribed and Declarable Conflicts of Interest**

Where a Councillor informs the meeting of a Prescribed or Declarable Conflict of Interest, section 150FA of the *Local Government Act 2009* requires the following information to be recorded in the minutes of the meeting:

- (1) The name of the Councillor who may have a prescribed or declarable conflict of interest in the matter;
- (2) The particulars of the prescribed or declarable conflict of interest;
- (3) If another Councillor informs the meeting of a belief of suspicion, about another Councillor's Conflict of Interest:
  - (a) The action the Councillor takes;
  - (b) Any decision by eligible Councillors; and
  - (c) The name of each eligible Councillor who voted in relation to whether the Councillor has a declarable conflict of Interest, and how each eligible Councillor voted.
- (4) Whether the Councillor participated in deciding the matter, or was present for deciding the matter;
- (5) For a matter to which the Prescribed or Declarable Conflict of Interest relates:
  - (a) The name of the Councillor who has declared the conflict of interest;*
  - (b) The nature of the personal interest, as described by the Councillor;*
  - (c) The decision made;*
  - (d) Whether the Councillor participated in the meeting under an approval by the Minister;*
  - (e) If the Councillor voted on the matter, how they voted; and*
  - (f) How the majority of Councillors voted on the matter.*
- (6) If the Councillor has a Declarable Conflict of Interest, in addition to the information above, the following information must be recorded in the minutes:
  - (a) The decision and reasons for the decision as to whether the Councillor with the Declarable Conflict of Interest may participate in the decision, or must not participate in the decision; and
  - (b) The name of each eligible Councillor who voted on the decision, and how the eligible Councillor voted.

## **7 MATTERS OUTSTANDING FROM PREVIOUS COUNCIL MEETINGS**

### **7.1 INVESTIGATIONS TO POTENTIALLY ACQUIRE ADDITIONAL LAND FOR SPORT AND RECREATION PURPOSES**

At the General Meeting 18 December 2019 (Item 19.3 refers), Council resolved as follows:

*That the petition be received and referred to the Chief Executive Officer for consideration and a report to the local government.*

A report will be brought to a future meeting of Council.

### **7.2 SOUTHERN REDLAND BAY EXPANSION AREA (SRBEA) - CONFIRMING THE PREFERRED APPROACH FOR PLANNING INVESTIGATIONS**

At the General Meeting 2 September 2020, (Item 14.3 refers), Council resolved as follows:

*That Council resolves that this item lie on the table and be brought back to a future General Meeting of Council.*

This report will be removed from the table at a future meeting of Council.

### **7.3 NOTICE OF MOTION - MAJOR AMENDMENT TO THE CITY PLAN - ENVIRONMENTAL CORRIDORS**

At the General Meeting 4 November 2020 (Item 17.1 refers), Council resolved as follows:

*That Council resolves as follows:*

- 1. To undertake an urgent review regarding options to provide an enhanced level of statutory land use planning protection to environmental corridors within the Urban Footprint as identified in the Wildlife Connections Plan 2018-2028.*
- 2. To request officers undertake the following:*
  - a) Prepare a report to Council outlining the findings of the review, as well as recommended changes to City Plan by the end of February 2021.*
  - b) Prepare a major amendment pursuant to Part 4 of the Minister's Guideline's and Rules under the Planning Act 2016, if required, incorporating the proposed changes to City Plan as supported by Council by the end of May 2021.*
  - c) Consult with each divisional councillor regarding changes to City Plan that may be recommended.*

A report will be brought to a future meeting of Council.

#### **7.4 OPPORTUNITIES FOR SHORT STAY FACILITIES FOR SELF-CONTAINED RECREATIONAL VEHICLES AND CARAVANS ON REDLANDS COAST**

At the General Meeting 18 November 2020 (Item 15.2 refers), Council resolved as follows:

*That Council resolves as follows:*

1. *To note the contents of the report including:*
  - a) *The assessment criteria used to determine suitable sites at Attachment 3 – Essential and Desirable Criteria.*
  - b) *The assessment of all identified sites at Attachment 4 – Site Suitability Assessment.*
  - c) *The preferred sites at Attachment 5 – Preferred Sites.*
2. *That a report be brought back to Council with further details including the preferred operational model and indicative costs of minor infrastructure for the preferred sites.*
3. *To endorse the undertaking of an economic needs assessment for short stay, non-commercial camping of self-contained RVs and caravans in Redlands Coast within four (4) months, subject to budget approval.*
4. *To communicate the current opportunities and limitations for not-for-profit and community based organisations to provide for short stay basic camping ground options in Redlands Coast for self-contained RVs and caravans.*

A report will be brought to a future meeting of Council.

#### **7.5 REDLANDS ECONOMIC DEVELOPMENT ADVISORY BOARD UPDATE**

At the General Meeting 2 December 2020 (Item 14.4 refers), Council resolved as follows:

*That Council resolves as follows:*

1. *To note this report.*
2. *To note the Redlands Economic Development Advisory Board Annual Report 2019-20 (Attachment 1).*
3. *To note that officers will undertake a review of the Redlands Economic Development Advisory Board and provide a further report to Council.*

A report will be brought to a future meeting of Council.

## **7.6 NOTICE OF MOTION - REQUEST AMENDMENTS TO LOCAL LAW 2 (ANIMAL MANAGEMENT) 2015, SUBORDINATE LOCAL LAW 2 (ANIMAL MANAGEMENT) 2015 AND SUBORDINATE LOCAL LAW 1.5 (KEEPING OF ANIMALS) 2015**

At the General Meeting 2 December 2020 (Item 17.1 refers), Council resolved as follows:

*That Council resolves as follows:*

1. *To request officers prepare a report to Council regarding the existing prohibition on the number of dogs that can be kept on a property. The report will outline the options available to change the number of dogs allowable on a property, to include:*

*Option 1 – Activity based assessment:*

- a) Benchmarking with other Councils will be undertaken.*
- b) Flexibility on number of dogs for specific activities i.e. Show dogs and foster providers.*

*Option 2 – Number of dogs permitted based on property size:*

- a) Benchmarking with other Councils will be undertaken.*
- b) Property size and zoning considerations.*

*Option 3 – existing criteria modifications*

*The current local laws provide for a three dog permit, the next available option is a kennel permit. Consideration to be given to additional steps in between based on assessment criteria.*

*The following Local Laws will require amendments to accommodate a change in the number of dogs permitted on a property.*

- a) Local Law No. 2 (Animal Management) 2015.*
- b) Subordinate Local Law No. 2 (Animal Management) 2015*
- c) Subordinate Local Law No 1.5 (Keeping of Animals) 2015*

2. *To request officers to include in the report options available for cat registrations:*

*Option 1 – Reduction in registration fees for compliant owners*

*Owners who are able to demonstrate responsible cat ownership:*

- a) Cat enclosures*
- b) Fence rollers*
- c) Other deterrents*

*Option 2 – Stepped increase in registration fees for non-compliant owners*

*Potential to increase the registration fees where:*

- a) Complaints have been received about the cat i.e. straying*
- b) Process to subsequently reduce the fee when compliance is achieved.*

3. *That the report be brought to a General Meeting of Council prior to the close of Quarter One, 2021.*

A report will be brought to a future meeting of Council.

## **7.7 EXPRESSIONS OF INTEREST CAMPAIGN - REDLANDS COAST TOURIST AND COMMUNITY DESTINATION, MACARTHUR ST, ALEXANDRA HILLS**

At the General Meeting 2 December 2020 (Item 19.2 refers), Council resolved as follows:

*That Council resolves as follows:*

- 1. To note the outcomes of the Expressions of Interest Campaign for a Tourist Park and associated community uses that has now finished, and that no tourism-related proposals were received.*
- 2. To hold discussions with proponents of non-tourism related purposes to understand how other proposals may fit into the planning for development of the land that align with Council's policies and plans.*
- 3. To workshop with Councillors, the outcome of these discussions.*
- 4. To provide a further report to Council in regards to the site upon completion of item 3 above.*
- 5. That this report and attachments remain confidential to ensure proposed commercial arrangements and details pertaining to individuals are kept private, subject to maintaining the confidentiality of legally privileged and commercial in confidence information.*

A report will be brought to a future meeting of Council.

## **8 MAYORAL MINUTE**

In accordance with s.6.9 of Council Meeting Standing Orders, the Mayor may put to the meeting a written motion called a 'Mayoral Minute', on any matter. Such motion may be put to the meeting without being seconded, may be put at that stage in the meeting considered appropriate by the Mayor and once passed becomes a resolution of Council.

## **9 PUBLIC PARTICIPATION**

There will be no public participation as this meeting is closed to the public, as a result of COVID-19 Pandemic social restrictions and Regulation changes.

## **10 PETITIONS AND PRESENTATIONS**

### **10.1 PETITION CR MCKENZIE – RESIDENTS REQUESTING AN INVESTIGATION INTO THE COVENANT EFFECTING BOUNDARY LOTS IN KINROSS ESTATE.**

IN ACCORDANCE WITH S.6.11 OF GOV-017-SD COUNCIL MEETING STANDING ORDERS, CR ROWANNE MCKENZIE WILL PRESENT A PETITION AND MOTION AS FOLLOWS:

**THAT THE PETITION IS OF AN OPERATIONAL NATURE AND BE RECEIVED AND REFERRED TO THE CHIEF EXECUTIVE OFFICER FOR CONSIDERATION.**

## **11 MOTION TO ALTER THE ORDER OF BUSINESS**

The order of business may be altered for a particular meeting where the Councillors at that meeting pass a motion to that effect. Any motion to alter the order of business may be moved without notice.

## **12 REPORTS FROM THE OFFICE OF THE CEO**

Nil

## **13      REPORTS FROM ORGANISATIONAL SERVICES**

### **13.1      DECEMBER 2020 MONTHLY FINANCIAL REPORT**

#### **Objective Reference:**

**Authorising Officer:**    Deborah Corbett-Hall, Chief Financial Officer

**Responsible Officer:**   Deborah Corbett-Hall, Chief Financial Officer

**Report Author:**         Udaya Panambala Arachchilage, Corporate Financial Reporting Manager

**Attachments:**         1.    December 2020 Monthly Financial Report [↓](#)

#### **PURPOSE**

To note the year to date financial results as at 31 December 2020.

#### **BACKGROUND**

Council adopts an annual budget and then reports on performance against the budget on a monthly basis. This is not only a legislative requirement but enables the organisation to periodically review its financial performance and position and respond to changes in community requirements, market forces or other outside influences.

#### **ISSUES**

##### ***Capital carryover budget 2019-20***

Council adopted a carryover budget on 19 August 2020 to accommodate capital works straddling two financial years. The attached monthly financial report for December includes the carryover budget adopted by Council.

##### ***2020-21 Budget review***

Council officers are currently compiling submissions for a budget review. The monthly analysis will be consolidated to update Council's budget for the 2020-21 financial year. Officers are planning to table a revised budget for Council's consideration in February 2021.

#### **STRATEGIC IMPLICATIONS**

Council has either achieved or favourably exceeded the following key financial stability and sustainability ratios as at the end of December 2020.

- Operating surplus ratio
- Net financial liabilities
- Level of dependence on general rate revenue
- Ability to pay our bills – current ratio
- Ability to repay our debt – debt servicing ratio
- Cash balance
- Cash balances – cash capacity in months
- Longer term financial stability – debt to asset ratio
- Operating performance
- Interest coverage ratio

The asset sustainability ratio did not meet the target at the end of December 2020 and continues to be a stretch target for Council with renewal spends of \$10.81M and depreciation expense of \$28.24M year to date on infrastructure assets. This ratio is an indication of how Council currently maintains, replaces and renews its existing infrastructure assets as they reach the end of their useful lives. Capital spend on non-renewal projects increases the asset base and therefore increases depreciation expense, resulting in a lower asset sustainability ratio.

Council's Capital Portfolio Prioritisation Administrative Directive demonstrates its commitment to maintaining existing infrastructure and the adoption of a renewal strategy for its existing assets ahead of 'upgrade' and/or 'new' works.

### **Legislative Requirements**

The December 2020 financial reports are presented in accordance with the legislative requirement of section 204(2) of the *Local Government Regulation 2012*, requiring the Chief Executive Officer to present the financial report to a monthly Council meeting.

### **Risk Management**

The December 2020 financial reports have been noted by the Executive Leadership Team and relevant officers who can provide further clarification and advice around actual to budget variances.

### **Financial**

There is no direct financial impact to Council as a result of this report; however it provides an indication of financial outcomes at the end of December 2020.

### **People**

Nil impact expected as the purpose of the attached report is to provide financial information to Council based upon actual versus budgeted financial activity.

### **Environmental**

Nil impact expected as the purpose of the attached report is to provide financial information to Council based upon actual versus budgeted financial activity.

### **Social**

Nil impact expected as the purpose of the attached report is to provide financial information to Council based upon actual versus budgeted financial activity.

### **Human Rights**

There are no human rights implications for this report as the purpose of the attached report is to provide financial information to Council based upon actual versus budgeted financial activity.

### **Alignment with Council's Policy and Plans**

This report has a relationship with the following items of Council's 2018-2023 Corporate Plan:

#### **8. Inclusive and ethical governance**

Deep engagement, quality leadership at all levels, transparent and accountable democratic processes and a spirit of partnership between the community and Council will enrich residents' participation in local decision-making to achieve the community's Redlands 2030 vision and goals.



- 8.2 Council produces and delivers against sustainable financial forecasts as a result of best practice Capital and Asset Management Plans that guide project planning and service delivery across the city.

**CONSULTATION**

Consulted	Date	Comment
Council departmental officers	Year to date December 2020	Consulted on financial results and outcomes
Financial Services Group officers	Year to date December 2020	Consulted on financial results and outcomes
Executive Leadership Team and Senior Leadership Team	Year to date December 2020	Recipients of variance analysis between actual and budget. Consulted as required

**OPTIONS****Option One**

That Council resolves to note the financial position, results and ratios for December 2020 as presented in the attached Monthly Financial Report.

**Option Two**

That Council resolves to request additional information.

**OFFICER'S RECOMMENDATION**

**That Council resolves to note the financial position, results and ratios for December 2020 as presented in the attached Monthly Financial Report.**



# Monthly Financial Report

## December 2020



## Monthly Financial Report

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## 1. EXECUTIVE SUMMARY

This monthly report illustrates the financial performance and position of Redland City Council compared to its adopted budget at an organisational level for the period ended 31 December 2020. The year to date and annual revised budget referred to in this report incorporates the changes from budget capital carryovers adopted by Council on 19 August 2020.

## Key Financial Highlights and Overview

Key Financial Results (\$000)	Annual Revised Budget	YTD Revised Budget	YTD Actual	YTD Variance	YTD Variance %	Status Favourable ✓ Unfavourable ✗
Operating Surplus / (Deficit)	(1,473)	(180)	<b>4,693</b>	4,873	2707%	✓
Recurrent Revenue	304,795	150,574	<b>149,613</b>	(961)	-1%	✗
Recurrent Expenditure	306,268	150,754	<b>144,920</b>	(5,834)	-4%	✓
Capital Works Expenditure	91,150	31,297	<b>21,048</b>	(10,249)	-33%	✓
Closing Cash & Cash Equivalents	171,713	177,548	<b>181,356</b>	3,808	2%	✓

Council reported a year to date operating surplus of \$4.69M which is favourable to budget by \$4.87M due to less than budget recurrent expenditure. The favourable variance in recurrent expenditure is mainly due to timing of contractor cost expenditure. Of note, interest income is lower than budget due to lower than expected interest rates on investments.

Capital grants, subsidies and contributions are below budget due to timing of developer cash contributions.

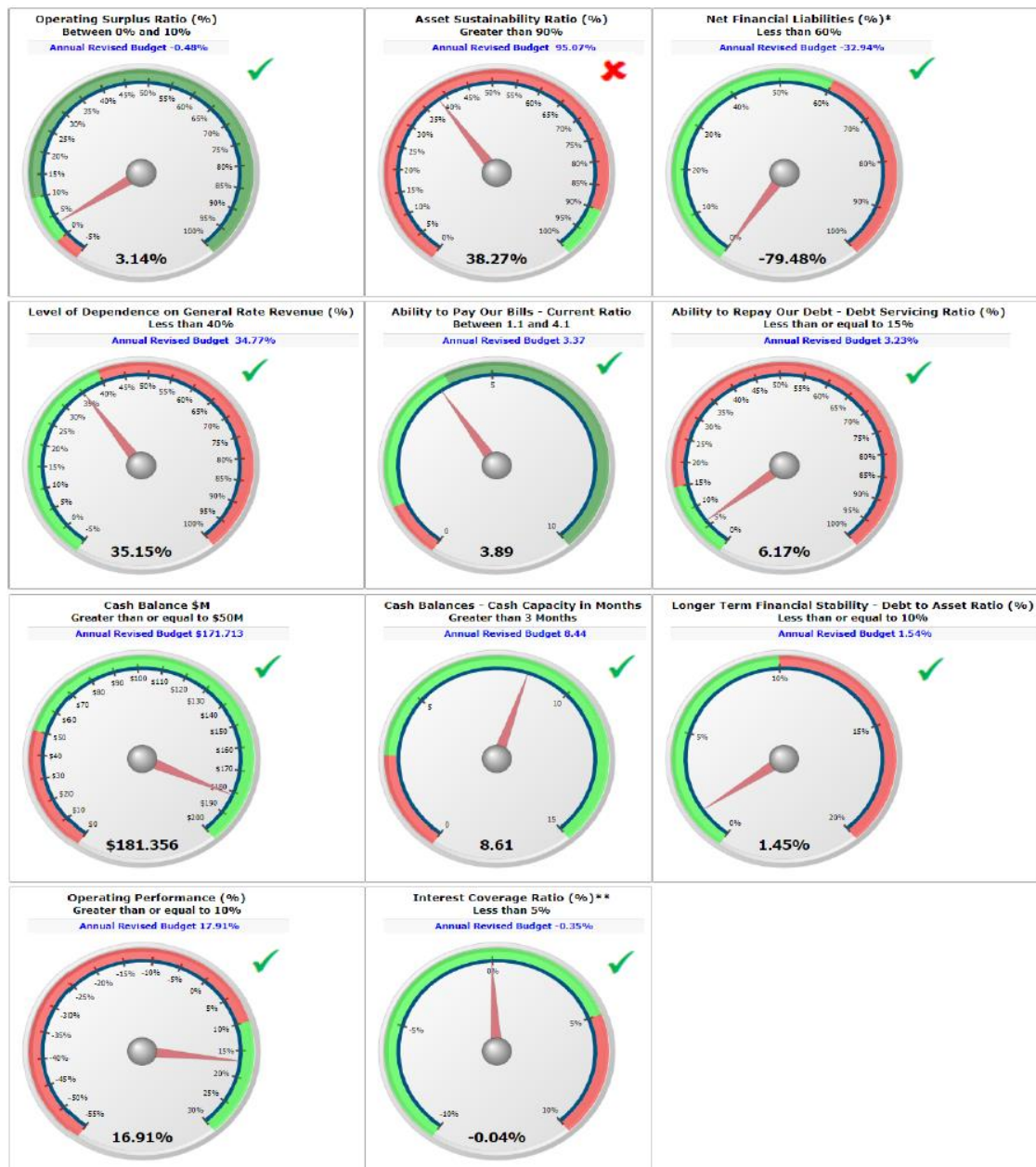
Council's capital works expenditure is below budget by \$10.25M due to timing of works for a number of infrastructure projects.

Constrained cash reserves represent 56% of the cash balance.

## Monthly Financial Report

## 2. KEY PERFORMANCE INDICATORS

■ Target met 
 ■ Target exceeded 
 ■ Target not met



\* The net financial liabilities ratio exceeds the target range when current assets are greater than total liabilities (and the ratio is negative)

\*\* The interest coverage ratio exceeds the target range when interest revenue is greater than interest expense (and the ratio is negative)

## Monthly Financial Report

## 3. STATEMENT OF COMPREHENSIVE INCOME

STATEMENT OF COMPREHENSIVE INCOME					
For the period ending 31 December 2020					
	Annual	Annual	YTD	YTD	YTD
	Original Budget \$'000	Revised Budget \$'000	Revised Budget \$'000	Actual \$'000	Variance \$'000
<b>Recurrent revenue</b>					
Rates charges	108,926	108,926	54,527	<b>54,075</b>	(452)
Levies and utility charges	160,082	160,082	79,492	<b>78,845</b>	(647)
Less: Pensioner remissions and rebates	(3,430)	(3,430)	(1,728)	<b>(1,801)</b>	(73)
Fees	13,554	13,554	6,863	<b>7,660</b>	797
Rental income	956	956	417	<b>569</b>	152
Interest received	2,999	2,999	1,499	<b>1,038</b>	(461)
Sales revenue	3,630	3,630	2,140	<b>1,732</b>	(408)
Other income	533	533	376	<b>865</b>	489
Grants, subsidies and contributions	14,896	17,545	6,988	<b>6,630</b>	(358)
<b>Total recurrent revenue</b>	<b>302,146</b>	<b>304,795</b>	<b>150,574</b>	<b>149,613</b>	<b>(961)</b>
<b>Recurrent expenses</b>					
Employee benefits	91,988	92,088	46,278	<b>46,714</b>	436
Materials and services	145,591	148,140	71,341	<b>65,800</b>	(5,541)
Finance costs	2,382	2,382	1,193	<b>1,216</b>	23
Depreciation and amortisation	64,938	64,938	32,543	<b>32,030</b>	(513)
Other expenditure	520	520	299	<b>163</b>	(136)
Net internal costs	(1,800)	(1,800)	(900)	<b>(1,003)</b>	(103)
<b>Total recurrent expenses</b>	<b>303,619</b>	<b>306,268</b>	<b>150,754</b>	<b>144,920</b>	<b>(5,834)</b>
<b>OPERATING SURPLUS / (DEFICIT)</b>	<b>(1,473)</b>	<b>(1,473)</b>	<b>(180)</b>	<b>4,693</b>	<b>4,873</b>
<b>Capital revenue</b>					
Grants, subsidies and contributions	25,922	32,449	12,712	<b>8,756</b>	(3,956)
Non-cash contributions	3,480	3,480	41	<b>-</b>	(41)
<b>Total capital revenue</b>	<b>29,402</b>	<b>35,930</b>	<b>12,753</b>	<b>8,756</b>	<b>(3,997)</b>
<b>Capital expenses</b>					
(Gain) / loss on disposal of non-current assets	289	289	144	<b>142</b>	(2)
<b>Total capital expenses</b>	<b>289</b>	<b>289</b>	<b>144</b>	<b>142</b>	<b>(2)</b>
<b>TOTAL INCOME</b>	<b>331,548</b>	<b>340,725</b>	<b>163,327</b>	<b>158,369</b>	<b>(4,958)</b>
<b>TOTAL EXPENSES</b>	<b>303,908</b>	<b>306,557</b>	<b>150,898</b>	<b>145,062</b>	<b>(5,836)</b>
<b>NET RESULT</b>	<b>27,641</b>	<b>34,168</b>	<b>12,429</b>	<b>13,307</b>	<b>878</b>
<b>Other comprehensive income / (loss)</b>					
Items that will not be reclassified to a net result					
Revaluation of property, plant and equipment	-	-	-	<b>-</b>	-
<b>TOTAL COMPREHENSIVE INCOME</b>	<b>27,641</b>	<b>34,168</b>	<b>12,429</b>	<b>13,307</b>	<b>878</b>



## Monthly Financial Report

## 3. STATEMENT OF COMPREHENSIVE INCOME - CONTINUED

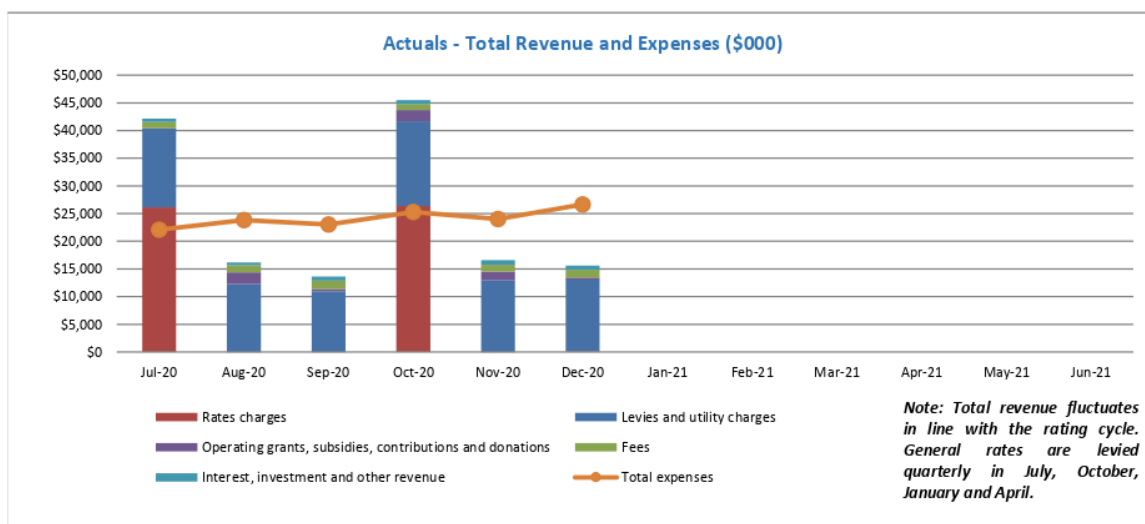
LEVIES AND UTILITY CHARGES ANALYSIS For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
<b>Levies and utility charges</b>					
Refuse collection rate charge	29,127	29,127	14,482	14,620	138
SES separate charge	497	497	248	247	(1)
Environment separate charge	8,387	8,388	4,194	4,171	(23)
Separate charge landfill remediation	2,163	2,163	1,078	1,076	(2)
Wastewater charges	47,842	47,842	23,845	23,716	(129)
Water access charges	20,120	20,120	10,025	10,034	9
Water consumption charges	51,945	51,945	25,620	24,981	(639)
<b>Total levies and utility charges</b>	<b>160,082</b>	<b>160,082</b>	<b>79,492</b>	<b>78,845</b>	<b>(647)</b>

MATERIALS AND SERVICES ANALYSIS For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
<b>Materials and services</b>					
Contractors	38,549	39,195	19,017	16,150	(2,867)
Consultants	2,813	3,332	1,609	810	(799)
Other Council outsourcing costs*	23,063	21,918	9,921	9,590	(331)
Purchase of materials	53,059	55,336	26,389	26,710	321
Office administration costs	11,685	11,748	5,966	5,483	(483)
Electricity charges	5,748	5,748	2,890	2,676	(214)
Plant operations	3,548	3,548	1,655	1,462	(193)
Information technology resources	3,067	3,302	1,677	1,407	(270)
General insurance	1,646	1,611	811	664	(147)
Community assistance**	1,777	1,768	1,090	585	(505)
Other material and service expenses	636	634	316	263	(53)
<b>Total materials and services</b>	<b>145,591</b>	<b>148,140</b>	<b>71,341</b>	<b>65,800</b>	<b>(5,541)</b>

\* Other Council outsourcing costs are various outsourced costs including refuse collection and disposal, waste disposal, legal services, traffic control, external training, valuation fees, etc.

\*\* Community assistance costs represent community related costs including community grants, exhibitions and awards, donations and sponsorships.



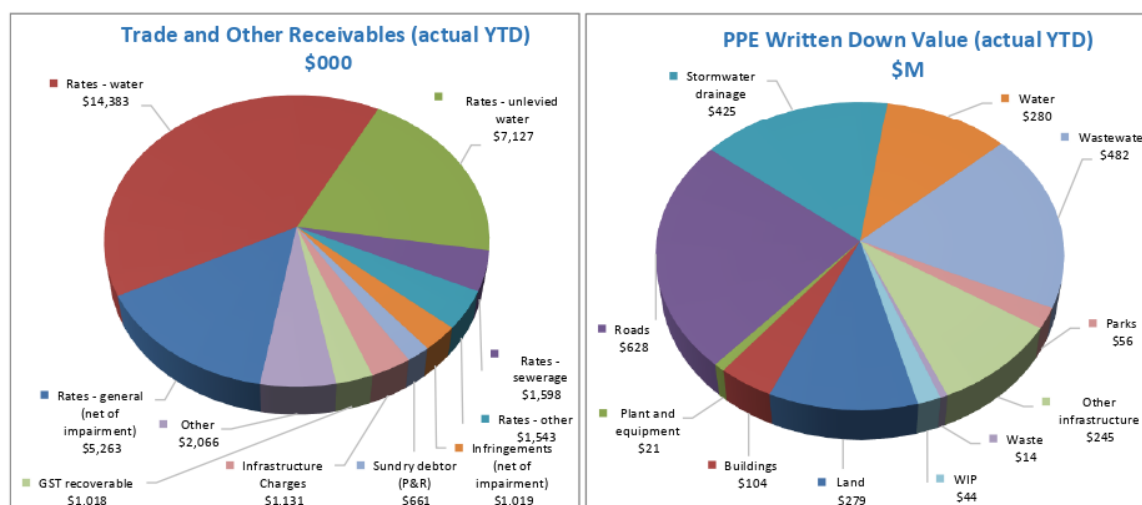
## Monthly Financial Report

## 4. STATEMENT OF FINANCIAL POSITION

STATEMENT OF FINANCIAL POSITION As at 31 December 2020				
	Annual	Annual	YTD	YTD
	Original Budget \$000	Revised Budget \$000	Revised Budget \$000	Actual \$000
<b>CURRENT ASSETS</b>				
Cash and cash equivalents	169,264	171,713	177,548	181,356
Trade and other receivables	45,924	45,900	44,587	35,809
Inventories	918	853	868	882
Non-current assets held for sale	-	118	118	-
Other current assets	1,955	2,956	2,956	3,289
<b>Total current assets</b>	<b>218,061</b>	<b>221,539</b>	<b>226,077</b>	<b>221,336</b>
<b>NON-CURRENT ASSETS</b>				
Investment property	1,091	1,225	1,225	1,225
Property, plant and equipment	2,572,288	2,617,957	2,586,930	2,577,931
Intangible assets	486	1,682	1,903	1,825
Right-of-use assets	5,919	5,911	6,445	6,418
Other financial assets	73	73	73	73
Investment in other entities	13,101	13,101	13,101	13,101
<b>Total non-current assets</b>	<b>2,592,958</b>	<b>2,639,948</b>	<b>2,609,677</b>	<b>2,600,573</b>
<b>TOTAL ASSETS</b>	<b>2,811,018</b>	<b>2,861,487</b>	<b>2,835,754</b>	<b>2,821,909</b>
<b>CURRENT LIABILITIES</b>				
Trade and other payables	28,839	41,895	46,715	28,861
Borrowings - current	6,361	8,326	8,326	8,326
Lease liability - current*	1,302	1,294	1,294	1,294
Provisions - current	10,769	12,188	13,301	14,140
Other current liabilities	-	1,960	1,970	4,268
<b>Total current liabilities</b>	<b>47,271</b>	<b>65,663</b>	<b>71,606</b>	<b>56,889</b>
<b>NON-CURRENT LIABILITIES</b>				
Borrowings - non-current	37,900	35,840	25,333	25,337
Lease liability - non-current*	5,481	5,481	6,052	6,040
Provisions - non-current	15,120	14,162	14,162	14,162
<b>Total non-current liabilities</b>	<b>58,501</b>	<b>55,483</b>	<b>45,547</b>	<b>45,539</b>
<b>TOTAL LIABILITIES</b>	<b>105,772</b>	<b>121,146</b>	<b>117,153</b>	<b>102,428</b>
<b>NET COMMUNITY ASSETS</b>	<b>2,705,246</b>	<b>2,740,341</b>	<b>2,718,601</b>	<b>2,719,481</b>
<b>COMMUNITY EQUITY</b>				
Asset revaluation surplus	1,008,120	1,035,840	1,035,840	1,035,840
Retained surplus	1,580,316	1,597,694	1,578,229	1,581,681
Constrained cash reserves	116,810	106,807	104,532	101,960
<b>TOTAL COMMUNITY EQUITY</b>	<b>2,705,246</b>	<b>2,740,341</b>	<b>2,718,601</b>	<b>2,719,481</b>

## Monthly Financial Report

## 4. STATEMENT OF FINANCIAL POSITION - CONTINUED



### RIGHT-OF-USE ASSETS

For the period ending 31 December 2020

	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual Balance \$000
<b>Right-of-use asset</b>				
Buildings	2,780	2,697	3,006	3,018
Land	2,763	2,847	3,047	3,035
Plant and Equipment	376	367	392	365
<b>Closing balance</b>	<b>5,919</b>	<b>5,911</b>	<b>6,445</b>	<b>6,418</b>

### PROPERTY, PLANT AND EQUIPMENT (PPE) MOVEMENT\*

For the period ending 31 December 2020

	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual Balance \$000
<b>PPE movement</b>				
Opening balance (includes WIP from previous years)	2,556,325	2,588,458	2,588,458	2,588,458
Acquisitions and WIP in year movement	81,096	94,632	31,337	21,048
Depreciation in year	(63,282)	(63,282)	(31,641)	(31,023)
Disposals	(1,851)	(1,851)	(1,224)	(555)
Other adjustments**	-	-	-	3
<b>Closing balance</b>	<b>2,572,288</b>	<b>2,617,957</b>	<b>2,586,930</b>	<b>2,577,931</b>

\* This table includes movement relating to property, plant and equipment only and is exclusive of intangible assets.

\*\* Other adjustments include transfers between asset classes, revaluation adjustments, prior period adjustments and depreciation thereon.



## Monthly Financial Report

## 5. STATEMENT OF CASH FLOWS

STATEMENT OF CASH FLOWS For the period ending 31 December 2020				
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Receipts from customers	276,486	276,486	135,957	<b>143,963</b>
Payments to suppliers and employees	(239,435)	(242,084)	(113,954)	<b>(124,233)</b>
	<b>37,051</b>	<b>34,402</b>	<b>22,003</b>	<b>19,730</b>
Interest received	2,999	2,999	1,499	<b>1,038</b>
Rental income	956	956	418	<b>569</b>
Non-capital grants and contributions	14,483	17,132	6,741	<b>6,502</b>
Borrowing costs	(2,052)	(2,052)	(2,052)	<b>(2,048)</b>
Right-of-use assets interest expense	(144)	(144)	(73)	<b>(73)</b>
<b>Net cash inflow / (outflow) from operating activities</b>	<b>53,294</b>	<b>53,294</b>	<b>28,536</b>	<b>25,718</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Payments for property, plant and equipment	(77,614)	(91,150)	(31,297)	<b>(21,048)</b>
Proceeds from sale of property, plant and equipment	1,562	1,562	1,080	<b>531</b>
Capital grants, subsidies and contributions	25,922	34,149	14,412	<b>11,358</b>
<b>Net cash inflow / (outflow) from investing activities</b>	<b>(50,131)</b>	<b>(55,439)</b>	<b>(15,805)</b>	<b>(9,159)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Proceeds of borrowings	9,612	9,612	-	<b>-</b>
Repayment of borrowings	(6,361)	(6,361)	(6,361)	<b>(6,369)</b>
Right-of-use lease payment	(1,294)	(1,294)	(723)	<b>(735)</b>
<b>Net cash inflow / (outflow) from financing activities</b>	<b>1,957</b>	<b>1,957</b>	<b>(7,084)</b>	<b>(7,104)</b>
<b>Net increase / (decrease) in cash held</b>	<b>5,120</b>	<b>(188)</b>	<b>5,647</b>	<b>9,455</b>
Cash and cash equivalents at the beginning of the year	164,145	171,901	171,901	<b>171,901</b>
<b>Cash and cash equivalents at the end of the financial year / period</b>	<b>169,264</b>	<b>171,713</b>	<b>177,548</b>	<b>181,356</b>

**Cash Inflow (actual YTD)**

Category	Percentage
Utility charges	48%
Rates charges	32%
Capital grants, subsidies and contributions	7%
Interest received	1%
Operating grants and contributions	4%
Fees	6%
Other cash receipts	2%

**Cash Outflow (actual YTD)**

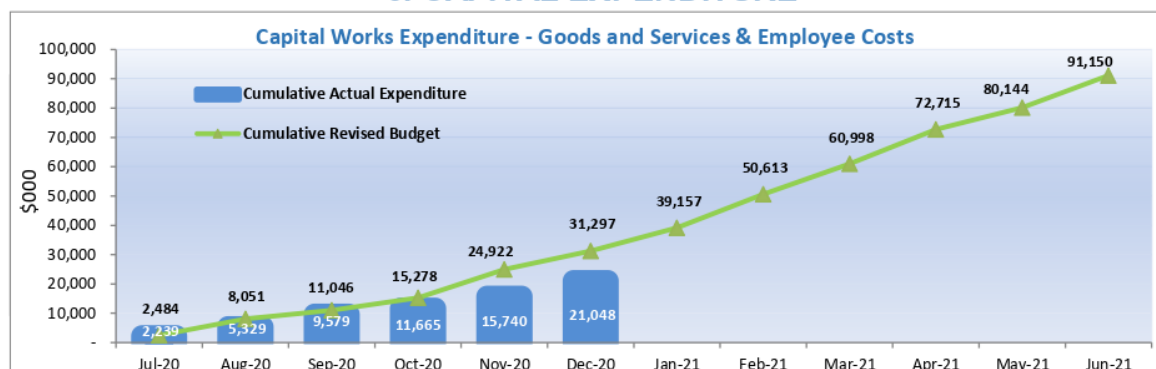
Category	Percentage
Materials and services	49%
Employee costs	32%
Payments for property, plant and equipment	14%
Repayment of borrowings	4%
Borrowing costs	1%

<b>Total Cash Funding (Actual YTD)</b>	<b>163,961</b>	<b>Total Cash Expenditure (Actual YTD)</b>	<b>154,506</b>
Total Cash Funding (Annual Revised Budget)	342,897	Total Cash Expenditure (Annual Revised Budget)	343,085
% of Budget Achieved YTD	48%	% of Budget Achieved YTD	45%

## Monthly Financial Report

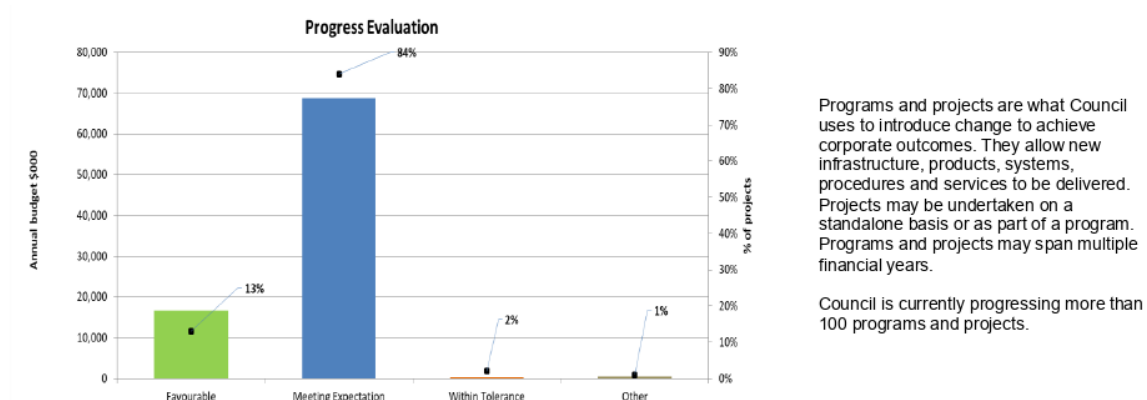
## 6. CAPITAL EXPENDITURE



	Annual Revised Budget \$'000	YTD Revised Budget \$'000	YTD Actual \$'000	YTD Variance \$'000
Capitalised goods and services	82,717	27,356	17,381	(9,975)
Capitalised employee costs	8,433	3,941	3,667	(274)
<b>Total</b>	<b>91,150</b>	<b>31,297</b>	<b>21,048</b>	<b>(10,249)</b>

## 7. PROGRAM AND PROJECT UPDATE

<span style="color: green;">■</span> Favourable (budget under/schedule on track)	<span style="color: blue;">■</span> Meeting expectations (budget and schedule on track)	<span style="color: orange;">■</span> Within tolerance (either budget and schedule not on track)	<span style="color: brown;">■</span> Other (Schedule to be tracked)
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## Notable Projects

The status of two notable projects are as follows:

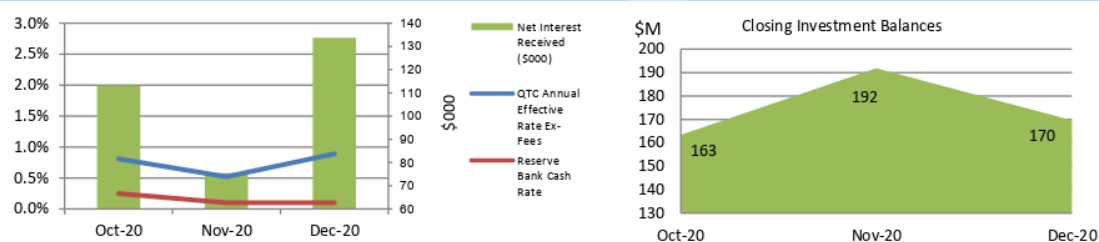
Project description	Progress
Bus Shelter and Seat Renewal Program - Undertake asset renewal and achieve a practical level compliance to Disability Discrimination Act across the bus stop network.	Meeting Expectations
Road Upgrade & Expansion Program (SMBI Greenseal) - Sealing gravel roads on the Southern Moreton Bay Islands for dust suppression, safety and improved amenity.	Meeting Expectations

## Monthly Financial Report

## 8. INVESTMENT &amp; BORROWINGS REPORT

For the period ending 31 December 2020

## INVESTMENT RETURNS - QUEENSLAND TREASURY CORPORATION (QTC)



Total QTC Investment at End of Month was \$169.67M

Council investments are currently held predominantly in the Capital Guaranteed Cash Fund, which is a fund operated by the Queensland Treasury Corporation (QTC). In October 2020 \$10M was invested in a term deposit of Commonwealth Bank of Australia (CBA) to maximise interest earnings.

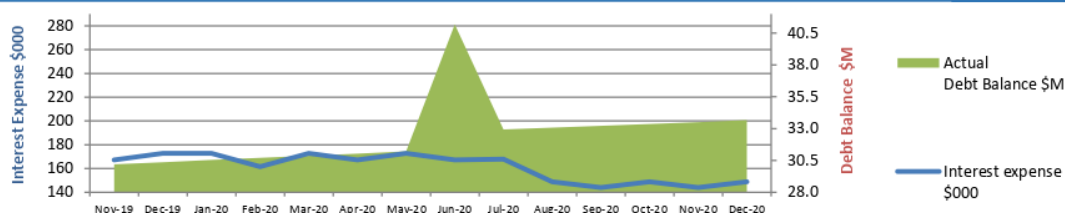
The movement in interest earned is indicative of both the interest rate and the surplus cash balances held, the latter of which is affected by business cash flow requirements on a monthly basis as well as the rating cycle.

Note: the Reserve Bank reduced the cash rate down to 0.10% during November 2020.

On a daily basis, cash surplus to requirements is deposited with QTC to earn higher interest as QTC is offering a higher rate than what is achieved from Council's transactional bank accounts. The current annual effective interest rate paid by QTC is 0.89%. Term deposit rates are being monitored to identify investment opportunities to ensure Council maximises its interest earnings.

Council adopted its Investment Policy (POL-3013) in June 2020 for the 2020/2021 financial year

## BORROWINGS AND BORROWING COSTS (QTC)



The existing loan accounts were converted to fixed rate loans on 1 April 2016 following a QTC restructure of loans and policies. In line with Council's debt policy, debt repayment of \$8.42M, being \$6.37M principal and \$2.05M interest has been made *annually* for 2020/2021 which will result in the loans being repaid approximately one year earlier.

The debt balance shows a decrease as the Annual Debt Service Payment (ADSP) was made during July 2020. Interest will accrue monthly on a daily balance until next ADSP in July 2021 which is reflected in the increasing debt balance.

In June 2020 additional borrowings of \$9.80M were undertaken as part of Council's Capital Works Plan.

Total Borrowings at End of Month were \$33.66M

Council adopted its Debt Policy (POL-1838) in June 2020 for the 2020/2021 financial year

## BORROWINGS

For the period ending 31 December 2020

	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual Balance \$000
<b>Borrowings</b>				
Opening balance	(41,273)	(41,178)	(41,178)	(41,178)
Accrued interest on borrowings	(1,789)	(1,789)	(894)	(902)
Interest paid on borrowings	2,052	2,052	2,052	2,048
Principal repaid	6,361	6,361	6,361	6,369
Loan drawdown	(9,612)	(9,612)	-	-
<b>Closing balance</b>	<b>(44,261)</b>	<b>(44,166)</b>	<b>(33,659)</b>	<b>(33,663)</b>

## Monthly Financial Report

## 9. CONSTRAINED CASH RESERVES

Reserves as at 31 December 2020	Purpose of reserve	Opening Balance	To Reserve	From Reserve	Closing Balance
		\$000	\$000	\$000	\$000
<b>Special Projects Reserve:</b>					
Aquatic Paradise Revetment Wall Reserve	To fund Aquatic Paradise revetment wall works program	2	13	(1)	14
Weinam Creek Reserve	Maintenance and improvements associated with Weinam Creek projects	-	310	(302)	8
Waste Levy Reserve	To fund Waste Levy Program	-	2,192	(2,014)	178
Raby Bay Revetment Wall Reserve	To fund Raby Bay revetment wall works program	2,093	1,424	(373)	3,144
Fleet Plant & Capital Equipment Reserve	To support the long term fleet replacement program	2,536	520	(439)	2,617
		<b>4,631</b>	<b>4,459</b>	<b>(3,129)</b>	<b>5,961</b>
<b>Constrained Works Reserve:</b>					
Public Parks Trunk Infrastructure Reserve	Capital projects for public parks trunk infrastructure	6,662	1,171	(498)	7,335
Land for Community Facilities Trunk Infrastructure Reserve	Land for community facilities trunk infrastructure	3,086	724	-	3,810
Water Supply Trunk Infrastructure Reserve	Upgrade, expansion or new projects for water supply trunk infrastructure	14,626	97	-	14,723
Sewerage Trunk Infrastructure Reserve	Upgrade, expansion or new projects for sewerage trunk infrastructure	10,909	901	(1,349)	10,461
Local Roads Trunk Infrastructure Reserve	Capital projects for local roads trunk infrastructure	33,731	2,662	(764)	35,629
Cycleways Trunk Infrastructure Reserve	Capital projects for cycleways trunk infrastructure	11,923	979	(101)	12,801
Stormwater Trunk Infrastructure Reserve	Capital projects for stormwater trunk infrastructure	10,842	334	(1,475)	9,701
Tree Planting Reserve	Acquisition and planting of trees on footpaths	103	48	(4)	147
Koala Tree off-set Planting Reserve	Acquisition and planting of trees for koala habitat	12	-	(12)	-
		<b>91,894</b>	<b>6,916</b>	<b>(4,203)</b>	<b>94,607</b>
<b>Separate Charge Reserve:</b>					
Environment Charge Maintenance Reserve	Ongoing conservation and maintenance operations	-	4,170	(3,686)	484
SES Separate Charge Reserve	On-going costs of maintaining the Redland SES	38	247	(234)	51
		<b>38</b>	<b>4,417</b>	<b>(3,920)</b>	<b>535</b>
<b>Special Charge Reserve - Canals:</b>					
Aquatic Paradise Canal Reserve*	Maintenance and repairs of Aquatic Paradise canals	758	-	-	758
Sovereign Waters Lake Reserve*	Maintenance and repairs of Sovereign Lake	431	-	-	431
1718 Raby Bay Canal Reserve	Service, facility or activity of works in respect of the canals of the Raby Bay canal estate	219	-	-	219
1718 Aquatic Paradise Canal Reserve	Service, facility or activity of works in respect of the canals of the Aquatic Paradise canal estate	(495)	-	-	(495)
1718 Sovereign Waters Lake Reserve	Service, facility or activity of works in respect of the lake	(56)	-	-	(56)
		<b>857</b>	<b>-</b>	<b>-</b>	<b>857</b>
<b>TOTALS</b>		<b>97,420</b>	<b>15,792</b>	<b>(11,252)</b>	<b>101,960</b>
		Closing cash and cash equivalents			<b>181,356</b>
		Reserves as percentage of cash balance			<b>56%</b>

\*No interest charged for these reserves December 2020 year to date due to low prevailing interest rate.

## Monthly Financial Report

## 10. CITY WATER STATEMENTS

CITY WATER SUMMARY OPERATING STATEMENT					
For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
Total revenue	122,970	122,970	61,458	60,439	(1,019)
Total expenses	71,469	71,469	35,733	35,959	226
Earnings before interest, tax and depreciation (EBITD)	51,501	51,501	25,725	24,480	(1,245)
External interest expense	71	71	35	55	20
Internal interest expense	10,621	10,621	5,311	5,311	-
Depreciation	24,142	24,142	12,071	11,994	(77)
Operating surplus / (deficit)	16,667	16,667	8,308	7,120	(1,188)

CITY WATER CAPITAL FUNDING STATEMENT					
For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
Capital contributions, donations, grants and subsidies	2,537	2,537	1,269	998	(271)
Net transfer (to) / from constrained capital reserves	(2,365)	(374)	672	285	(387)
Non-cash contributions	3,399	3,399	-	-	-
Funding from utility revenue	8,568	10,151	4,036	876	(3,160)
Total sources of capital funding	12,138	15,714	5,977	2,159	(3,818)
Contributed assets	3,399	3,399	-	-	-
Capitalised expenditure	8,258	11,833	5,736	1,517	(4,219)
Loan redemption	482	482	241	642	401
Total application of capital funds	12,138	15,714	5,977	2,159	(3,818)

## 11. CITY WASTE STATEMENTS

CITY WASTE OPERATING STATEMENT					
For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
Total revenue	35,715	35,715	17,775	17,707	(68)
Total expenses	27,427	27,427	13,594	13,469	(125)
Earnings before interest, tax and depreciation (EBITD)	8,288	8,288	4,181	4,238	57
External interest expense	17	17	9	9	-
Depreciation	327	327	163	167	4
Operating surplus / (deficit)	7,943	7,943	4,009	4,062	53

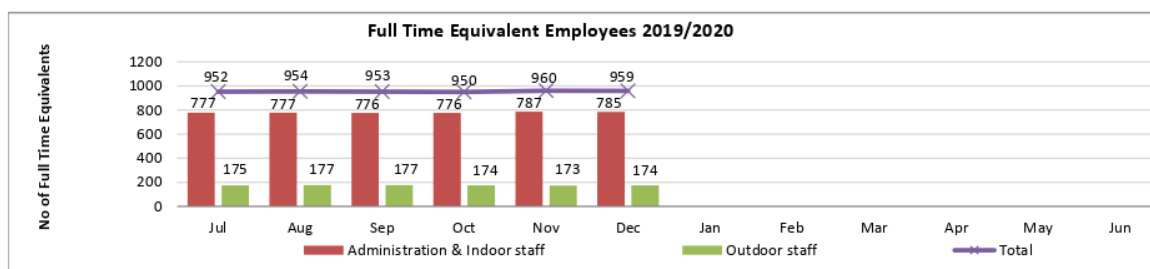
  

CITY WASTE CAPITAL FUNDING STATEMENT					
For the period ending 31 December 2020					
	Annual Original Budget \$000	Annual Revised Budget \$000	YTD Revised Budget \$000	YTD Actual \$000	YTD Variance \$000
Non-cash contributions	-	-	-	-	-
Funding from utility revenue	924	2,729	1,547	383	(1,164)
Total sources of capital funding	924	2,729	1,547	383	(1,164)
Capitalised expenditure	779	2,584	1,417	275	(1,142)
Loan redemption	145	145	130	108	(22)
Total application of capital funds	924	2,729	1,547	383	(1,164)

## Monthly Financial Report

## 12. APPENDIX: ADDITIONAL AND NON-FINANCIAL INFORMATION

## Workforce Reporting



December 2020: Headcount		Employee Type			
Department Level		Casual	Full Time	Part Time	Total
Office of CEO and People, Culture and Organisational Performance		9	40	7	56
Organisational Services		7	205	18	230
Community and Customer Services		31	284	69	384
Infrastructure and Operations		9	352	17	378
<b>Total</b>		<b>56</b>	<b>881</b>	<b>111</b>	<b>1,048</b>

Note: Full Time Equivalent Employees includes all full time employees at a value of 1 and all other employees, at a value less than 1. The table above demonstrates the headcount by department. Following Ourspace, the table includes contract of service and temporary personnel. It includes casual staff in their non-substantive roles as at the end of the period where relevant.

## Overdue Rates Debtors &amp; Statistics

Days Overdue	Dec-20	% Overdue	Dec-19	% Overdue	\$ Variance	% Variance	Rates & Charges Statistics		
0 - 30	\$0	0.0%	\$115	0.0%	-\$115	0.0%	Levied (Billed) Rates & Charges since 1 July 2020	\$153,367,040	\$132,934,417
31 - 60	\$4,072,896	2.5%	\$4,256,530	3.0%	-\$183,634	-0.5%	Rate arrears brought forward 1 July 2020	\$12,988,652	\$9,452,770
61 - 90	\$0	0.0%	\$476	0.0%	-\$476	0.0%	Total	\$166,355,692	\$142,387,187
91 - 180	\$1,898,531	1.1%	\$1,831,709	1.3%	\$66,822	-0.2%	Balance of overdue rates & charges	\$10,320,392	\$9,873,825
>180	\$4,348,965	2.6%	\$3,784,995	2.7%	\$563,970	-0.1%	% Overdue	6.2%	7.0%
<b>Total</b>	<b>\$10,320,392</b>	<b>6.2%</b>	<b>\$9,873,825</b>	<b>7.0%</b>	<b>\$446,567</b>	<b>-0.8%</b>			



## Monthly Financial Report

## 13. GLOSSARY

## Key Terms

**Written Down Value:**

*This is the value of an asset after accounting for depreciation or amortisation, and it is also called book value or net book value.*

**Work In Progress:**

*This represents an unfinished project that costs are still being added to. When a project is completed, the costs will be either capitalised (allocated to relevant asset class) or written off.*

## Definition of Ratios

**Operating Surplus Ratio\*:**

*This is an indicator of the extent to which revenues raised cover operational expenses only or are available for capital funding purposes*

Net Operating Surplus  
Total Operating Revenue

**Asset Sustainability Ratio\*:**

*This ratio indicates whether Council is renewing or replacing existing non-financial assets at the same rate that its overall stock of assets is wearing out*

Capital Expenditure on Replacement of Infrastructure Assets (Renewals)  
Depreciation Expenditure on Infrastructure Assets

**Net Financial Liabilities\*:**

*This is an indicator of the extent to which the net financial liabilities of Council can be serviced by operating revenues*

Total Liabilities - Current Assets  
Total Operating Revenue

**Level of Dependence on General Rate Revenue:**

*This ratio measures Council's reliance on operating revenue from general rates (excludes utility revenues)*

General Rates - Pensioner Remissions  
Total Operating Revenue - Gain on Sale of Developed Land

**Current Ratio:**

*This measures the extent to which Council has liquid assets available to meet short term financial obligations*

Current Assets  
Current Liabilities

**Debt Servicing Ratio:**

*This indicates Council's ability to meet current debt instalments with recurrent revenue*

Interest Expense\*\*\* + Loan Redemption^  
Total Operating Revenue - Gain on Sale of Developed Land

**Cash Balance - \$M:**

*Cash balance includes cash on hand, cash at bank and other short term investments.*

Cash Held at Period End

**Cash Capacity in Months:**

*This provides an indication as to the number of months cash held at period end would cover operating cash outflows*

Cash Held at Period End  
[[Cash Operating Costs + Interest Expense] / Period in Year]

**Longer Term Financial Stability - Debt to Asset Ratio:**

*This is total debt as a percentage of total assets, i.e. to what extent will our long term debt be covered by total assets*

Current and Non-current Debt\*\*  
Total Assets

**Operating Performance:**

*This ratio provides an indication of Council's cash flow capabilities*

Net Cash from Operations + Interest Revenue and Expense  
Cash Operating Revenue + Interest Revenue

**Interest Coverage Ratio:**

*This ratio demonstrates the extent to which operating revenues are being used to meet the financing charges*

Net Interest Expense on Debt Service\*\*\*  
Total Operating Revenue

\* These targets are set to be achieved on average over the longer term and therefore are not necessarily expected to be met on a monthly basis.

\*\* Debt includes lease liabilities.

\*\*\* Interest expense includes interest on leases.

^ Loan redemption includes lease redemption.

**13.2 S-1961-20/21 – INM SPECIALIST SUPPLIER – INFORMATION MANAGEMENT SYSTEMS****Objective Reference:****Authorising Officer:** John Oberhardt, General Manager Organisational Services**Responsible Officer:** Glynn Henderson, Group Manager Corporate Services**Report Author:** Andy Bethke, Service Manager Service Delivery**Attachments:** 1. List of Specialised Suppliers [↓](#)**PURPOSE**

To seek resolution from Council to enter into a contractual relationship with specialist service providers for renewals and licenses of software and hardware systems without first inviting written quotes or tenders for a period of 24 months, pursuant to section 235 of the Local Government Regulation 2012 (*LGR2012*).

Section 235 of the LGR2012 provides a number of exceptions to inviting written quotes or tenders in relation to medium-sized (\$15,000 or more but less than \$200,000) and large-sized (\$200,000 or more in a financial year) contractual arrangements. The proposed arrangement falls within the medium-sized and large-sized transactions.

The relevant exceptions in section 235 are where Council resolves:

- It is satisfied that there is only 1 specialist supplier who is reasonably available (s.235(a))
- Because of the specialised nature of the goods/services sought, it would be impractical or disadvantageous for Council to invite quotes or tenders (s.235(b))

**BACKGROUND**

Redland City Council (Council) manages a number of information management systems that have annual renewal and license fees. These fees are ongoing until the systems are upgraded, replaced or no longer required and at times do not fall under a contract arrangement after initial implementation. The costs for renewals and license fees are between \$15,000 or more but less than \$450,000 per financial year.

**Current Situation**

Council currently approaches the market for a number of information management systems where it may apply the sound contracting principles in accordance with the *Local Government Act 2009*, s.104 (3). With more established programs such as Technology 1 (Property & Rating, Finance One) and Objective (EDRMS) that have been implemented in Council in previous years, they are no longer under any contract arrangement or initial implementation contracts may have expired. These programs have an annual renewal and/or licensing fee and are only able to be sourced through specialised suppliers based on their proprietary systems being incorporated in our enterprise framework.



## ISSUES

There are two issues to consider in relation to this resolution:

1. The need to renew and/or licence information management programs annually for Council business continuity and continued service to the community.
2. The need to source these particular information management systems from specialised suppliers.

There is in these instances no other suppliers to provide the information management programs to Council.

## STRATEGIC IMPLICATIONS

### Legislative Requirements

In accordance with section 235(a) of *Local Government Regulation 2012*, a local government may enter into a medium-sized contractual arrangement or large-sized contractual arrangement without first inviting written quotes or tenders if:

- (a) The local government resolves it is satisfied that there is only one supplier who is reasonably available.

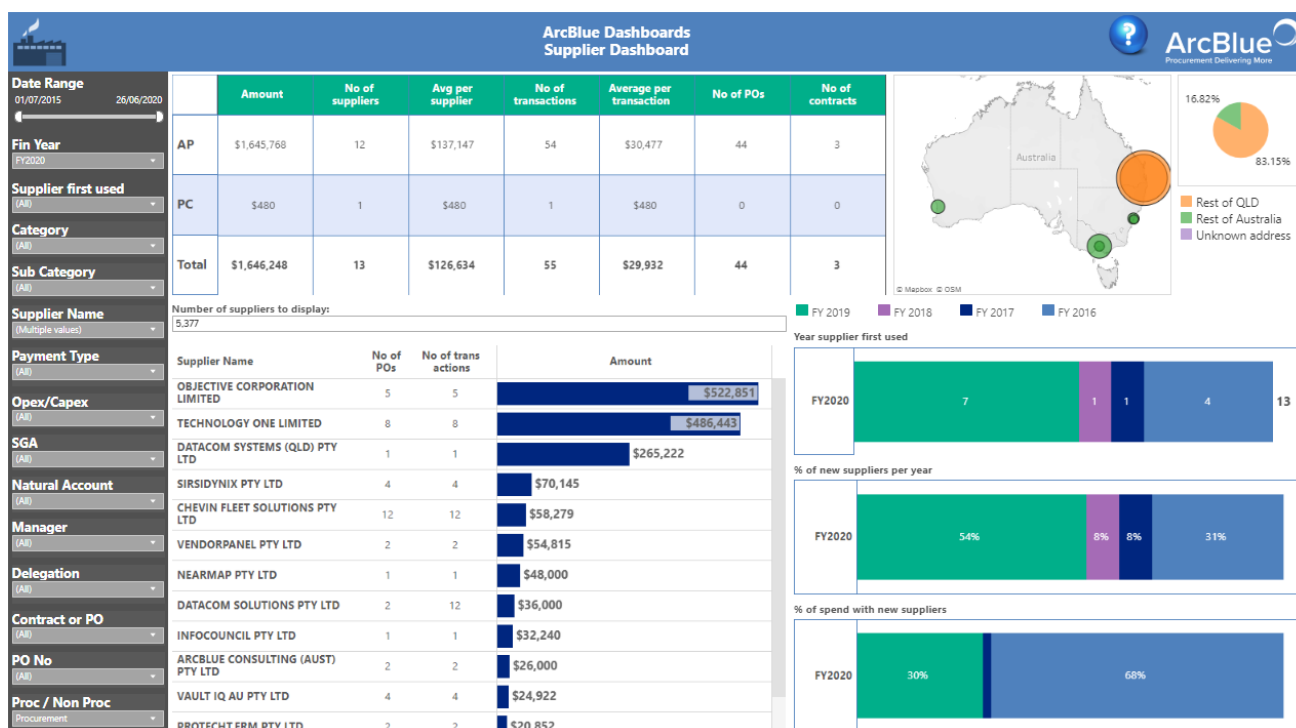
### Risk Management

If Council does not renew and/or licence the information management programs implemented in Council they may cause disruption to business continuity for Council, and therefore disruption in our service to the community.

### Financial

License and renewal fees are typically the same cost per financial year. Establishing a specialised supplier arrangement for information management systems where possible will allow for better planning and budget allocations each financial year. It will also allow monitoring and review of spend within these arrangements. If unable to renew, information management systems would need to be replaced at a higher cost.

Please see below, ArcBlue dashboard review of spend by specialised supplier for license and renewal fees for the 2019 – 2020 financial year:



## People

Without the Specialised Supplier List, Council staff would be required to undertake timely quote and tender processes. New systems implementation for Council would also initiate change management and training requirements.

Maintaining established information management systems is in the best interests of Council's workforce.

## Environmental

There are no environmental impacts.

## Social

Disruption to Council information management systems may impact Council's service to the community if they are altered without significant planning and implementation strategies.

## Human Rights

There are no human rights impacts.

## Alignment with Council's Policy and Plans

This is an operational issue and is consistent with Council's current policies and plans.

**CONSULTATION**

Consulted	Consultation Date	Comments/Actions
Procurement Transformation Manager	August	Supported

**OPTIONS****Option One**

That Council resolves as follows:

1. That it is satisfied that due to the nature of the renewals and/or licenses for Council information management systems that it would be impractical or disadvantageous to seek quotes or tenders for the relevant services.
2. To enter into medium-sized and large-sized contractual arrangements with the list of Specialised Suppliers outlined in Attachment 1, without first inviting written quotes pursuant to section 235(a) of the *Local Government Regulation 2012*.

**Option Two**

That Council resolves to seek further information.

**OFFICER'S RECOMMENDATION**

That Council resolves as follows:

1. That it is satisfied that due to the nature of the renewals and/or licenses for Council information management systems that it would be impractical or disadvantageous to seek quotes or tenders for the relevant services.
2. To enter into medium-sized and large-sized contractual arrangements with the list of Specialised Suppliers outlined in Attachment 1, without first inviting written quotes pursuant to section 235(a) of the *Local Government Regulation 2012*.

## ATTACHMENT 1

### Specialised Suppliers

Identified Parties	Purpose	Description
Nearmap Pty Ltd	Aerial imagery technology and location data company that provides frequently-updated, high-resolution aerial imagery	The product is licensed solely through Nearmap Pty Ltd. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Dejar	Supply of proprietary software used to display Rates notices internally and externally	This proprietary software is the only software available currently that can display these historical records.
SirsiDynix	Library Management System (LMS) providing automation and catalogue for the libraries.	The product is licensed solely through SirsiDynix. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Objective Corporation Ltd	Council's enterprise document and records management system	The product is licensed solely through Objective Corporation Pty Ltd. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Technology One Pty Ltd	Property & Rating, Finance1: Council enterprise software – financial, property and rating systems	The products are licensed solely through Technology One Ltd. Moving away from the products would require replacement systems and associated implementations, integrations and change management.
NTT Data Figtree Systems Pty Ltd	Workers Compensation system to manage employee return to work and workers compensation claims online.	The products are licensed solely through NTT DATA Figtree Systems Pty Ltd. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Infocouncil Pty Ltd	Software for managing the automation of Council agendas, minutes and reporting.	The product is licensed solely through Infocouncil Pty Ltd. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Datacom Solutions	Venue Booking System (Sports & Rec) Facility room and resource management and booking software.	The product is licensed solely through Datacom Solutions. Moving away from the product would require a replacement system and associated implementation, integration and change management.
CIC Technologies	Electronic Key Cabinets (Vehicle management) Software to track and report key movement for Council Fleet vehicles	The product is licensed solely through CIC Technologies. Moving away from the product would require a replacement system and associated implementation, integration and change management.
VAULT INTELLIGENCE LIMITED	Vault IQ is Council's WH&S Recording System. Data management and information storage for WH&S specific reporting	The product is licensed solely through VAULT INTELLIGENCE LIMITED. Moving away from the product would require a replacement system

## ATTACHMENT 1

### Specialised Suppliers

Identified Parties	Purpose	Description
		and associated implementation, integration and change management.
Chevin Fleet Solutions	Fleet Management System. Enabling Council to manage all fleet and asset information (acquisition through to disposals)	The product is licensed solely through Chevin Fleet Solutions. Moving away from the product would require a replacement system and associated implementation, integration and change management.
Protecht Group	Protecht is a Risk & Liability Recording System. Enables Council to meet obligations and liabilities in core activity areas by assessing and managing risk.	The product is licensed solely through Protecht Group. Moving away from the product would require a replacement system and associated implementation, integration and change management.
ArcBlue	Spend Tracking Software – Capex/Opex. Procurement spend analytics tool to enable Council best practice outcomes, insights and efficiency	The product is licensed solely through ArcBlue. Moving away from the product would require a replacement system and associated implementation, integration and change management.
VendorPanel Pty Ltd	VendorPanel and ContractsMonitor are Cloud based software solutions providing Council with procurement management for tenders and quotations and contract management automation.	The products are licensed solely through VendorPanel Pty Ltd. Moving away from the products would require replacement systems and associated implementations, integrations and change management.
CrisisReady App	EarthCheck's Tourism CrisisReady Program, App and Toolkit helps to build business and destination resilience through preparedness and 24/7 rapid response in crisis situations.	The product is licensed solely through EarthCheck. Moving away from the product would require a replacement system and associated implementation, integration and change management.

### 13.3 FIRE MANAGEMENT REVIEW - CLOSE OUT REPORT

**Objective Reference:****Authorising Officer:** Andrew Ross, General Counsel**Responsible Officer:** Andrew Ross, General Counsel**Report Author:** Michael Tait, Service Manager Disaster Planning and Operations**Attachments:** 1. Queensland Fire and Emergency service (QFES) Report Recommendations Action List January 2021 [↓](#)**PURPOSE**

To note the completion of the recommendations by Queensland Fire and Emergency Service (QFES) in their Fire Management Plan Review Report of July 2017 (the Fire Report) into Council's ongoing operational business practices.

**BACKGROUND**

Bushfire risk is inherent in all communities living within bushland settings, particularly the Redlands that has large bushland areas and unique logistical issues that come with accessing the regional hinterland areas of Redland Bay, Mount Cotton and Sheldon and the Bay Islands including Southern Moreton Bay Islands (SMBI), that have demographically higher aged and vulnerable communities.

Council's new 'Corporate Plan 2021 to 2026 and Beyond', has specifically identified a key initiative within the Natural Environment objective, to partner with the community to manage fire risk through Council's fire management program specifically on private property. This corporate initiative builds on the earlier work undertaken as part of the Fire Report recommendations.

The Fire Report was commissioned by Council in response to the Macleay and Russell Island Fires in 2016. The blaze on Russell Island was reported in the early afternoon of 15 December 2016 and within seven hours 110 people, 48 appliances and five aircraft were involved in the fire-fighting effort. The fire was brought under control on 18 December 2016, after burning out more than 150 hectares of the island. While the fire did not result in loss of life or significant property structural damage, it sparked considerable community concern about the level of fire risk on SMBI, the adequacy of fire management practices and community safety in the event of future fire events.

Council adopted the QFES Fire Report in its entirety which made 56 recommendations with the majority of recommendations completed by October 2018 with ongoing implementation into Council's operational business. Of the report's recommendations, 42 related to the SMBI and 14 to the mainland. The recommendations fell into six categories:

- Reducing illegal dumping and hoarding
- Improving the resilience and disaster preparedness of residents
- Ensuring emergency response capacity across multiple agencies
- Reviewing maintenance plans and access trails
- Looking at Local Laws and legislation
- Ensuring continued access to the existing fire hydrants on the SMBI

Many of these issues identified in the wake of the fires have required a whole-of-government approach, in partnership with the community. This State, Council, and community partnership has been strengthened as it continues to deliver positive outcomes.

Whilst the fire recommendations are particularly focused on SMBI, the principles and initiatives inform Council's continuing fire management program across the City.

The key activities in each of the categories are included below together with the annexed Fire Report Action List:

### **Community**

Bushfire has no land boundary and the basic tenet to manage bushfire is to adopt a joint and consistent community response from planning, preparation, response and recovery with all land holders in their own communities during times of emergency and continuing as an integral part of the Council's disaster framework and community engagement strategy. As a result:

- a) This basic tenet crystallised in the formation of SMBI Community Champions program that began in 2016/17 as a joint initiative with SMBI community volunteers in partnership with Council, Red Cross, Queensland Fire and Emergency Services and Volunteering Queensland. It has developed into a remarkable example of Council helping communities to care for themselves
- b) The champions together with the SMBI Residents identified fuel load on vacant Council and private land as their highest perceived risk area. Reducing this fuel load risk has been a major focus of Council's action plan with almost doubling its fire mitigation budget from \$800,000 in 2017 to more than \$1.2m in 2018 noting the cost of managing Council's public environmental areas and parklands continues as one of the highest operational expenses
- c) The development of the Brisbane Headquarters Regional Mitigation Brigade was progressed by local community residents from Mount Cotton (a number of which joined the brigade) with support from key stakeholders, including the Divisional Councillor and Deputy Mayor Julie Talty and Springwood State MP the Honourable Mick de Brenni. The development of this mitigation brigade also recognises the role of the Federal Government and State Government in managing their significant environmental land holdings across the Redlands and adjoining regional areas
- d) The joint Land Management Agreement for Minjerribah Township Fire Management Strategies executed by Council in 2020 is another community based land management agreement between Quandamooka people, State Government and Council to consolidate land management strategies across North Stradbroke Island
- e) There are numerous other community based educational and awareness raising programs promoted by Council to ready Redlands for bushfire and storm seasons that are raised in pop-up community event displays, media releases and newsletters, that include basic messaging including 'Safer SMBI', 'Spring Clean-up', 'know your neighbour', as well as 'Street Speaks' campaigns to reduce illegal dumping and hoarding and improve community preparation and resilience on tips to prepare homes and develop an emergency plan

### **Land Management and Infrastructure**

Council continues to review, expand and maintain its fire access trails network, Asset Protection Zones (APZ), Land Management Zones (LMZ), Fuel Load Reduction, Fire Monitoring and Prescribed Burn programs. The programs are informed by a risk assessment and methodology in conjunction with QFES, Council's Parks and Conservation Unit and independent consultants Ten Rivers who have prepared fire management reports across the City, considering risk in the broader context of ecological values, aboriginal and cultural values and ongoing maintenance. As a result:

- a) In addition to an expanded land management programs Council continues to assess suitability of reticulated water (fire hydrants) and fire appliances with water capacity for a fire attack capability. This recognises that in every fire emergency, getting a hydrant to work is one of a firefighters' key priorities. During 2017/18 Council completed its assessment of all hydrant lines across the SMI; and for previously unused/valved off lines, the hydrants were pressurised and brought back on line.
- b) From September 2017 the Russell Island and Macleay Island transfer stations increased operating hours to 7 days a week to assist residents in land management practices. In 2018 the Mayor attended Canberra to lobby the Federal Government for an improved mobile phone service, as part of the Fire Report under the Australian Government's black spot funding program. In late February 2020 the new Optus tower on Russell Island started operating improving the ability to communicate in the event of any bush fires or natural disasters, including COVID-19 emergencies. A new North Stradbroke Island Telstra tower has been approved under the black spot funding program but is not yet operational.

### **Disaster Multidisciplinary Response**

The Fire Report produced by QFES is a key example of the multidisciplinary and multiagency response to bushfire threat that is covered under the State's Disaster Management framework and the Local Disaster Management Group (LDMG) formed under the *Disaster Management Act 2003*. As a result:

- a) The fire report was produced by QFES in consultation with Council and Local residents, Southern Moreton Bay Combined Island Association Representatives, Real Estate Agents on Russell and Macleay Islands, Queensland Police Service (QPS) Officers on Russell and Macleay Islands, State Emergency Services (SES) Officers on Russell Island, QFES Rural Fire Brigades on each island and regional representatives. The LDMG is a multiagency group consisting of multiple State bodies (including QFES, SES, QPWS, Qld Health, Dept of Communities), utilities (including Seqwater, Energex, Telstra, Optus, NBN), Community Groups (including Australian Red Cross, Salvation Army, Australian Coastguard, Volunteer Marine Rescue, Surf Life Saving Qld, Volunteering Qld) and private organisations and stakeholders (including Sealink and Quandamooka Yoolooburabee Aboriginal Corporation (QYAC)).
- b) Council liaises regularly across the community and external agencies to plan, prioritise and undertake its annual burn program. Council applies for an Annual Burn Permit to Light Fire which enables burning on Council-owned land on the islands and mainland. Council uses the State Government Bushfire Prone Area Mapping and the QFES SABRE (bush fire risk analysis) mapping tool to determine the high priority burn blocks throughout the Redlands Coast. The South-east Queensland Fire and Biodiversity Consortium and the Australasian Fire and Emergency Service Authorities Council (AFAC) also provide valuable information on fire management practices. Biannual Southern Area Fire Managers Group meetings are held with QYAC, QPWS, DNRME, Seqwater and Sibelco to discuss proposed burn plans and the potential to share resources. These meetings also allow the sharing of information about past burns. Council engages QYAC to undertake cultural heritage checks on all burn blocks prior to burn preparation works and before conducting burns.



- c) In December 2017 Council appointed a SMBI coordinator to strengthen the coordination of a broad range of operational and support services, including bush fire risk. After the Russell Island Fires in 2018, the LDMG appointed a new role of 'Marine Coordinator', to better facilitate coordination of multiagency vessels and volunteer vessels owned by private operators to assist in the response to bushfire and or disaster risks across the City Islands. This position was taken on by QPS Water Police as a member of the LDMG and aligns with their current duties and responsibilities. In 2019 the QPS also commissioned two new police vessels to operate from the Redland Bay water police facility. The vessels have responded to the Stradbroke Island bush fires and the provision and transportation of vehicles, police officers and other assets to assist the SMBI community. In 2020 Council purchased a new SES facility at Redland Bay that will have expanded capacity to deal with disaster across the SMBI and southern Redlands.
- d) In late 2018, Council launched the Redlands Disaster Dashboard at [disaster.redland.qld.gov.au](https://disaster.redland.qld.gov.au); a website that provides access to useful information for preparing, responding or recovering from a disaster event within the Redland City. Making it easier for residents to go to one online source to access information such as Road Conditions, Power Outages, Rainfall Radar, Weather Warnings, Fire Incidents, social media, planning tools and much more. In early 2020 Council enhanced the online Disaster Dashboard with an Emergency notification service that is an opt-in service which allows for emergency communications across the communities and multiple agencies. The online messaging complements new disaster signage that has been installed at all disaster evacuation centres and key transport and jetty locations.
- e) There are numerous other examples of a strengthened multiagency response to bushfire and disaster threat through the development of annual joint training exercises, including the local SES group who in October 2020 won ten regional and two State awards.

### **Regulation and Compliance**

The illegal dumping of waste on public and private property, the number of overgrown properties and properties where illegal building works had been conducted were identified by residents and QFES as major areas of concern that needed to be addressed if fire risk was to be reduced and community safety and amenity enhanced.

The Fire Report recommended Council take a tougher approach to enforcement of local laws to eliminate many of the issues identified as contributing factors to fire risk on the SMBI. As a result:

- a) Strengthened compliance action was developed which included a new community survey in 2018 to benchmark land owner awareness around fire management, as well as the development of improved mapping services to identify public lands and new fact sheets designed to increase community knowledge and support land owner responsibilities to reduce fire hazards, including Local Law obligations.
- b) The compliance actions were supported by the funding of dedicated Council officers to proactively monitor and enforce the Spring Clean-Up campaign that was launched in August 2017. By December 2018 the proactive compliance program had resulted in an assessment of approximately one third of all properties on Russell Island, and by June 2019 all of Russell Island had been assessed. By Feb 2020, Macleay Island, Karragarra Island and Lamb Island had been assessed. In general the majority of properties are now compliant noting fire risk will change based on seasonal factors and land owner maintenance activities. The program has continued and has completed an assessment of all of Russell Island at end of 2020 and will be focussing on Macleay; Karragarra Island and Lamb Island and the mainland in 2021/22.

- c) To date 764 notices have been issued to reduce fire hazards; 36 Penalty Infringement Notices (fines) issued; and 83 properties have been entered and cleared by Council Officers/Contractors to reduce fire hazards. There has also been an increased take-up by residents of regular maintenance services offered by private contractors to ensure fire risks are minimised. Council officers have also engaged with QFES to collaborate on identified high risk areas to develop current and future operational planning actions for private land.
- d) There have been various State led reviews into Queensland bushfire regulation and preparedness, that Councils Fire management program will continue to evolve and operate under. This includes the '2018 Queensland Bushfires Review Report A climate for good Neighbours (June 2019); the Queensland Audit office 2018/19 Report as a Follow-up of Bushfire Prevention and Preparedness and on 11 December 2020 the Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning the Honourable Dr Steven Miles released guidelines to help improve the bushfire resilience of new and existing homes. The guidelines are produced in consultation with the CSIRO incorporating learnings from years of experience across the country including lessons learned from Victoria's 2009 Black Saturday Bushfires.
- e) Vegetation protection in Queensland is a complex regulatory area and Council is continuing to work with stakeholders, including advocating to the Queensland State Government to address complexity and inconsistency to simplify responsibilities in managing bushfire risks across the city's large bushland areas, particularly those on existing private properties where clearing exemptions and planned burns may be approved by QFES. Council will continue to provide updated fact sheets that simplify the role of the City Plan, Local Law 6 Protection of Vegetation and Vegetation Protection Orders within the State Planning Regulatory framework.

## STRATEGIC IMPLICATIONS

### Legislative Requirements

In accordance with the *Queensland Disaster Management Act 2003*; local government is primarily responsible for taking preventative and preparatory measures to reduce the likelihood and severity of a disaster event occurring and ensure the community, resources and services are able to cope with the effects of an event within their local government area.

### Risk Management

The bush fire review offers substantial opportunity to build community resilience and focus efforts on continuous improvement to mitigate bushfire risks.

### Financial

The Fire Report implementation work is complete noting the existing fire management program occurs within existing financial budgets, as expanded by the Fire Report implementation activities.

### People

Council adopted a whole of Council strategy coordinated across multiple teams to deliver the Fire Report recommendations. The internal Fire Management Working Group formed to implement the recommendations is complete and incorporated into continuing business operations.

### Environmental

The fire mitigation work is conducted in accordance with cultural heritage requirements and considers environmental and ecological sensitivities.

### Social

Some social implications have been identified, including homeliness/temporary homes, hoarding, dumping, over grown allotments, unapproved structures and land uses, and related public infrastructure and services have called for a whole of government response with relevant State agencies is continuing to be advocated as a shared objective.

### Human Rights

There are no Human Rights issues.

### Alignment with Council's Policy and Plans

This report aligns with Council's new 'Corporate Plan 2021 to 2026 and Beyond', that has specifically identified a key initiative within the Natural Environment objectives, to partner with the community to manage fire risk through Council's fire management program.

## CONSULTATION

Consulted	Consultation Date	Comments/Actions
Fire Management Working Group	Multiple	Engagement forum

**OPTIONS****Option One**

The Council resolves to note the completion of the recommendations by Queensland Fire and Emergency Service in their Fire Management Plan Review Report of July 2017 into Council's ongoing operational business practices.

**Option Two**

That Council resolves to request further information regarding the implementation of the recommendations by Queensland Fire and Emergency Service in their Fire Management Plan Review Report of July 2017 into Council's ongoing operational business practices.

**OFFICER'S RECOMMENDATION**

**The Council resolves to note the completion of the recommendations by Queensland Fire and Emergency Service in their Fire Management Plan Review Report of July 2017 into Council's ongoing operational business practices.**

# **ATTACHMENT**

## **Fire Report Action List**

**Presented to Council General Meeting 20 January 2021**

**Redland City Council**

**Queensland Fire and Emergency Service**

## **FIRE MANAGEMENT REVIEW REPORT**

**Recommendations and Key Actions**

**2017 to 2021**

**Recommendation 1****Closed**

Raise community awareness of local laws via all available reporting and communication channels, encouraging residents to report instances of illegal dumping. Leverage off the Queensland Department of Environment and Heritage program "See It, Report It, Stop It".

Council's actions:

- Redland City Council (RCC/Council) Fire Review web information created 2017
- "Spring Clean" website and local law fact sheets released February 2018 with regular updates
- Disaster Management community stalls held in Cleveland, Capalaba, Victoria Point in January 2018 and generally fortnightly at city and island events since
- Issue on agenda for monthly multi-agency meetings and SMI Hub

**Recommendation 2****Closed**

Investigate the viability of operating island transfer stations seven days a week on Macleay and Russell islands, in the same manner as Lamb and Karragarra islands.

Council's actions:

- Trial of seven-day-a-week opening conducted on Macleay and Russell islands September 2017-January 2018
- Trial extended and continuing as business operations
- Community education campaigns included advertising, passenger ferry slides, letterbox drops and mail-outs to non-resident land/property owners

**Recommendation 3****Closed**

Investigate alternatives to the existing disposal fees for commercial green waste and the inclusion of mulching or chipping facilities at waste transfer stations to convert bulky green waste into a usable commodity for Council and community.

Council action:

- Due to past contamination of dumped green waste, decision taken by Redwaste not to offer mulched green waste back to the community, but mulch available from private services
- No change to current fees for commercial operators

**Recommendation 4****Closed and continuing**

Coordinate a systematic clean-up of impacted areas using Council personnel and resources with assistance from volunteer community groups or organisations such as Clean up Australia. As many illegal dumping locations are on private land, a partnership between Council and land-owners may be considered to assist in cost recovery. Any coordinated clean-up would include safety considerations for those involved.

Council actions:

- Initial inspection of Council-owned land across city completed and removal of illegally dumped rubbish costed
- New instances of reported illegal dumping to be investigated and cleaned up under business-as-usual activities
- Other clean-up options and priorities being examined

**Recommendation 5****Closed**

Consult with Rural Fire Service (RFS) regional office to identify their needs with regard to vehicle wrecks for road crash rescue training. While the vehicles will still require removal from the islands, the costs would be partially offset by the training opportunities for emergency services.

Council action:

- During consultation Queensland Fire and Emergency Services (QFES) advised vehicle wrecks on Southern Moreton Bay Islands (SMBI) unsuitable for training because of excessive cost of removing fuels, oils and glass prior to use

**Recommendation 6****Closed and continuing**

Implement a proactive approach to Council's local law enforcement on the SMBI, which will likely require additional enforcement personnel and up skilling of additional officers to assess matters relating to Local Law 3, including fuel loadings and reduction of hoarding and unsightly blocks.

Council actions:

- Tougher compliance program undertaken with two compliance officers for SMBI
- All SMBI properties assessed by Feb 2020 as generally compliant noting program continuing
- To date 764 notices have been issued to reduce fire hazards; 36 Penalty Infringement Notices (fines) issued; and 83 properties have had entered and cleared by Council Officers/Contractors.
- Increased take-up by residents of regular maintenance services offered by private contractors to ensure fire risks are minimised.
- Council officers have also engaged with QFES to collaborate on identified high risk areas
- 82 properties under further investigation

**Recommendation 7****Closed and continuing**

Investigate the feasibility of access control to popular illegal dumping sites. As many dump sites are on private land, cost recovery must be considered.

Council actions:

- Frequent dumping areas on SMBI to be assessed and blocked as required
- Access restriction to Council land considered on case by case basis and upgraded as required
- Existing fire access trails blocked by bollards
- Planned new trails to be blocked, allowing access only for fire management and maintenance

- Access restrictions to private land not being considered at this time due to legal issues and budget implications

<b>Recommendation 8</b>	<b>Closed</b>
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For illegal dumping or excessive build-up of fuel on private land, consider involvement of QFES, in accordance with the *Fire and Emergency Services ACT 1990* Section 69 which states: "...the occupier of a premises must take measures to reduce the risk of fire occurring and reduce the potential danger to persons, property and the environment in the event of a fire occurring".

Council action:

- QFES to be consulted with regard to identified non-compliance with regulations when it is determined additional powers are required

<b>Recommendation 9</b>	<b>Closed and continuing</b>
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Implement the recommended prescribed burn schedule contained within the QFES Predictive Services Report on Council-managed land.

Council actions:

- More than \$2 million budgeted for fire management in 2017-18 and 2018-19
- 14 planned burns completed in 2017 during season restricted by wet weather
- 34 planned burns scheduled for 2018/19 completed to October (10 mainland, 5 SMBI, 2 NSI).
- Annual Prescribed Burn Program continuing in consultation with multiply agencies

<b>Recommendation 10</b>	<b>Closed and continuing</b>
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Investigate the use of RFS and other service providers to assist or undertake these tasks. When conditions are favourable the prescribed burn program must be a priority.

Council action:

- Council to work in partnership with QFES and Quandamooka Yoolooburabee Aboriginal Corporation (QYAC) to deliver prescribed burns program
- To continue to work with RFS on fire mitigation strategies, where appropriate.

<b>Recommendation 11</b>	<b>Closed and continuing</b>
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In the event of prolonged unfavourable weather that limits prescribed burning, consideration must be given to implementing or strengthening fire access trails into the fire breaks, as detailed in Rob Friend and Associates Fire Break Assessment Report for Redland Shire Council 1996 and the Parsons Brinckerhoff SMBI Firebreak Report for Redland Shire Council 2005.

Council actions:

- Existing fire access trails inspected and 17km of new trails designed for construction
- Upgrade work undertaken to clear along established evacuation routes has been completed



- Strengthening and widening of other access trails underway and continuing
- QYAC has provided cultural heritage surveys which provides direction for Council with the creation and clearing of trails

**Recommendation 12****Closed and continuing**

When implementing any fire mitigation strategy, Council should ensure activities have a high profile and are publicised using all available channels. Council should report annually on prescribed burning outcomes in a manner that meets public accountability objectives, including publishing details of targets, areas burnt and funds expended on the program, as well as impacts on biodiversity. Council should lead by example with responsible management of fuel loadings on undeveloped land. Any publication of fire mitigation activities is to be accompanied by a call-to-action for private land-owners, to ensure a "Safer SMBI".

Council actions:

- Promotion of mitigation work being undertaken by Council to reduce fuel loads across SMBI.
- Annual mitigation program displayed on Council website:  
[https://www.redland.qld.gov.au/site\\_search/results/?q=Fire+Management](https://www.redland.qld.gov.au/site_search/results/?q=Fire+Management)
- "Safer SMBI" program launched to raise bush fire risk awareness
- "Spring Clean SMBI" program launched

**Recommendation 13****Closed and continuing**

Implement an awareness-raising campaign or SMBI residents to promote call-to-action to create a "Safer SMBI". The aim of the campaign will be to inform residents of the good work being done by Council and other land-owners, as well as educating residents and land-owners of their obligations under Local Law 3 Part 3 – overgrown and unsightly blocks and Part 4 – fire and fire hazards. The campaign also provides the opportunity to clarify the significant confusion among SMBI residents regarding Local Law 6 – protection of vegetation.

Council actions:

- "Safer SMBI" and Southern Redlands campaigns successfully rolled out
- Simple-to-understand local laws fact sheet produced and made available to residents
- Education campaign relating to Local Laws 3 and 6 incorporated into Disaster Planning and Operations "Street Speaks" program, which achieved more than 300 contact hours of engagement and helped educational activities to reach more than 25,000 people
- Survey conducted on SMBI to assess community's understanding of local laws. Survey results will inform future educational programs.

**Recommendation 14****Closed and continuing**

Encourage a closer working relationship between Council and RFS volunteers on the SMBI in the identification and management of blocks with excessive fuel loads on both Council and private land.

Council actions:

- RCC and RFS have a strong relationship and work collaboratively on fire mitigation activities
- Relationship has been strengthened through work of the Southern Fire Managers Group and with discussions about addressing issues raised on the Bay islands
- RCC/RFS collaborate on equipment/resource inspections and the annual burns program
- RFS volunteers help Council with prescribed burns on Russell Island

**Recommendation 15****Closed**

Upgrade the Red-e-map system to indicate which blocks are Council-managed and which are privately owned, to assist residents to identify who they need to mediate with to resolve issues.

Council action:

- Council's Red-e-map system currently shows Council-owned lots throughout the city

**Recommendation 16****Closed and continuing**

Consider engaging counselling services to assist residents that display hoarding behaviours. Council should ensure that enforcement officers are trained in dealing with vulnerable residents and those that display hoarding tendencies.

Council actions:

- Council's Environment and Regulation team continues formal compliance action across the SMBI in consultation with the Queensland Government's Department of Communities, Child Safety and Disability Services to provide staff to accompany local laws officers and help identify and assist residents who display hoarding behaviours
- Work is underway for Council's Community Development team to partner the Community Champions program with the newly-developed Community Hub, where external agencies work with senior members of the public to promote a "help from within" approach to social issues on the SMBI

**Recommendation 17****Closed**

Introduce and improve emergency information signage on the SMBI.

Council actions:

- Emergency signage installed at all major roads, transport hubs and SMBI Ferry Terminals
- Emergency information for signage endorsed by emergency services.

**Recommendation 18****Closed**

Erect evacuation area signs and neighbourhood safer places signage at relevant locations, with each including emergency contact details.

Council actions:

- Evacuation centre signs have been installed at Russell Island Recreation Hall, Macleay Island Community Hall, Point Lookout Community Hall, Dunwich Community Hall (via a roadside noticeboard as the building is heritage listed), Redland Bay Community Hall, Victoria Point Community Hall and Thorneside Community Hall
- QFES has provided fire danger rating signs that have been installed at Serpentine Creek, Redland Bay; Ford Road, Sheldon; Mt Cotton Road (South) Mt Cotton; West Mt Cotton Road Mt Cotton; Mt Cotton Road (West) Mt Cotton; East Coast Road, Point Lookout, NSI; Rickertt Road, Thorneside; and Moreton Bay Road, Capalaba

**Recommendation 19****Closed and continuing**

Council partner with RFS to analyse the results of the Predictive Services Unit (PSU) report and Bushfire Analysis Tool to tailor a new advance early warning protocol.

Council action:

- Council has prepared a number of pre-populated emergency warning messages for a range of hazard scenarios should an emergency alert be required. The messages can be released to target areas through the State Disaster Coordination Centre (SDCC)
- In late 2018, Council launched the Redlands Disaster Dashboard
- In early 2020 Council enhanced the online Disaster Dashboard with an Emergency notification service that is an opt-in service which allows for emergency communications across the communities and multiple agencies.

**Recommendation 20****Closed and continuing**

Council should consider partnering with existing volunteer organisations to ensure vulnerable communities are targeted with relevant safety messages, programs and instructions.

Council action:

- The 'Safer SMI', 'Spring Clean-up', 'know your neighbour', and 'Street Speaks' programs continue across the city to enhance community awareness and resilience
- Community Champions are actively involved in the ongoing education of residents
- Queensland Reconstruction Authority has assisted funding of the "Street Speaks" rollout

**Recommendation 21****Closed and continuing**

Conduct street audits to identify residents, addresses and locations requiring tailored emergency assistance during emergencies or evacuations, in collaboration with relevant authorities and community groups. The results are to be maintained in a register that is shared with emergency services and other support organisations.

Council actions:

- Vulnerable persons continue to be identified with State agencies and stakeholders to assist immediate contact should that be required

- Vulnerable communities have also been mapped by QFES, using its Simulation Analysis-Based Risk Evaluation (SABRE) bushfire risk analysis tool

<b>Recommendation 22</b>	<b>Closed</b>
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Create a simplified Disaster Management Plan.

Council actions:

- Island specific disaster management plans have been completed and distributed to the SMI, Coochiemudlo Island and the North Stradbroke Island (NSI) townships of Dunwich, Amity Point and Point Lookout

<b>Recommendation 23</b>	<b>Closed and continuing</b>
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Given the limited access many SMI residents have to emergency warnings and advice due to communication challenges, identification of alternatives must be given high priority, Council is to investigate other feasible methods to notify residents of emergencies.

Council actions:

- While the Redlands Coast's emergency communications capabilities have been assessed as "strong" by the Office of the Inspector General Emergency Management (IGEM), Council conducted a review to ascertain if it could be improved
- RCC Disaster Planning and Operations negotiated a new arrangement with local community radio station Bay FM which has resulted in a direct phone line to the studio to allow for live broadcasts during emergency events and an email address to the studios for provision of media releases, weather updates and general information regarding emergencies
- Lobbied Federal Government and succeeded in having the SMI included on the "Black Spots" program and funding made available for 2 new telecommunications towers, with one operating from Russel Island from February 2020 and one planned for NSI

<b>Recommendation 24</b>	<b>Closed and continuing</b>
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Complete an audit of the fire hydrant maintenance program to ensure community expectations of accessibility and usability are being achieved.

Council actions:

- More than 1000 hydrants on SMI inspected
- All hydrants inspected on Lamb and Karragarra islands
- Inspections on Russell and Macleay islands continuing
- City-wide hydrant inspection program continues

<b>Recommendation 25</b>	<b>Closed and continuing</b>
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Assist RFS and SES to encourage new membership via Council communications, website, community gatherings and other appropriate channels.

Council actions:

- An advertising campaign specifically targeting NSI was launched earlier this year to recruit new volunteer firefighters
- Campaign launched to recruit volunteers on the SMBI

<b>Recommendation 26</b>
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<b>Closed and continuing</b>
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Local RFS brigades have stated that road crash rescue training is cost-prohibitive due to the expenses of removing wrecked cars from the islands. Council should investigate any cost-neutral transport opportunities to assist with removal of cars after training.

Council action:

- Council has been advised by QFES of the preference to use the purpose-built Whyte Island training facility and that the use of vehicles from the SMBI was prohibitive because of the cost of removing fuel, oils and glass prior to use
- Other disposal options being considered

<b>Recommendation 27</b>
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<b>Closed and continuing</b>
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Assist RFS and SES to facilitate a Memorandum of Understanding (MOU) with operators of barges, ferries and other vessels in the area to establish a structured procedure for inter-island support to enable SMBI services to respond as a group to other islands.

Council actions:

- In or about 2018 the QPS appointed a marine coordinator to better facilitate coordination of multi-agency vessels and volunteer vessels
- In 2019 the QPS also commissioned two new police vessels to operate from the Redland Bay water police facility.

<b>Recommendation 28</b>
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<b>Closed and continuing</b>
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Monitor the condition and usability of the evacuation routes listed in the Disaster Management Plan and conduct pre-fire season assessments of the amount and condition of fire fuels adjacent.

Council actions:

- Current evacuation routes inspected and maintenance undertaken
- Main evacuation route on Russell Island (Centre Rd/Minjerriba Rd) and alternative (Glendale Rd) route inspected and cleared
- Additional/proposed evacuation routes to be incorporated into future maintenance schedules

<b>Recommendation 29</b>
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<b>Closed and continuing</b>
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Investigate any option to open a second evacuation route on Russell Island. If implemented, this new evacuation route must be communicated to the community and emergency plans updated.

Council actions:

- Alternative evacuation routes from Rocky Point investigated
- The northern side of Stradbroke Drive designed and is part of new priority new trail
- A second alternative being formalised from Glendale Rd or Lagoon Rd to provide access from south-west of island to eastern side

<b>Recommendation 30</b>	<b>Closed and continuing</b>
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Create access trails within the southern zone of Russell Island to allow RFS units to enter for fire suppression activities.

Council actions:

- Additional fire trails designed as part of 17km of priority new trails for construction
- QYAC has provided cultural heritage survey for Russell Island
- New fire management project manager appointed with new trails

<b>Recommendation 31</b>	<b>Closed and continuing</b>
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Revisit the current fire management practices detailed in the Redland City Council Bushfire Action Plan 2016, specifically Section 3 (South) of Russell Island. The plan recommends consideration of possible burns to maintain regional ecosystems. Given that protection of life and property is always to be placed above environmental concerns, prescribed burns should be considered to reduce the fine fuel loadings that currently increase the significant impact of wildfire.

Council actions:

- Fire ecologist commissioned to review fire management practices on Russell Island
- Geographic information system (GIS) mapping for Russell Island completed
- Review of other southern bay islands to follow, focusing on adequacy of SMBI bushfire mitigation works, fire trail infrastructure, proposed fire trails fire regimes

<b>Recommendation 32</b>	<b>Closed and continuing</b>
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As the current RCC Fire Management Operations Guidelines were prepared by QFES in 2007, it is recommended that this document be fully assessed to ensure it still presents an accurate guide for operations.

Council action:

- QFES engaged to update operational guidelines to ensure they meet best practice standards

<b>Recommendation 33</b>	<b>Closed and continuing</b>
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Conduct an analysis of the SMBI using SABRE tool to identify areas that require specific works to provide a greater level of safety to the community.

Council actions:

- SABRE tool reviewed and found to be compatible with Council systems
- Conservation fire staff undertake SABRE training

<b>Recommendation 34</b>	<b>Closed and continuing</b>
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Council to upgrade the Red-e-map system that displays properties that are currently covered by a Vegetation Protection Order (VPO). Additional information should be made available to indicate – who requested the VPO; date of notice of VPO; date of VPO confirmation; and vegetation type being protected.

Council action:

- VPO information under continuing review as part of City Plan
- Vegetation protection information published in fact sheet prepared for Local Laws 3 and 6
- Information provided to public regarding vegetation and VPOs via the “Fire, Vegetation and Property Management” fact sheet

<b>Recommendation 35</b>	<b>Closed and continuing</b>
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Consider an audit of possible dangerous trees on public land and make the results of the audit visible to public.

Council action:

- Work ongoing as part of business-as-usual activities

<b>Recommendation 36</b>	<b>Closed and continuing</b>
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Produce a simple, easy to understand, document that clearly states the obligations to land-owners relating to Local Law 3 – Community and Environmental Management and Local Law 6 – Protection of Vegetation.

Council action:

- Fact sheet endorsed by Council in February 2018 and uploaded onto relevant Council websites and printed copies being distributed via the “Street Speaks” program

<b>Recommendation 37</b>	<b>Closed and continuing</b>
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Conduct an education campaign for residents via social media, community meetings and other channels on how to access contact details for neighbouring properties for mutual vegetation and property management.

Council action:

- Process established for all disaster management advertising to contain information regarding how residents can make contact with neighbours

<b>Recommendation 38</b>	<b>Closed and continuing</b>
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Undertake a periodic survey of residents and land-owners to ensure local laws are being understood.

Council actions:

- Community Survey closed July 2018, with promotion through social media, island networks and letterbox drop of all residents
- 94 completed surveys assisted Council in planning response
- Local laws fact sheets prepared and made available

#### **Recommendation 39**

**Closed and continuing**

Implement recommended fire trails as per Fire Trail Assessment. As some recommended access trails would be constructed and maintained on private land to enhance safety of the community, negotiations between Council and private land-owners will be required.

Council actions:

- Proposed trails mapped and marked and being implemented
- Private blocks requiring boundary surveys identified
- QYAC provides cultural heritage survey for Russell

#### **Recommendation 40**

**Closed and continuing**

Conduct an internal audit of fire access trails and tracks to ensure they meet the requirements laid out in Rob Friend and Associates Fire Break Assessment Report for Redland Shire Council 1996 and Parsons Brinckerhoff SMI Firebreak Report for Redland Shire Council 2005.

Council actions:

- All major reserves assessed and included on scheduled maintenance program
- City-wide inspections of fire access trails and tracks ongoing
- Slashing and maintenance of trails ongoing

#### **Recommendation 41**

**Closed and continuing**

Annual inspection and maintenance by Council of all fire access track bollards and locks.

Council action:

- Included in annual asset inspection program and business-as-usual operations

#### **Recommendation 42**

**Closed and continuing**

Implementation of proposed fire trails and data shared between Council and QFES for inclusion in fire management tools and QFES TOM system.

Council actions:

- Continued regular liaison with QFES regarding fire mitigation strategies
- Data sharing with QFES continues



**Recommendation 43****Closed and continuing**

Implement a program to review fuel levels within all land management zones, including exclusion zones

Council actions:

- Prescribed burns program continually under review
- Fuel load assessments being undertaken of proposed burn sites
- Assessments of fuel load completed annually as business-as-usual

**Recommendation 44****Closed and continuing**

Use Fire Danger Index (FDI) 20 for general bushfire risk decision-making regardless of the efficacy of planned mitigation efforts.

Council actions:

- Mitigation burn schedule incorporated into future activities
- Latest fire treatment information provided to QFES

**Recommendation 45****Closed and continuing**

Utilise QFES PSU to repeat a simulation-based approach to annual bushfire risk analysis, updating the latest fire scar history, fuel maps, disruptions etc. Council should provide the latest fuel treatment history and fire scar data in March each year, and the analysis be repeated at FDI 20.

Council actions:

- Procedures updated in line with SABRE risk analysis tool
- Officers trained under SABRE to conduct simulation-based modelling for annual risk analysis
- Latest fuel treatment information provided to QFES

**Recommendation 46****Closed and continuing**

Use the SABRE tool created for this study to undertake a detailed analysis of the mainland area for FDI 20+ to identify any areas or issues that may require attention.

Council action:

- Officers trained to complete this work on mainland

**Recommendation 47****Closed and continuing**

That all trails bordering all management zones, except wildlife mitigation zones and urban or commercial development, should be maintained to a minimum of Type 3, including the five-metre fuel reduced zone beyond the five-metre slash line.

Council actions:

- Existing fire trails and fire breaks inspected and being maintained
- Work continues to clear trails within the zones
- Council continually consulting with RFS on fuel load reduction target

**Recommendation 48****Closed and continuing**

Conduct a minimum six-monthly assessment of all perimeter trails and breaks to ensure that remain fit for purpose and meet outlined standards.

Council actions:

- Perimeter fire trails and fire breaks assessed and ongoing maintenance and future inspections incorporated into business as usual activities

**Recommendation 49****Closed and continuing**

Council to use the SABRE tool to undertake its own detailed analysis of areas covered by VPOs on the mainland.

Council actions:

- Officers trained in use of SABRE tool
- Current VPO information under review as part of new City Plan rollout

**Recommendation 50****Closed and continuing**

Work with QFES to roll out additional awareness and educational material that explains how residents can best manage vegetation on blocks covered by VPOs.

Council action:

- In collaboration with QFES, Council has developed a fact sheet to explain Local Laws 3 and 6 and how residents can manage vegetation on all blocks, including those with VPOs
- Fact sheet widely distributed through community engagement activities, letterbox drops and displayed on Council website

**Recommendation 51****Closed**

Council to consider updating sections 4.1 Natural Disaster Vulnerability and section 2 – Locality Risk Profiles within the current Redland City Council Disaster Management Plan to include fire weather appreciation information to explain FDI levels and the levels upon which fire mitigation strategies are based; an impact area map displaying potential ember attack areas; and direct attack success probability

Council action:

- Council has referred this action to QFES as lead agency to advise on success probability rates in fire-fighting

**Recommendation 52****Closed and continuing**

Conduct an assessment of the EZk4 and EZs1 (fire exclusion zones) to determine the environmental objective of these areas. Develop a plan to reduce and maintain the fuel loading in these zones to below 16 tonnes per hectare.

Council actions:

- After review by Council and QFES all Fire Exclusion Zones (FEZ) have been removed and incorporated into Wildlife Mitigation Zones (WMZ) that allow a greater reduction in fuel load
- EZ zones renamed "Low Burn Zones" indicating that fuel reduction burns can occur
- Fire consultant ecologist reviewing fire action plans for SMBI
- Discussions continue with QFES regarding the 16 tonnes per hectare fuel load target

**Recommendation 53****Closed and continuing**

Construct and maintain a fire access trail that follows the boundary between private land and Council-controlled land, to allow protection of adjacent houses and rapid access for QFES resources to the back of the properties.

Council action:

- Existing fire access trail adjacent to the specified area has been audited is considered suitable to protect the homes specified in the fire review report

**Recommendation 54****Closed and continuing**

On days of forecast FDI 30+ or QFES Wildfire Alert Level 3, Council is to ensure that a bulk water tanker be made available for immediate response on request from QFES

Council action:

- Council does not provide first response attack fire-fighting capability but maintains fleet of vehicles for hazard mitigation and provide personnel to assist QFES in combating fire
- QFES liaise with South East Region to activate more resources if needed in the event of fire

**Recommendation 55****Closed and continuing**

Liaise with QFES to identify any capacity to introduce a community-based bushfire education program via voluntary community educators.

Council actions:

- Council has partnered with RFS and SES who have well-established volunteer community education programs
- Regular advertising campaigns have been incorporated into Disaster Planning and Operations business as usual
- Community Champions are actively involved in dissemination of information to the general public

**Recommendation 56****Closed and continuing**

Perform an audit of the Council area to identify all significant cultural and heritage locations and implement steps to ensure that these assets are protected from impact by wildfire.

Council actions:

- QYAC has undertaken cultural heritage studies of priority areas as part of the annual fire mitigation works and prescribed burns program

**GLOSSARY OF TERMS**

City Plan – Redlands Coast’s new planning scheme

Council – Redland City Council

DNRME – Queensland Government Department of Natural Resources, Mining and Energy

FDI – Fire danger index

FEZ – Fire exclusion zones

FRZ – Fuel reduction zones

GIS mapping – geographic information system mapping

IGEM – Inspector-General Emergency Management

LDMG – Local Disaster Management Group

MOU – Memorandum of Understanding

NSI – North Stradbroke Island

PSU – Queensland Fire and Emergency Services Predictive Services Unit

QFES – Queensland Fire and Emergency Services

QPWS – Queensland Government Parks and Wildlife Service

QRA – Queensland Reconstruction Authority

QYAC – Quandamooka Yoolooburrabee Aboriginal Corporation

Redwaste – Redland City Council waste department

RI – Russell Island

RFS – Rural Fire Service

SABRE – Simulation Analysis-Based Risk Evaluation (QFES bushfire risk analysis tool)

SDCC – State Disaster Coordination Centre

SES – State Emergency Service

SMBI – Southern Moreton Bay Islands (Russell, Macleay, Lamb, Karragarra)

Street Speaks – Council’s educational program for SMBI residents to highlight the need for disaster preparedness and resilience

VPO – Vegetation Protection Order

WMZ – Wildlife Mitigation Zone

## 14 REPORTS FROM COMMUNITY & CUSTOMER SERVICES

### 14.1 DECISIONS MADE UNDER DELEGATED AUTHORITY FOR CATEGORY 1, 2 AND 3 DEVELOPMENT APPLICATIONS

**Objective Reference:**

**Authorising Officer:** Louise Rusan, General Manager Community & Customer Services

**Responsible Officer:** David Jeanes, Group Manager City Planning & Assessment

**Report Author:** Jill Driscoll, Group Support Coordinator

**Attachments:** 1. Decisions made under delegated authority 15.11.2020 to 05.12.2020 [↓](#)

#### PURPOSE

To note decisions made under delegated authority for development applications (Attachment 1). This information is provided for public interest.

#### BACKGROUND

At the General Meeting of 21 June 2017, Council resolved that development assessments be classified into the following four categories:

Category 1 – minor code and referral agency assessments

Category 2 – moderately complex code and impact assessments

Category 3 – complex code and impact assessments

Category 4 – major assessments (not included in this report)

The applications details in this report have been assessed under:

**Category 1** – Minor code assessable applications, concurrence agency referral, minor operational works and minor compliance works, and minor change requests and extension to currency period where the original application was Category 1.

Delegation Level: Chief Executive Officer, General Manager, Group Managers, Service Manager, Team Leaders and Principal Planners as identified in the officer's instrument of delegation.

**Category 2** – In addition to Category 1, moderately complex code assessable applications, including operational works and compliance works and impact assessable applications without objecting submissions; other change requests and variation request where the original application was Category 1,2,3 or 4\*.

*\*Provided the requests do not affect the reason(s) for the call in by the Councillor (or that there is agreement from the Councillor that it can be dealt with under delegation).*

Delegation Level: Chief Executive Officer, General Manager, Group Managers and Service Managers as identified in the officer's instrument of delegation.

**Category 3** – In addition to Category 1 and 2, applications for code or impact assessment with a higher level of complexity. They may have minor level aspects outside a stated policy position that are subject to discretionary provision of the planning scheme. Impact applications may involve submissions objecting to the proposal readily addressable by reasonable and relevant conditions. Assessing superseded planning scheme requests and approving a plan of subdivision.

Delegation Level: Chief Executive Officer, General Manager and Group Managers as identified in the officer's instrument of delegation.

**Human Rights**

There are no known human rights implication associated with this report.

**OFFICER'S RECOMMENDATION**

**That Council resolves to note this report.**

## Attachment 1 Decisions Made Under Delegated Authority 15.11.2020 to 05.12.2020

## Decisions Made Under Delegated Authority 15.11.2020 to 21.11.2020

## CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0474	Design and Siting - Dwelling	Building Code Approval Group Pty Ltd	380 Birkdale Road Wellington Point QLD 4160	Referral Agency Response - Planning	16/11/2020	N/A	Approved	1
CAR20/0481	Design and Siting - Garage	Vadim RIBINSKY	23 Mergowie Drive Cleveland QLD 4163	Referral Agency Response - Planning	17/11/2020	N/A	Approved	2
MCU20/0117	Dual occupancy	Urban Planners Queensland Pty Ltd	1 Mooloolomba Road Point Lookout QLD 4183	Code Assessment	20/11/2020	N/A	Development Permit	2
CAR20/0467	Design and Siting - Patio roof	Pronto Building Approvals	50 Morris Circuit Thornlands QLD 4164	Referral Agency Response - Planning	16/11/2020	N/A	Approved	3
CAR20/0468	Design and Siting - Carport	A1 Certifier Pty Ltd	43 Whipbird Circuit Victoria Point QLD 4165	Referral Agency Response - Planning	16/11/2020	N/A	Approved	4
MCU20/0109	Dwelling house	Heisig Constructions	1 Orana Esplanade Victoria Point QLD 4165	Code Assessment	18/11/2020	N/A	Development Permit	4
CAR20/0473	Design and Siting - Dwelling	Bartley Burns Certifiers & Planners	17 Flora Street Lamb Island QLD 4184	Referral Agency Response - Planning	18/11/2020	N/A	Approved	5
MCU20/0096	Dwelling house	Margaretha Jacoba Cornelia ANDERSON	56 Bay Drive Russell Island QLD 4184	Code Assessment	16/11/2020	N/A	Development Permit	5
MCU20/0141	Change to development approval MCU013975 - Dwelling	Bay Island Designs Building Approvals United	20 Timothy Street Macleay Island QLD 4184	Minor Change to Approval	16/11/2020	N/A	Approved	5



**Decisions Made Under Delegated Authority 15.11.2020 to 21.11.2020****CATEGORY1**

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0477	Design and Siting - Shed	Daniel Martin SUTHERLAND	30 Pitt Road Birkdale QLD 4159	Referral Agency Response - Planning	19/11/2020	N/A	Approved	10
CAR20/0478	Design and Siting - Carport and Patio	Cornerstone Building Certification	19 Wren Street Birkdale QLD 4159	Referral Agency Response - Planning	20/11/2020	N/A	Approved	10

### Decisions Made Under Delegated Authority 15.11.2020 to 21.11.2020

#### CATEGORY2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CWA20/0011	Civil Works - Commercial and Residential Units and ROL (MCU19/0150)	Doug Murphy and Freddy LUKITO	26 Wellesley Street Wellington Point QLD 4160	Conditioned Works	19/11/2020	N/A	Permit Issued	1
OPW20/0002.01	Change to Development Approval (OPW20/0002)	41 Mindarie Holdings Pty Ltd	41 Mindarie Crescent Wellington Point QLD 4160	Minor Change to Approval	19/11/2020	N/A	Approved	1
OPW19/0125	Excavation & Fill (incl. Retaining walls)	Daniel James DAUNCEY	3 Bluebird Court Thornlands QLD 4164	Code Assessment	17/11/2020	N/A	Development Permit	7
OPW20/0024	Operational Works for RAL 1 into 4 lots	HCE Engineers	55-57 Burbank Road Birkdale QLD 4159	Code Assessment	28/08/2020	16/11/2020	Development Permit	10
OPW20/0095	Operational Works for RAL - 2 into 2 Lots	Debra Gay WARDLE	69-71 Thorneside Road Thorneside QLD 4158	Code Assessment	16/11/2020	N/A	Development Permit	10

### Decisions Made Under Delegated Authority 22.11.2020 to 28.11.2020

#### CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0480	Design and Siting - Open Carport	Steve Bartley & Associates Pty Ltd	3 Canegrove Circuit Wellington Point QLD 4160	Referral Agency Response - Planning	23/11/2020	N/A	Approved	1
DBW20/0036	Domestic Additions/Design & Siting/BOS - Patio roof	Bea Thomson FRANCE	136 Shore Street North Cleveland QLD 4163	Code Assessment	25/11/2020	N/A	Development Permit	2
CAR20/0452	Design and Siting - Shed	Damien William SHAW Danielle Maree SHAW	29 Albicore Drive Thornlands QLD 4164	Referral Agency Response - Planning	26/11/2020	N/A	Approved	3
CAR20/0485	Amenity and Aesthetics & Design and Siting - Removal Dwelling	The Certifier Pty Ltd	18 Mareela Street Coochiemudlo Island QLD 4184	Referral Agency Response - Planning	23/11/2020	N/A	Approved	4
CAR20/0489	Design and Siting - Shed	Gregory James LLOYD	16 Derwent Street Macleay Island QLD 4184	Referral Agency Response - Planning	23/11/2020	N/A	Approved	5
CAR20/0490	Design and Siting - Dwelling	Bay Island Designs	56-58 Taylor Street Russell Island QLD 4184	Referral Agency Response - Planning	26/11/2020	N/A	Approved	5
CAR20/0491	Design and Siting - Dwelling	Bay Island Designs	54 Taylor Street Russell Island QLD 4184	Referral Agency Response - Planning	26/11/2020	N/A	Approved	5
CAR20/0492	Design and Siting - Dwelling	Bay Island Designs	56-58 Taylor Street Russell Island QLD 4184	Referral Agency Response - Planning	26/11/2020	N/A	Approved	5

## Decisions Made Under Delegated Authority 22.11.2020 to 28.11.2020

## CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
MCU20/0102	Dwelling house	Paul John PARKINSON	24 Koonwarra Parade Macleay Island QLD 4184	Code Assessment	23/11/2020	N/A	Development Permit	5
MCU20/0104	Dwelling house	Esther Elizabeth BAKLIS Marin BASIC	149-151 Canaipa Point Drive Russell Island QLD 4184	Code Assessment	23/11/2020	N/A	Development Permit	5
CAR20/0482	Design and Siting - Dwelling	The Certifier Pty Ltd	8 Azalea Street Redland Bay QLD 4165	Referral Agency Response - Planning	23/11/2020	N/A	Approved	6
CAR20/0466	Build Over or Near Relevant Infrastructure	The Certifier Pty Ltd	8 Somerset Street Alexandra Hills QLD 4161	Referral Agency Response - Engineering	23/11/2020	N/A	Approved	7
CAR20/0484	Design and Siting - Patio	Bandera Pty Ltd	Era Living 9 Moogerah Street Capalaba QLD 4157	Referral Agency Response - Planning	24/11/2020	N/A	Approved	7
CAR20/0504	Design and Siting - Outbuilding	A1 Certifier Pty Ltd	13 Queensbury Court Wellington Point QLD 4160	Referral Agency Response - Planning	27/11/2020	N/A	Approved	8
CAR20/0494	Design and Siting - Additions	A1 Certifier Pty Ltd	12-14 Stanley Street Capalaba QLD 4157	Referral Agency Response - Planning	26/11/2020	N/A	Approved	9
CAR20/0497	Design and Siting - Dwelling house	Total Building Consult Pty Ltd	21 Pulbrook Drive Capalaba QLD 4157	Referral Agency Response - Planning	25/11/2020	N/A	Approved	9
CAR20/0505	Design and Siting - Shed	Jared Anthony DONNELLY	12 Cook Street Capalaba QLD 4157	Referral Agency Response - Planning	25/11/2020	N/A	Approved	9

### Decisions Made Under Delegated Authority 22.11.2020 to 28.11.2020

#### CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0400	Design and Siting - BOS Carports	K P Building Approvals Pty Ltd	1 Riaweena Street Thorneside QLD 4158	Referral Agency Response - Planning	27/11/2020	N/A	Approved	10
CAR20/0476	Design and Siting - Dwelling	Liane M DAY	7 Mary Street Birkdale QLD 4159	Referral Agency Response - Planning	23/11/2020	N/A	Approved	10
CAR20/0483	Design and Siting - Open deck	Total Plan Service	31 Spoonbill Street Birkdale QLD 4159	Referral Agency Response - Planning	23/11/2020	N/A	Approved	10
CAR20/0500	Design and Siting - Domestic Outbuilding	David J PRENTICE Rhonda May DWYER- PRENTICE	22 Pitt Road Birkdale QLD 4159	Referral Agency Response - Planning	24/11/2020	N/A	Approved	10
MCU20/0120	Dual occupancy	Cornelis Machiel OLIVIER	12A Maud Street Birkdale QLD 4159	Code Assessment	24/11/2020	N/A	Development Permit	10
OPW20/0099	Operational Works - Domestic Driveway Crossover	Donna Ellenn HENDERSON	63 Thomas Street Birkdale QLD 4159	Code Assessment	27/11/2020	N/A	Development Permit	10

### Decisions Made Under Delegated Authority 22.11.2020 to 28.11.2020

#### CATEGORY2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
OPW20/0094	Prescribed Tidal Works - Removal of existing pontoon and installation of new pontoon	Justin Wade TODD	35 Mainroyal Court Cleveland QLD 4163	Code Assessment	25/11/2020	N/A	Development Permit	2
OPW20/0102	Prescribed Tidal Works - Pontoon	Chu-Lin WANG	42 Caravel Court Cleveland QLD 4163	Code Assessment	24/11/2020	N/A	Development Permit	2
RAL18/0119.02	Change to Development Approval - RAL18/0119 Reconfiguring a lot - Standard Format 1 into 24 Lots	Choi Ted WONG Daniel Choi Hing WONG Katherine Oi Shee WONG Lombards Property Holdings Pty Ltd Timothy Choi Tim WONG	9A Laura Street Cleveland QLD 4163	Minor Change to Approval	23/11/2020	N/A	Approved	2
OPW20/0085	Excavation & Fill (incl. Retaining walls)	The Certifier Pty Ltd	8 Alawa Street Macleay Island QLD 4184	Code Assessment	23/11/2020	N/A	Development Permit	5
OPW20/0087	Excavation & Fill incl. Retaining wall	Christopher Luke ANGEL	45 Balthazar Circuit Mount Cotton QLD 4165	Code Assessment	26/11/2020	N/A	Development Permit	6
OPW19/0039.01	Extension to Currency Period - Operational Works - 1 into 45 lots	Harridan Pty Ltd	84-86 Kinross Road Thornlands QLD 4164	Minor Change to Approval	26/11/2020	N/A	Approved	7
OPW20/0101	Operational works - Domestic Driveway Crossover	Theresa Kaye FLEMMING	11 Carrock Street Alexandra Hills QLD 4161	Code Assessment	24/11/2020	N/A	Development Permit	7

### Decisions Made Under Delegated Authority 29.11.2020 to 05.12.2020

#### CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
DBW20/0049	Domestic Additions - Dwelling	Steve Bartley & Associates Pty Ltd	12-16 Champion Lane Wellington Point QLD 4160	Code Assessment	01/12/2020	N/A	Development Permit	1
RAL20/0070	Reconfiguring a lot - Standard Format 1 into 4	Statcorp Pty Ltd	79-81 Princess Street Cleveland QLD 4163	Code Assessment	30/11/2020	N/A	Development Permit	2
CAR20/0495	Design and Siting - Awning & Pergola	Fluid Approvals	15 Pleasant Court Cleveland QLD 4163	Referral Agency Response - Planning	02/12/2020	N/A	Approved	3
CAR20/0506	Design and Siting - Shed	East Coast Surveys Pty Ltd	243-247 Redland Bay Road Thornlands QLD 4164	Referral Agency Response - Planning	02/12/2020	N/A	Approved	3
CAR20/0514	Design and Siting - Dwelling	G Developments Pty Ltd	61 Bay Street Cleveland QLD 4163	Referral Agency Response - Planning	02/12/2020	N/A	Approved	3
CAR20/0517	Design and Siting - Roofed Deck	The Certifier Pty Ltd	1-19 Dinwoodie Road Thornlands QLD 4164	Referral Agency Response - Planning	30/11/2020	N/A	Approved	3
CAR20/0513	Design and Siting - Dwelling House	Ashcroft Architects Pty Ltd (Redland Bay)	6 Cartwright Street Victoria Point QLD 4165	Referral Agency Response - Planning	03/12/2020	N/A	Approved	4
CAR20/0471	Design and Siting - Shed	Adept Building Approvals	26 Coolabah Street Russell Island QLD 4184	Referral Agency Response - Planning	02/12/2020	N/A	Approved	5

## Decisions Made Under Delegated Authority 29.11.2020 to 05.12.2020

## CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0479	Design and Siting - Dwelling	Palladio Homes Pty Ltd (Burleigh)	24 Wilson Esplanade Redland Bay QLD 4165	Referral Agency Response - Planning	30/11/2020	N/A	Approved	5
CAR20/0508	Design and Siting - Dwelling and Carport	Professional Certification Group Pty Ltd	8 Capewell Court Russell Island QLD 4184	Referral Agency Response - Planning	04/12/2020	N/A	Approved	5
CAR20/0528	Design and Siting - Dwelling	Platinum Building Approvals	32 Todman Street South Russell Island QLD 4184	Referral Agency Response - Planning	01/12/2020	N/A	Approved	5
CAR20/0493	Design and Siting - Open Pergola	Fluid Building Approvals Brisbane	3 Brut Street Mount Cotton QLD 4165	Referral Agency Response - Planning	30/11/2020	N/A	Approved	6
CAR20/0507	Design and Siting - Patio	Fastrack Building Certification	23 Sunningdale Drive Redland Bay QLD 4165	Referral Agency Response - Planning	01/12/2020	N/A	Approved	6
CAR20/0512	Design and Siting - Dwelling	Dixonbuild Pty Ltd	2 Village Drive Mount Cotton QLD 4165	Referral Agency Response - Planning	03/12/2020	N/A	Approved	6
CAR20/0171	Design and Siting/BOS - Retaining wall/fence	K P Building Approvals Pty Ltd	1-3 Edgar Court Alexandra Hills QLD 4161	Referral Agency Response - Planning	02/12/2020	N/A	Approved	7
CAR20/0499	Design and Siting - Garaport	A1 Certifier Pty Ltd	40 Arlington Street Cleveland QLD 4163	Referral Agency Response - Planning	03/12/2020	N/A	Approved	7



## Decisions Made Under Delegated Authority 29.11.2020 to 05.12.2020

## CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR20/0509	Design and Siting - Domestic Outbuilding	Adept Building Approvals	23 Drevesen Avenue Cleveland QLD 4163	Referral Agency Response - Planning	30/11/2020	N/A	Approved	7
CAR20/0524	Design and Siting - Pergola	K P Building Approvals Pty Ltd	8 Ingham Street Capalaba QLD 4157	Referral Agency Response - Planning	01/12/2020	N/A	Approved	7
MCU20/0010	Home based business	Ellenick Pty Ltd As Trustee	285 Redland Bay Road Capalaba QLD 4157	Code Assessment	04/12/2020	N/A	Development Permit	7
CAR20/0526	Design and Siting - Dwelling House	Vadim RIBINSKY JNR	21 Highridge Place Alexandra Hills QLD 4161	Referral Agency Response - Planning	03/12/2020	N/A	Approved	8
CAR20/0496	Design and Siting - Carport	Christopher Charles TESTROW	80 Wentworth Drive Capalaba QLD 4157	Referral Agency Response - Planning	02/12/2020	N/A	Approved	9
CAR20/0519	Design and Siting - Carport	Corban Fraser Edward NEELEY Phoebe Blanche NEELEY	12 Blaxland Street Capalaba QLD 4157	Referral Agency Response - Planning	30/11/2020	N/A	Approved	9
CAR20/0531	Design and Siting - Domestic Outbuilding	Grant Bradley SMITH Kellie Ann SMITH	14 Ironbark Street Capalaba QLD 4157	Referral Agency Response - Planning	04/12/2020	N/A	Approved	9
CAR20/0522	Design and Siting - Carport	RDs Building Approvals	72 Mary Pleasant Drive Birkdale QLD 4159	Referral Agency Response - Planning	01/12/2020	N/A	Approved	10
CAR20/0527	Design and Siting - Dwelling and build over/near infrastructure	Metricon Homes Pty Ltd	230 Mooroondu Road Thorneside QLD 4158	Referral Agency Response - Planning	03/12/2020	N/A	Approved	10

### Decisions Made Under Delegated Authority 29.11.2020 to 05.12.2020

#### CATEGORY2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
OPW20/0098	Prescribed Tidal Works - Pontoon Structure	Charles William ROBSON Sandra Leigh ROBSON	7 Marram Court Cleveland QLD 4163	Code Assessment	04/12/2020	N/A	Development Permit	2
CWA20/0014	Multiple Dwelling x 4	Lenecon	11 Boat Street Victoria Point QLD 4165	Conditioned Works	02/12/2020	N/A	Permit Issued	4
CAR20/0516	Build Over or Near Relevant Infrastructure	Bartley Burns Certifiers & Planners	54 Lochridge Street Thornlands QLD 4164	Referral Agency Response - Engineering	04/12/2020	N/A	Approved	7

## 14.2 LIST OF DEVELOPMENT AND PLANNING RELATED COURT MATTERS AS AT 16 DECEMBER 2020

### Objective Reference:

**Authorising Officer:** Louise Rusan, General Manager Community & Customer Services

**Responsible Officer:** David Jeanes, Group Manager City Planning & Assessment

**Report Author:** Michael Anderson, Senior Appeals Planner

**Attachments:** Nil

### PURPOSE

To note the current development and planning related appeals and other related matters/proceedings.

### BACKGROUND

Information on appeals and other related matters may be found as follows:

#### 1. Planning and Environment Court

a) Information on current appeals and applications with the Planning and Environment Court involving Redland City Council can be found at the District Court website using the "Search civil files (eCourts) Party Search" service:

<http://www.courts.qld.gov.au/services/search-for-a-court-file/search-civil-files-ecourts>

b) Judgments of the Planning and Environment Court can be viewed via the Supreme Court of Queensland Library website under the Planning and Environment Court link:

<http://www.sclqld.org.au/qjudgment/>

#### 2. Court of Appeal

Information on the process and how to search for a copy of Court of Appeal documents can be found at the Supreme Court (Court of Appeal) website:

<https://www.courts.qld.gov.au/courts/court-of-appeal/the-appeal-process>

#### 3. Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)

The DSDMIP provides a Database of Appeals that may be searched for past appeals and applications heard by the Planning and Environment Court:

<https://planning.dsdmip.qld.gov.au/planning/spa-system/dispute-resolution-under-spa/planning-and-environment-court/planning-and-environment-court-appeals-database>

The database contains:

a) A consolidated list of all appeals and applications lodged in the Planning and Environment Courts across Queensland of which the Chief Executive has been notified.

b) Information about the appeal or application, including the file number, name and year, the site address and local government.

#### 4. Department of Housing and Public Works (DHPW)

Information on the process and remit of development tribunals can be found at the DHPW website:

<http://www.hpw.qld.gov.au/construction/BuildingPlumbing/DisputeResolution/Pages/default.aspx>

## PLANNING &amp; ENVIRONMENT COURT APPEALS &amp; APPLICATIONS

<b>1.</b>	<b>File Number:</b>	3829 of 2019
	<b>Appellant:</b>	<b>Sutgold Pty Ltd v Redland City Council</b>
	<b>Respondent:</b>	<b>Redland City Council</b>
	<b>Proposed Development:</b>	Reconfiguring a Lot (8 lots into 176 lots and new roads) 72, 74, 78, 80, 82 Double Jump Road, 158-166, 168-172 and 174-178 Bunker Road, Victoria Point (Lots 12, 13, 15, 22 and 21 on RP86773, Lots 16 and 20 on SP293877 and Lot 12 on RP898198)
	<b>Appeal Details:</b>	Appeal against deemed refusal by Council.
	<b>Current Status:</b>	<p>Appeal filed 23 October 2019. An early without prejudice meeting was held on 26 November 2019. A directions hearing was held on 6 February 2020. A list of matters supporting an approval was provided by the Appellant on 14 April 2020. The list of experts has been nominated and without prejudice conferences were held with the Appellant on 6, 14 and 21 May 2020 to discuss Council's position and proposed changes. A review was held on 17 June 2020 and it was ordered that the Appellant was to file and serve any application for a minor change by 26 June 2020. By 15 July 2020, the Respondent and Co-Respondent were to file and serve a written response to the Appellant's minor change application stating whether it will or will not oppose the declaration being made. Council was required to notify of its position on the appeal by 24 July 2020, should the Court determine the changes are minor.</p> <p>The matter was reported to the General Meeting of Council on 22 July 2020. It was confirmed that the proposed changes were a minor change but Council was still opposing the application. The parties were notified of Council's position on 24 July 2020. A without prejudice meeting was held with the appellant on 22 July 2020.</p> <p>The matter was considered at a hearing on 6 August 2020 where it was ordered that the infrastructure and traffic experts nominated by the parties are to meet and prepare a joint expert report (JER), to be completed by 18 September 2020. JERs in respect of town planning and engineering were received on 23 November and 24 November 2020 respectively. The ecology and traffic JERs were received on 10 and 14 December 2020 respectively. The appeal is allocated for a hearing in March 2021 for 8 days.</p>

<b>2.</b>	<b>File Number:</b>	4312 of 2019
<b>Appellant:</b>		<b>New Land Tourism Pty Ltd</b>
<b>Respondent:</b>		<b>Redland City Council</b>
<b>First Co-respondents (By election):</b>		<b>Benjamin Alistair Mackay and Renee Michelle Mackay</b>
<b>Second Co-respondents (By election):</b>		<b>Debbie Tye-Anderson, Kerri Vidler, Lee Nicholson, Peter Anderson, Vanessa Anderson, Thelma Anderson</b>
<b>Proposed Development:</b>		Material change of use (tourist accommodation) 147-205 Rocky Passage Road, Redland Bay (Lot 3 on RP153333)
<b>Appeal Details:</b>		Appeal against Council's decision to give a preliminary approval for a development application.
<b>Current Status:</b>		<p>Appeal filed 29 November 2019. A review was held on 11 June 2020 and it was ordered that the Appellant shall provide without prejudice material to all other parties by 24 June 2020. A without prejudice conference, chaired by the P &amp; E ADR Registrar, was held on 22 July 2020.</p> <p>At a review on 5 August 2020 it was ordered that the appellant shall provide to the other parties without prejudice material addressing wastewater and landscaping issues by 21 August 2020. This material was provided by the Appellant. A review was held on 14 September 2020.</p> <p>The Appellant was to provide further without prejudice material by 25 September 2020. The Appellant provided the further material on 14 October 2020 and a further without prejudice conference was held on 19 October 2020. The Appellant provided revised material for comment. A further without prejudice meeting was held on 16 December 2020. Further information is to be provided in January 2021 and a further review is scheduled for 2 February 2021.</p>

<b>3.</b>	<b>File Number:</b>	4703 of 2019
<b>Applicant:</b>		<b>Redland City Council</b>
<b>Respondents:</b>		<b>Canaipa Developments Pty Ltd</b> <b>Ian Robert Larkman</b> <b>TLC Jones Pty Ltd</b> <b>TLC Supermarkets Unit Trust No 2</b>
<b>Site details:</b>		29-39 High Street, Russell Island (Lot 100 on SP204183)
<b>Application Details:</b>		Application for interim and final relief with respect to alleged development offences under the <i>Planning Act 2016</i> and offences under the <i>Environmental Protection Act 1994</i> .
<b>Current Status:</b>		<p>Application filed 20 December 2019. A directions hearing was held on 5 February 2020 and a review took place on 8 April 2020. A further review was held on 24 April 2020 and Orders were that Council is to notify the Respondents as to whether the proposed replacement on-site sewerage treatment facility complies with the requirements sought in the originating application. A 4 day trial commenced on 28 September 2020. Final written submissions were submitted on 16 October 2020. The Respondent provided final submissions on 30 October 2020 and a response was provided on 6 November 2020. A part hearing was held on 13 November 2020.</p> <p>On 15 December 2020, the Court issued an Enforcement Order requiring the owner of the Russell Island shopping centre to, within 9 months, replace the existing onsite Sewerage Treatment Plant and land application area with a system authorised by an Environmental Authority for Environmentally Relevant Activity 63. The owners of the shopping centre will need to continue to comply with the requirement to have onsite portable toilets.</p>

<b>4.</b>	<b>File Number:</b>	566 of 2020
	<b>Appellant:</b>	<b>Clay Gully Pty Ltd</b>
	<b>Respondent:</b>	<b>Redland City Council</b>
	<b>Proposed Development:</b>	Reconfiguration of a lot by standard format plan (3 lots into 289 lots over 7 stages, new road and park. 39 Brendan Way, 21-29 and 31 Clay Gully Road, Victoria Point (Lot 1 on RP72635, Lot 4 on RP57455 and Lot 1 on RP95513)
	<b>Appeal Details:</b>	Appeal against deemed refusal by Council.
	<b>Current Status:</b>	<p>Appeal filed 25 February 2020. Council notified of its position in the appeal on 1 May 2020 and provided reasons for refusal on 5 May 2020. A review was held on 8 May 2020 and it was ordered that the Appellant was to file and serve any request for further and better particulars by 15 May 2020.</p> <p>A request for further and better particulars was made by the Appellant on 15 May 2020. Council provided its response to the request for further and better particulars on 1 June 2020. The Appellant submitted its matters supporting approval of the proposed development on 15 June 2020.</p> <p>A without prejudice discussion with the appellant and co-respondent, chaired by the P &amp; E ADR Registrar, was held on 18 June 2020. A further without prejudice meeting was held on 25 June 2020. The matter was adjourned on the papers until 17 August 2020, in order to facilitate further discussions between the parties. A without prejudice meeting was held with the appellant on 3 August 2020.</p> <p>It was ordered that the parties should engage in a further without prejudice meeting by 4 September 2020 and this was held on 3 September 2020. A review was held on 10 September 2020 and the Orders were that the parties engage in a further without prejudice meeting by 9 October 2020. A without prejudice meeting was held on 6 October 2020. The matter was considered at the General Meeting on 7 October 2020.</p> <p>A further review was held on 15 October 2020 and a further without prejudice meeting was held on 22 October 2020. The Appellant filed its minor change application on 23 November 2020 and the matter was listed for further review on 8 December 2020. Orders were made to provide draft conditions by 11 December 2020. The draft conditions were provided on 15 December 2020. The Appellant is to identify any issues with the draft conditions by 23 December 2020 and a without prejudice meeting to occur (if there are issues) by 18 January 2021.</p> <p>A further review is scheduled for 3 February 2021.</p>

<b>5.</b>	<b>File Number:</b>	1612 of 2020
<b>Appellant:</b>		<b>Sutgold Pty Ltd</b>
<b>Respondent:</b>		<b>Redland City Council</b>
<b>Proposed Development:</b>		Development permit for a reconfiguration of 9 Lots into 275 Residential Lots, 3 Balance Lots, 1 Load Centre Lot, 2 Park Lots, 2 Open Space Lots, 1 Pedestrian Connection Lot and 1 Multi-function Spine Lot in 12 stages. 36-56 Double Jump Road, 26 Prospect Crescent and 27 Brendan Way, Victoria Point more properly described as Lot 4 on RP57455, Lot 1 on RP95513, Lot 2 on RP86773, Lot 1 on RP86773, Lot 3 on RP148004, Lot 7 on RP57455, Lot 2 on RP169475, Lot 2 on RP165178, Lot 6 on SP145377, Lot 801 on SP261302 and Lot 5 on SP293881.
<b>Appeal Details:</b>		Appeal against deemed refusal by Council.
<b>Current Status:</b>		<p>Appeal filed 5 June 2020. A hearing was held on 23 July 2020 where it was ordered that the respondent was required to notify the parties of its position and grounds if refused or conditions if it should be approved by 7 August 2020.</p> <p>The matter was considered at the General Meeting of Council on 5 August 2020 where it was resolved that the matter ought to be refused. The parties were notified of Council's position as respondent on 6 August 2020.</p> <p>A review was held on 19 August 2020. Orders were made on the papers that that the Appellant was to provide grounds for appeal by 2 September 2020. Council received the grounds of appeal on 9 September 2020. A without prejudice meeting was held on 23 September 2020. A review was held on 16 October 2020. It was ordered that that the parties engage in a further without prejudice meeting by 4 November 2020. A site visit with Council's and Appellant's ecological experts was held on 19 October 2020 and further without prejudice discussions were held on 22 October 2020.</p> <p>The matter was listed for review on 8 December 2020 and it was ordered that the Appellant was to provide its minor change material by 11 December 2020. Council is to advise whether they consent to or oppose the minor change application and file and serve any material in support of their position by 18 December 2020. The matter is listed for review and minor change application on 2 February 2021.</p>

<b>6.</b>	<b>File Number:</b>	1724 of 2020
<b>Appellant:</b>		<b>Fort Street Real Estate Capital Pty Ltd</b>
<b>Respondent:</b>		<b>Redland City Council</b>
<b>Proposed Development:</b>		Combined development permit for a material change of use (fast food outlet) and reconfiguring a lot (access easement and subdivision by lease). Birkdale Fair Shopping Centre at 2-12 Mary Pleasant Drive, Birkdale and more properly described as Lot 1 on RP816847.
<b>Appeal Details:</b>		Appeal against refusal by Council.
<b>Current Status:</b>		<p>Appeal filed on 17 June 2020. A review was held on 27 July 2020 where it was ordered that the appellant was to notify the parties of any changes to the development application by 31 July 2020. On 14 August 2020 the respondent (Council) notified the appellant that Council would not be opposing the minor change and notified its fully articulated grounds of refusal.</p> <p>A review was held on 19 August 2020 where it was ordered that the parties should exchange its list of experts by 26 August 2020 and that joint expert reports must be completed by 30 September 2020. All joint expert reports were exchanged and a without prejudice meeting was held on 15 October 2020. A three day trial was held on 25-27 November 2020.</p> <p>The judgment was handed down on 11 December 2020 and the appeal was allowed subject to lawful conditions.</p>

<b>7.</b>	<b>File Number:</b>	2080 of 2020
<b>Appellant:</b>		<b>Silkwear Developments Pty Ltd</b>
<b>Respondent:</b>		<b>Redland City Council</b>
<b>Proposed Development:</b>		Development permit for a reconfiguration of a lot (1 into 5 lots) respect of land at 1-13 Beckwith Street, Ormiston, more properly described as Lot 8 on RP895452 (Council ref: RAL19/0087).
<b>Appeal Details:</b>		Appeal against conditions.
<b>Current Status:</b>		<p>Appeal filed on 7 July 2020. A review was undertaken on 2 September 2020. It was ordered that Council is to draft and serve the grounds for the conditions in dispute by 16 September 2020. The appellant is to file and serve any amended grounds for setting aside the disputed conditions by 25 September 2020. A without prejudice meeting was held on 2 October 2020. A further without prejudice meeting was held on 15 October 2020. The Appellant provided revised plans to address stormwater quality and road design on 29 October 2020 and a further without prejudice meeting was due to be held on 19 November 2020 and review on 20 November 2020. These dates were adjourned in order for further changes to take place. Revised material was received on 24 November 2020 and a further without prejudice meeting was held on 26 November 2020.</p> <p>Further to the without prejudice meeting revised material was provided and further discussions took place on a without prejudice basis.</p> <p>The appeal was adjourned at review on 10 December 2020 and is listed for further review on 5 February 2021.</p>



<b>8.</b>	<b>File Number:</b>	2081 of 2020
<b>Appellant:</b>	<b>Silkwear Developments Pty Ltd</b>	
<b>Respondent:</b>	<b>Redland City Council</b>	
<b>Proposed Development:</b>	Development permit for a reconfiguration of a lot (1 into 5 lots) respect of land at 1-13 Beckwith Street, Ormiston, more properly described as Lot 8 on RP895452.	
<b>Appeal Details:</b>	Appeal against infrastructure charges notice.	
<b>Current Status:</b>	<p>Appeal filed on 7 July 2020. A review was undertaken on 2 September 2020. A without prejudice meeting was held on 2 and 15 October 2020. A further without prejudice meeting is to be held on 19 November 2020. These dates were adjourned in order for further changes to take place. Revised material was received on 24 November 2020 and a further without prejudice meeting took place on 26 November 2020.</p> <p>The appeal was adjourned at review on 10 December 2020 and is listed for further review on 5 February 2021. It is anticipated that a minor change application and final orders will be prepared for the review on 5 February 2021.</p>	

<b>9.</b>	<b>File Number:</b>	2337 of 2020
<b>Appellant:</b>	<b>Bernard Diab and Tracey Diab</b>	
<b>Respondent:</b>	<b>Redland City Council</b>	
<b>Proposed Development:</b>	Development permit for a material change of use for home-based business in respect of land at 393 Mount Cotton Road, Capalaba and more properly described as Lot 4 on SP297142.	
<b>Appeal Details:</b>	Appeal against refusal by Council.	
<b>Current Status:</b>	<p>Appeal filed on 17 August 2020. A review was held on 16 October 2020. The respondent (Council) issued its consolidated reasons for refusal on 30 October 2020. A without prejudice conference chaired by the ADR Registrar was held on 19 November 2020. The appellant agreed to provide a revised plan early in the week commencing 23 November 2020 with further comments to be provided within one week of receipt. This information was received on 7 December 2020 and is being reviewed by Council's town planning expert.</p> <p>The appeal is listed for a three day hearing in March 2021.</p>	

<b>10.</b>	<b>File Number:</b>	2893 of 2020
<b>Appellant:</b>	<b>Paige Pty Ltd</b>	
<b>Respondent:</b>	<b>Redland City Council</b>	
<b>Co-Respondent</b>	<b>Sutgold Pty Ltd</b>	
<b>Proposed Development:</b>	Development permit for reconfiguring a lot – 1 into 23 lots and new road on land located at 152-156 Bunker Road, Victoria Point on Lot 23 on RP86773.	
<b>Appeal Details:</b>	Appeal against deemed refusal by Council.	
<b>Current Status:</b>	<p>Appeal filed on 13 October 2020. Council provided its position on the appeal on 20 November 2020. A review was held on the 23 November 2020 and it was ordered that Council (Respondent) is to provide its particularised list of provisions relevant to the grounds for refusal by 27 November 2020. The particularised list identifying each assessment benchmark was provided on 9 December 2020.</p> <p>A further consolidated list of its reasons for refusal are to be provided by 18 December 2020.</p>	

## APPEALS TO THE QUEENSLAND COURT OF APPEAL

<b>11.</b>	<b>File Number:</b>	8114 of 2018 (MCU012812)/ (QPEC Appeal 3641 of 2015)
<b>Appellant:</b>		<b>Redland City Council</b>
<b>Respondent:</b>		<b>King of Gifts Pty Ltd and HTC Consulting Pty Ltd</b>
<b>Proposed Development:</b>		Material Change of Use for Service Station (including car wash) and Drive Through Restaurant 604-612 Redland Bay Road, Alexandra Hills (Lot 21 on SP194117)
<b>Appeal Details:</b>		Appeal against the decision of the Planning and Environment Court to allow the appeal and approve the development.
<b>Current Status:</b>		<p>Appeal filed by Council on 30 July 2018. Council's outline of argument was filed on 28 August 2018. The appellant's outline of argument was filed on 20 September 2018. The matter was heard before the Court on 12 March 2019. The judgment of the Supreme Court on 13 March 2020 was that the appeal is allowed and the orders made on 18 June 2019 be set aside. The appeal is to be remitted back to the Planning and Environment Court and the respondent is to pay the appellant's costs of the appeal.</p> <p>At a review in the P &amp; E Court on 15 June 2020 the Court ordered that written submissions are to be filed by 10 July 2020 with a hearing listed for 17 July 2020. The written submissions were filed on 10 July 2020.</p> <p>The judgment in the Planning and Environment Court was issued on 7 August 2020 and the appeal was allowed.</p> <p>A further appeal has been submitted by Council. An outline of argument and list of authorities were filed on 19 November 2020. The respondent's outline and authorities were due to be filed by 14 December 2020. A hearing date has been set down for 15 March 2021.</p>

## DEVELOPMENT TRIBUNAL APPEALS AND OTHER MATTERS

<b>12.</b>	<b>File Number:</b>	Appeal 20-021
<b>Appellant:</b>		Darren Horton
<b>Respondent:</b>		<b>Redland City Council</b>
<b>Proposed Development:</b>		Design and siting request for a swimming pool 11 Reserve Esplanade, Wellington Point (Lot 1 on RP53836)
<b>Appeal Details:</b>		Appeal against the decision of the Redland City Council to direct refusal of a swimming pool structure within the front boundary setback in a design and siting referral.
<b>Current Status:</b>		<p>Appeal filed on 2 September 2020. A tribunal site visit and meeting was held on 13 November 2020. Additional submissions were made on behalf of the Appellant on 18 November 2020 and a response provided by Council on 20 November 2020.</p> <p>Council was notified on 16 December 2020 that the Tribunal orders the Appellant, pursuant to section 250 of the Planning Act, to reconsider the design of the external walls of the proposed swimming pool structure to consider changes to the finish, colours and texture and for these to be provided within 20 days or request the tribunal to decide the appeal without any changes. A response from the Appellant is awaited.</p>

**Human Rights**

There are no known human rights implications associated with this report.

**OFFICER'S RECOMMENDATION**

**That Council resolves to note this report.**

### 14.3 DRAFT REDLANDS COAST AGE FRIENDLY ACTION PLAN 2021-2026

**Objective Reference:**

**Authorising Officer:** Louise Rusan, General Manager Community & Customer Services

**Responsible Officer:** Kim Kerwin, Group Manager Community & Economic Development

**Report Author:** Christine Potito, Principal Program Manager

**Attachments:** 1. Draft Redlands Coast Age Friendly Action Plan 2021- 2026 [↓](#)

**PURPOSE**

The purpose of this report is to present the draft Redlands Coast Age Friendly Action Plan 2021-2026 to Council for noting and to seek approval to commence community consultation on the draft plan.

**BACKGROUND****Age Friendly Cities Model**

The concept of Age Friendly cities began as a planning response to population ageing. In 2004 the World Health Organisation launched the Age Friendly Cities Project in 33 cities. The project explored how a city's landscape, buildings, transport system and housing contribute to mobility, health behaviours, social participation and self-determination of older people. It resulted in the production of the Age Friendly Cities Guide outlining the essential features of age friendly cities. Globally there are currently 1000 registered 'Age Friendly' cities and communities in 41 countries including Australia, covering 240 million people worldwide.

**History of Council's Age Friendly interests**

In 2006 Council's Ageing Well in the Redlands Strategy 2006–2016 identified a vision to create age friendly communities for the city and led to the establishment of the Redlands Advisory Group on senior's issues. In 2009 the Redlands Social Infrastructure Strategy identified a growing ageing population and need for planning for age friendly communities. In 2012 Council resolved to establish the Age Friendly Redland Committee to replace the Redlands Advisory Group on senior's issues. The 2018-2019 Operational Plan identified a key initiative to explore the concept of age friendly cities.

**Queensland Government Policy**

In 2016 the Queensland Government launched the Age Friendly Community Strategic Direction Statement and Action Plan based on the World Health Organisation's age friendly cities model.

**Stakeholder Engagement**

In 2018 Council developed an Age Friendly City Survey in consultation with Council of the Ageing (COTA) Qld and Redlands Council of the Ageing (RDCOTA). The survey was distributed by RDCOTA to 100 residents aged between 55 years and 95 years who lived on the mainland and in island suburbs. The majority of respondents had resided on the Redlands Coast for more than 20 years (57 per cent) and a further 30 per cent for more than 10 years. The survey explored perceptions of living and ageing in Redland City, what older residents value and any barriers to healthy and active ageing. The top priorities for older residents were:

- Public transport improvements
- Social isolation and loneliness

- Cost of living pressures

Council also consulted with key community organisations who work with older adults in Redland City, the top priorities for participants were:

- Protect the lifestyle that we have
- Public transport
- Car parking near centres, train stations and Redland Hospital
- SMBI residents access to activities taking place in Cleveland
- Access to health services within Redland City
- Internet access, computer knowledge and fear of technology
- Specialty parks e.g. swing chairs for wheelchairs, exercise circuits
- Low cost housing

## ISSUES

### Content of the draft Redlands Coast Age Friendly City Plan 2021-2026

The draft Redlands Coast Age Friendly Action Plan 2021-2026 recognises the global trends and national issues related to population ageing and considers the impacts on Redland City. The draft actions respond directly to issues raised by members of the community and are based on the eight domains known to directly influence the quality of life and wellbeing of older people. These are:

1. Outdoor spaces and buildings
2. Transportation
3. Housing
4. Social participation
5. Respect and social inclusion
6. Civic participation and employment
7. Communication and information
8. Community and health services

### Proposed Community Consultation on Draft

It is proposed that community consultation on the draft Redlands Coast Age Friendly Action Plan 2021-2026 is conducted for a period of 40 days commencing late January 2021. During the consultation period members of the community will have the opportunity to review the draft Redlands Coast Age Friendly Action Plan 2021-2026 and provide comment. The feedback received will be reviewed and used to inform the final plan.

The consultation will include:

- Publishing the plan on Redland City Council's Your Say website and online submission form.
- Promotion of the community engagement through Redlands Senior Network, Aged Care Providers Network, Disability Network and Council's community network update e-newsletter.
- Presentation to the Redlands Seniors Network members at network meeting.
- Printed copies of the draft Redlands Coast Age Friendly Action 2021-2026 and printed submission forms being available for viewing at Redland City Libraries and Council's Customer Contact Centres. Copies will be provided to key seniors organisations including RDCOTA, the Donald Simpson Centre and the University of the Third Age Redlands (U3A).

## STRATEGIC IMPLICATIONS

### Legislative Requirements

The draft Redlands Coast Age Friendly Action Plan 2021-2026 acknowledges older people as citizens of the community and recognises the changes that people may experience as they age may impact on their capacity to participate in the community. The plan recognises and aligns with the following legislation:

- *Age Discrimination Act 2004 (Cth)*
- *Disability Discrimination Act 1992 (Cth)*
- *Carer Recognition Act 2010 (Cth)*
- *Anti-Discrimination Act 1991 (Qld)*

### Risk Management

There are no known risks associated with the draft Redlands Coast Age Friendly Action Plan 2021-2026.

### Financial

The community consultation process recommended will be undertaken within the existing operational budget.

### People

The community consultation process will be absorbed by current staff resourcing.

### Environmental

No environmental implications noted.

### Social

The consultation process aims to ensure the community has an opportunity to voice their support, concerns or suggestions regarding the draft Redlands Coast Age Friendly Action Plan 2021-2026.

### Human Rights

The content of the draft Redlands Coast Age Friendly Action Plan 2021-2026 is compatible with the *Human Rights Act 2019 (Qld)* and supports the principles of freedom, respect, equality and dignity and the inherent value of each person, regardless of background, where we live, what we look like, what we think or what we believe. Consultation on the draft plan does not infringe any human rights.

### Alignment with Council's Policy and Plans

#### *Relationship to Corporate Plan*

The Draft Redlands Coast Age Friendly Action Plan 2021-2026 supports the Corporate Plan's Stronger Communities strategic objectives which are:

- 2.1 Enhance the health, safety and wellbeing of our community through partnerships, inclusive services, networks, facilities and infrastructure.
- 2.5 Enhance community inclusion where people of all ages, abilities and cultures can participate.

**CONSULTATION**

Consulted	Consultation Date	Comments/Actions
Redlands District Committee of the Ageing (RDCOTA)	April 2018	Consulted on the development of the Age Friendly City Survey 2018.
Council of the Ageing (COTA) Queensland	April 2018	Consulted on the development of the Age Friendly City Survey 2018.
Members of the community	June – July 2018	Consulted 100 residents aged 55-95 on their experiences of living and ageing in Redland City to inform development of the draft plan.
Redland Seniors Network	August 2018	Presented findings of the Age Friendly City Survey and consulted on the key issues impacting older residents in Redland City.
Seniors Community Organisations	October 2018	Consulted on the key issues impacting older residents in Redland City.
Executive Leadership Team	February 2018 September 2020	Provided strategic advice and operational delivery of the plan, and informed changes.
Senior Leadership Team	October 2020	Provided strategic advice and operational delivery of the plan, and informed changes.
Council Officers	July – September 2020	Provided technical expert advice and context on the actions and operational delivery of the plan and informed changes.
Councillors	July 2018 December 2020	Shaped the scope of the draft Age Friendly Action Plan and set the strategic direction through advocating for our community and city needs.

Targeted engagement has been undertaken in the development of the draft Redlands Coast Age Friendly Action Plan 2021-2026 including:

- Survey of 100 residents aged 55 years and over.
- Workshop with organisations representing seniors, aged care, disability and community services in Redland City.
- Councillor workshop.
- Executive Leadership Team.
- Senior Leadership Team.

Discussions have been undertaken with officers from the following Council service areas:

- City Infrastructure
- City Operations
- City Planning and Assessment
- Community and Cultural Services
- Community and Economic Development
- Communications, Engagement and Tourism
- Corporate Governance

- Environment and Regulation
- Infrastructure and Operations
- People Culture and Organisational Performance

## **OPTIONS**

### **Option One**

That Council resolves as follows:

1. To note the draft Redlands Coast Age Friendly City Plan 2021-2026.
2. To endorse for the draft Redlands Coast Age Friendly City Plan 2021-2026 to progress to community consultation for a period of 40 days commencing late January 2021.

### **Option Two**

That Council resolves not to note the Draft Redlands Coast Age Friendly Action Plan 2021-2026 and request further changes to the plan.

## **OFFICER'S RECOMMENDATION**

That Council resolves as follows:

1. To note the draft Redlands Coast Age Friendly City Plan 2021-2026.
2. To endorse for the draft Redlands Coast Age Friendly City Plan 2021-2026 to progress to community consultation for a period of 40 days commencing late January 2021.





Redlands Coast

# Age-friendly Action Plan

2021 – 2026

DRAFT

### **Acknowledgment of Traditional Owners and Country**

Redland City Council acknowledges the Quandamooka People, the Traditional Owners of the land, water and seas of Redlands Coast.

We pay respects to Elders past, present and future and extend respect to all Aboriginal and Torres Strait Islander People who live and work on the Redlands Coast.

DRAFT

## Mayor Foreword

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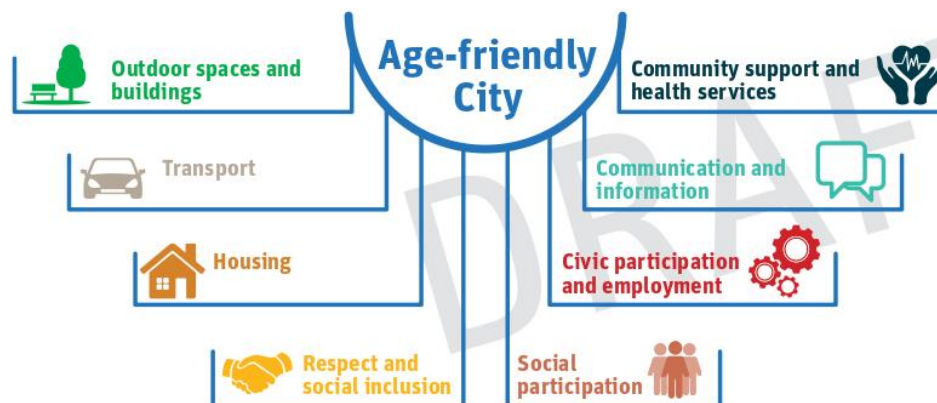


The Redlands Coast Age-friendly Action Plan 2021-2026 is built on the understanding that communities designed to be inclusive of older adults, can positively influence the health, wellbeing and happiness of all residents, and create a vibrant community that promotes productivity and economic growth.

The plan recognises there is no typical older person, like young people older people are a diverse group with varying experiences, capacities, lifestyles, cultures, identities and interests, and that each of these factors

influence ageing. This plan is based on the World Health Organisation (WHO) 'Age-friendly Cities' model's eight domains that collectively address the main influences of wellbeing and quality of life as people age.

It will guide the design of Council's policies, services and infrastructure to ensure we create environments that enable older adults to live active and healthy lives, live in security, enjoy good health and continue to participate fully in the community for as long as possible.



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## Vision

Ageing in Redlands Coast is a positive experience; people of all ages can live active, fulfilling lives and participate in all aspects of the community.

## Themes and outcomes



### Outdoor spaces and buildings

Older residents can access and enjoy the city's community facilities and outdoor spaces.



### Transport

Older residents find it easy to move about Redlands Coast.



### Housing

Older residents can access safe and secure housing.



### Respect and social inclusion

Older residents are respected and included in all aspects of community life.



### Social participation

Older residents can participate in a range of community activities and events.



### Civic participation and employment

Older residents can participate in work, volunteering and civic decision making.



### Communication and information

Older residents find it easy to access information about services, events and activities.



### Community support and health services

Older residents can access a range of services to support health and wellbeing.

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## Council's role

This Redlands Coast Age-friendly Action Plan 2021-2026 outlines the actions that Council will take over the next five years. Council's roles include:

<b>Advocacy</b>	Working on behalf of the community to secure government funding resources and investment in services to the community
<b>Regulation</b>	Implementing planning regulations that support ageing in place
<b>Service delivery</b>	Direct delivery of services and infrastructure to the community
<b>Funding</b>	Providing grant and sponsorship funding for community initiatives that support an ageing population
<b>Planning</b>	Planning for community and social infrastructure that serves an ageing population
<b>Partnering</b>	Strengthening networks and establishing constructive working relationships with the community and governments to implement initiatives

Actions will be implemented over the following time frames:

<b>Short-term</b>	within the next two years (2021-2023)
<b>Medium-term</b>	within the next three years (2021-2024)
<b>Long-term</b>	after 5 years or more (2025 onwards) but may need to commence in the medium-term
<b>Ongoing</b>	actions will continually be dealt with throughout life of the plan

Implementation of the actions will be monitored and progress of implementation will be reported on annually.



*“No government or ministry can achieve these outcomes working in isolation. It takes the whole community, working together to make environments age-friendly, harnessing innovation and imagination from all sectors and all actors.”*

Dr John Beard, World Health Organisation, Looking back over the last decade, looking forward to the next (2018)



## Role of community

A truly age-friendly city can only be achieved with action from the whole community. Some of the ways the community can assist in this effort are outlined as follows:

Stakeholder	Role	Opportunity to collaborate with Council
Queensland Government	<ul style="list-style-type: none"> <li>• Providing strategic direction.</li> <li>• Sharing knowledge and best practice.</li> <li>• Funding age-friendly initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>• Partnering with Council on joint initiatives.</li> <li>• Funding delivery of age-friendly projects.</li> </ul>
Academics, education and research institutes	<ul style="list-style-type: none"> <li>• Undertaking research into needs and desires of ageing population.</li> <li>• Sharing knowledge and data sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Partnering with Council in research into ageing populations.</li> </ul>
Industry and innovators	<ul style="list-style-type: none"> <li>• Developing new products and services to serve older adults.</li> </ul>	<ul style="list-style-type: none"> <li>• Sharing information with Council about innovations targeted at older adults.</li> </ul>
Local businesses and retailers	<ul style="list-style-type: none"> <li>• Adopting age-friendly business practices.</li> <li>• Employing older adults.</li> </ul>	<ul style="list-style-type: none"> <li>• Sharing age-friendly practices with Council.</li> </ul>
Community networks	<ul style="list-style-type: none"> <li>• Sharing information and expertise.</li> <li>• Undertaking projects that improve outcomes for older adults.</li> </ul>	<ul style="list-style-type: none"> <li>• Participating in age-friendly co-design events.</li> <li>• Providing Council with information on local issues impacting older residents.</li> <li>• Advising Council on age-friendly events planned.</li> </ul>
Community organisations	<ul style="list-style-type: none"> <li>• Identifying and removing barriers to access.</li> <li>• Maintaining an understanding of the needs of City's ageing population.</li> <li>• Participating in seniors network meetings.</li> </ul>	<ul style="list-style-type: none"> <li>• Participating in community consultations and co-design events.</li> <li>• Applying for grant funding for initiatives that improve outcomes for older adults.</li> </ul>
Community members	<ul style="list-style-type: none"> <li>• Showing respect towards older adults.</li> <li>• Looking out for older community members.</li> </ul>	<ul style="list-style-type: none"> <li>• Participating in community consultations.</li> <li>• Participating in co-design events.</li> </ul>



## Policy framework

*Age Discrimination Act 2004 (Cth)* protects individuals from discrimination on the basis of age in the areas of employment, education, accommodation and the provision of goods and services.

*Disability Discrimination Act 1992 (Cth)* protects individuals from discrimination against persons on the ground of disability.

*Carer Recognition Act 2010 (Cth)* increases recognition and awareness of carers and acknowledges the valuable contribution they make to society.

*Anti-Discrimination Act 1991 (Qld)* promotes equality of opportunity for everyone by protecting people from unfair discrimination in certain areas of activity and from sexual harassment and certain associated objectionable conduct.

*Human Rights Act 2019 (Qld)* helps build a culture in the Queensland public sector that respects and promotes human rights and promotes a dialogue about the nature, meaning and scope of human rights.

### United Nations Principles for Older Persons<sup>1</sup>

The United Nations recognises that in all countries individuals are reaching advanced ages in greater numbers than ever before, and that opportunities must be provided for older persons to participate in and contribute to society. Governments are encouraged to incorporate the United Nations Principles for Older Persons into programs, these are independence, care, self-fulfilment and dignity.

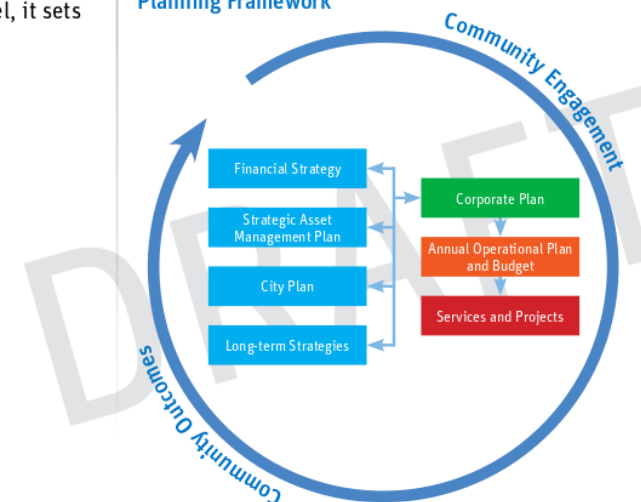
### Queensland Government Policy

The State Government's Queensland: an age-friendly community – Strategic direction statement and Action Plan was launched in 2017, and is based on the World Health Organisation's The strategy is based on the World Health Organisation's age-friendly Cities Model, it sets goals in each of the eight domains.

## Strategic planning framework

Redland City Council's strategies set the long-term strategic outcomes that Council is working towards, these outcomes guide future action planning. Council's strategies align with the Long Term Financial Strategy, the Strategic Asset Management Plan and the Redland City Plan, which informs the five year Corporate Plan. The Redlands Coast Age-friendly Action Plan 2021-2026 will be implemented through the annual service and asset management planning process, the annual operational plan and the annual budget.

### Redland City Council's Strategic Planning Framework



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<sup>1</sup> <https://www.ohchr.org/EN/ProfessionalInterest/Pages/OlderPersons.aspx>



## Redlands Coast Snapshot

Located in South East Queensland, 26 kilometres from Brisbane, Redlands Coast covers 537 square kilometres and approximately 335 kilometres of coastline. Redlands Coast is made up of a series of villages and communities linked by geography and economic opportunities. The City includes all mainland suburbs, hinterland and the island communities of Coochiemudlo Island, North Stradbroke Island and the Southern Moreton Bay Islands.

The regions rich cultural heritage, abundant wildlife, lush hinterland, relaxed coastal lifestyle, easy access to the crystal blue waters of southern Moreton Bay are integral to the character of the City. These are valued by residents, and proximity to Brisbane make Redlands Coast an ideal place to live, and both a desirable and popular place to retire.

### Ageing population

- The median age of residents in Redland City is 42 years and for the Southern Moreton Bay Islands it is 58 years.
- **18 per cent** of Redlands Coast residents are aged 65 and older.
- **53 per cent** of residents aged 65 years and over are women.

### Diversity

- **22.5 per cent** of residents were born overseas.
- **6.6 per cent** of residents speak a language other than English at home.
- **2.3 per cent** of residents (3,426) are of Aboriginal and Torres Strait Islander background.
- **5.5 per cent** of the Aboriginal and Torres Strait Islander population are aged 65 years and over.

### Housing

- **10 per cent** of residents aged 65 years and older live alone.

### Workforce participation

- **4 per cent** of working residents are aged 65 years and over.
- **5 per cent** of the city's labour force aged over 55 years were unemployed actively looking for either full or part time work.

### Unpaid contribution

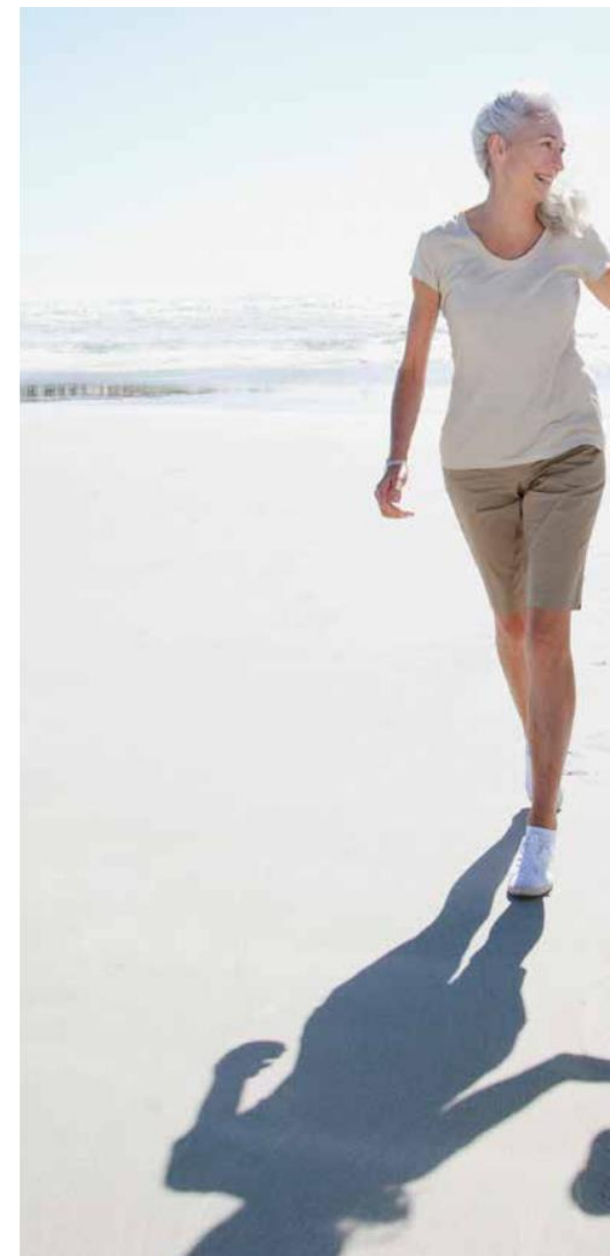
- **37 per cent** of residents who volunteer for an organisation were aged 55 years and over.
- **48 per cent** of residents who provided unpaid assistance to a person with a disability, were aged 55 years and over.

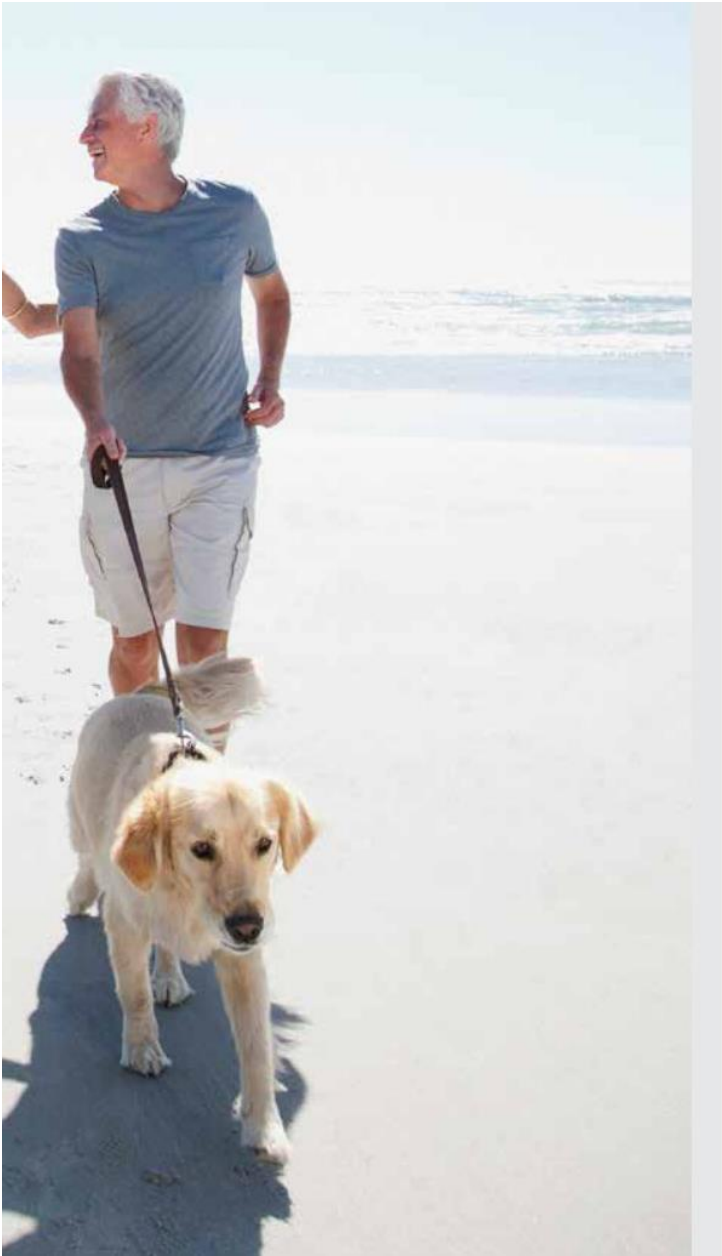
### Need for assistance

- **51 per cent** of residents with a need for assistance with core activities are aged 65 years and over.

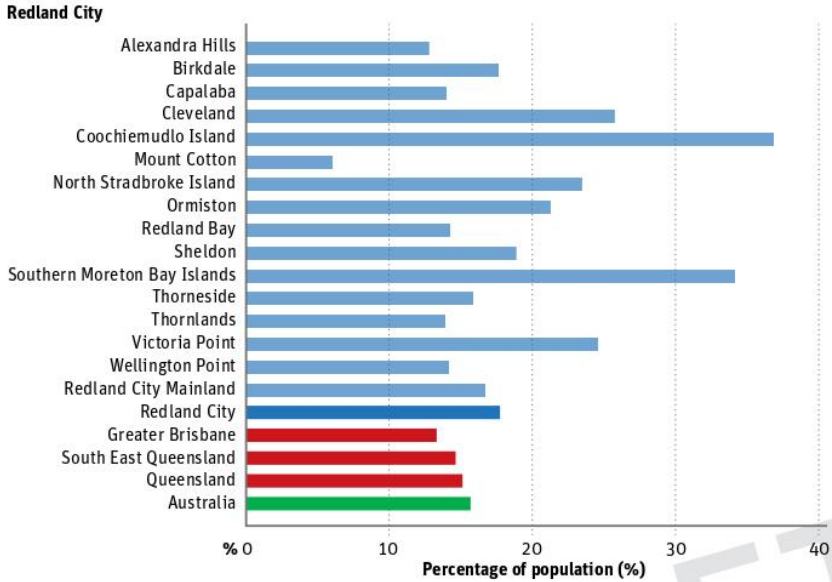
Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence Data)

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**Redland City residents aged 65 and over by suburb**



<sup>2</sup> Figure 1: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data)

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# Community Consultations

In consultation with Council of the Ageing (COTA) Qld and Redlands Council of the Ageing (RDCOTA), Council developed an Age-friendly City Survey to better understand the needs of older residents. The survey was distributed by RDCOTA to 100 residents aged between 55 years and 95 years who lived on mainland and island suburbs. The majority of respondents had resided in Redland City for more than 20 years (57 per cent) and a further 30 per cent for more than 10 years. The survey explored perceptions of living and ageing in Redlands Coast, what they valued and any barriers to healthy and active ageing. The survey was completed in 2018.

## The top priorities for survey respondents were:

- public transport improvements
- social isolation and loneliness
- cost of living pressures.

## Council also consulted with key community organisations who work with older adults in Redland City, the top priorities for participants were:

- protect the lifestyle that we have
- public transport
- car parking near centres, train stations and Redland Hospital
- Southern Moreton Bay Island (SMBI) residents access to activities taking place in Cleveland
- access to health services within Redland City
- internet access, computer knowledge and fear of technology
- specialty parks e.g. swing chairs for wheelchairs, exercise circuits
- low cost housing.

## Redlands Coast Strengths

*"Having lived in the Redlands for 45 years, such a beautiful area, I would find it hard to find a better place to retire"*

*"Community identity is strong, there is a sense of being a Redlander"*

*"Lifestyle is friendly, village like"*

*The natural environment is conducive to well-being"*

*"Playground" of the bay at doorstep - boaties/sea travel"*

*"Relaxed community"*

*"Heritage of the area"*

*"Family friendly, country feel"*

## What's the most important issue faced by older people in Redland City<sup>3</sup>?



*"Many older people feel isolated because they cannot use a computer, and many things are accessed via a computer".*

*"Maintaining independence and accessing facilities that allow me to maintain it".*

*"Maintaining contact with other people and keeping mentally and physically active".*

*"Knowing what's out there! Both in knowing about the opportunities for older people to contribute to the community and to participate in community activities and know what services are available to assist older people in engaging meaningfully in the community".*

*"Being able to get from one location to another at low cost and quickly. For example to get from my house to 'My Horizon' requires 1 km walk to the bus to Capalaba (Going away from destination). Then another bus back toward destination then walking across major road and walking another 800 meters. Depending on connection time, over 1 1/2 hours to travel".*

*"Once my husband is unable to drive, transport will be an issue. Taxi would be only response. Driving on the island is not the same as driving on the Mainland."*

*"Lack of health facilities that provide treatment of the aged within the city without the need to be transported to Brisbane."*

*"Being able to afford to stay in my own home with the cost of rates, electricity, water etc. continually rising".*



<sup>3</sup> Redland City Council Report on Findings Age-friendly City Survey 2018





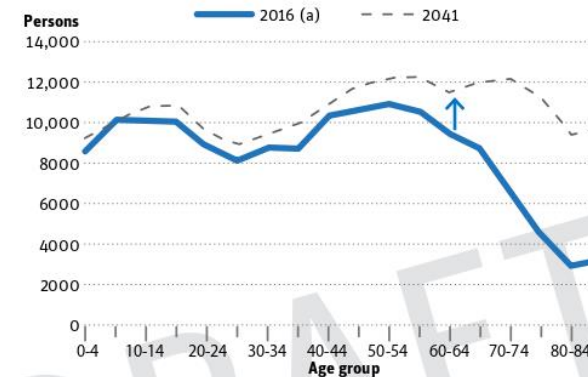
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## Trends and issues in ageing

### Changing demographics

The world's population is growing older; all developed countries are experiencing population ageing due to declining fertility rates, increased longevity and a decrease in mortality. Between 1980 and 2017, the number of people aged 60 and over worldwide increased from 382 million to 962 million. By 2050 this will rise to 2.1 billion<sup>4</sup>.

In 2016 17.2 per cent of Redland City's population was aged 65 years and by 2041 this is expected to increase to 28.3 per cent.<sup>5</sup>





## Increased life expectancy

Australians have one of the longest life expectancies in the world. A male Australian child born between 2016 and 2018 can expect to live to 80.2 years and a female 84.7 years. Over the past 10 years, life expectancy has increased by 1.5 years for males and 1.2 years for females due to improvements in health, education and public safety. However life expectancy of Aboriginal and Torres Strait Islander people is lower than for the non-indigenous population. For males it is estimated to be 8.6 years lower and 7.8 years lower for females than that of the non-Indigenous population<sup>4</sup>. In 2016, just 5 per cent (31,000) of Australia's Indigenous population were aged 65 and over compared with 16 per cent (3.4 million) of the non-Indigenous population.

## A changing life course

Longer life expectancy has changed the way people of all ages live their lives. The traditional life-course where education and learning ended in a person's 20's, career progression ended in 40's and retirement commenced in the 60's has changed significantly and will continue to evolve. People are working longer and want opportunities for recreation at different points throughout life, not just in retirement. Women are having children later and participating in learning throughout their lives and not transitioning to retirement until much later in life.<sup>5</sup>

## Physical activity

Physical activity is important for older adults to maintain energy levels, joint movement, control weight and reduce risk of chronic diseases and falls. It also plays a protective factor in reducing stress and anxiety; improving mood and memory, and can prevent or improve many risk factors and chronic diseases.<sup>7</sup> It is recommended that older adults undertake at least thirty minutes of accumulated moderate intensity physical activity at least five days per week, regardless of age, weight, health problems or ability. It is estimated that 75 per cent of people aged 65-74 are insufficiently active, and that this increases to 92 per cent for those aged 85 and over.<sup>8</sup>

<sup>4</sup> United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Ageing 2017 - Highlights (ST/ESA/SER.A/397).

<sup>5</sup> Queensland Government population projections, 2018 edition data and ABS 3235.0, Population by age and sex, regions of Australia, 2016

<sup>6</sup> Kalache, Alexandre. & South Australia. Department of the Premier and Cabinet, issuing body. (2013). The longevity revolution: creating a society for all ages. Adelaide, SA: Department of the Premier and Cabinet, <https://www.flinders.edu.au/sabs/fcas-files/Publications/The%20Longevity%20Revolution.pdf>

<sup>7</sup> Australian Institute of Health and Welfare 2018. Physical Activity across the life stages. Cat. no. PHE 225. Canberra: AIHW.

<sup>8</sup> Choose Health: Be Active: A physical activity guide for older Australians. Canberra: Commonwealth of Australia and the Repatriation Commission © 2005.

## Considerations for Redland City

Planning for services to meet the increased number of older adults in the community.

Planning for increased demand for age related services and increased demand for generalist services needed by an ageing population.

Reviewing the suitability of existing services and infrastructure to meet needs of an increasing ageing population.

Recognising the increased vulnerability of the Indigenous population in planning.

Consider needs and impact of ageing workforce and its impact on work across the lifespan.

Promotion of walking groups and physical activities for older adults, active travel, exercise equipment, accessible walking and cycling trails.

## Housing affordability in older age

The rate of outright home ownership in Australia has declined from 42.8 per cent of households in 1995–96 to 30.4 per cent in 2015–16. For people aged 55 years and over, the rate of home ownership without a mortgage has fallen from 77 per cent in 1995–96 to 62 per cent in 2015–16.<sup>9</sup>

The most recent Anglicare Rental Affordability Snapshot found of the 69,485 properties listed for rent across Australia (March 2019), only four per cent were affordable and appropriate for households in receipt of government-provided income support. Less than one per cent were suitable and affordable for a single person on an aged pension.<sup>10</sup>

## Preference for ageing in place

The majority of older adults have a strong desire to 'age in place'. Most prefer to remain living in their own home, or remain in their local neighbourhoods where they can maintain connections to community. Only 5 per cent of older adults live in residential aged care, this is often triggered by declining health and does not generally occur until later in life. Most people prefer to live in aged care facilities within close proximity to their partners and families.<sup>11</sup>

The preference for ageing in place is changing housing requirements; many people are seeking homes with universal design features that can be adapted easily to meet changing needs across the lifespan.

## Homelessness

Over the last decade the number of older adults experiencing homelessness has increased by 49 per cent. One in six people who were homeless (16 per cent) were over 55 years of age. Although the majority were male (63 per cent), there has been a 31 per cent increase in homelessness of older women since 2011.<sup>12</sup>

Factors such as domestic and family violence, relationship breakdown, financial difficulty, limited superannuation and assets can put older women at increased risk of homelessness. The disadvantages associated with homelessness contribute to premature ageing through the early onset of health problems more commonly associated with later life.

<sup>9</sup> [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Library/pubs/BriefingBook46p/HomeOwnership](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook46p/HomeOwnership)

<sup>10</sup> Anglicare Australia, Rental Affordability Snapshot National Report / April 2019

<sup>11</sup> Productivity Commission 2011, Caring for Older Australians: Overview, Report No. 53, Final Inquiry Report, Canberra.

<sup>12</sup> <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/diversity/people-at-risk-of-homelessness>

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## Considerations for Redland City

Availability of diverse housing in proximity to transport and other health services and social infrastructure across the City to assist older adults to transition to more affordable housing in retirement.

Supply of residential home care providers and home modification services in Redland City.

Availability of universal house design to support ageing in place.

## Advances in assistive technology

Assistive technologies are devices that support individuals to perform tasks that they would otherwise be unable to do. The rapid growth of assistive technology products and services is revolutionising the experience and management of ageing. Assistive technologies can improve cognition, mobility, communication and social connections, and enhance care, thereby improving quality of life of older adults enabling them to remain independent for longer and reducing caregiver stress.

## Contribution of older Australians

Older adults contribute an estimated \$39 billion to the Australian economy each year in unpaid care and voluntary work for organisations or groups<sup>13</sup>. In 2016, 668,000 Australians aged 65 and over volunteered their time in the year prior to Census night. 40 per cent of children under three years of age were cared for on a weekly basis by a grandparent, while 620,000 older Australians provided care to a person with a long-term health condition or to a person aged 65 years and over<sup>14</sup>.

## Workforce participation of older Australians

Older adults are increasingly choosing to work past the traditional age of retirement, either because they need to for economic reasons, or because they want to keep contributing. The workforce participation rate for men aged 65 years and over has increased from 10.1 per cent in 2004 to 17.6 per cent in 2018, and for women it increased from 3.2 per cent to 10.3 per cent for the same period. A further 6.1 per cent of employed people aged 55 years and over would like to work more than they currently do and 3.5 per cent are registered as unemployed.<sup>15</sup> Negative attitudes towards older adults can lead to social exclusion, with some missing out on work, training, study, and other opportunities. The *Age Discrimination Act 2004* makes it unlawful to treat people unfairly on the basis of their age in different areas of public life. One in five Australians aged 55 years or over report that age is a major barrier to finding a job or getting more hours of paid work.<sup>16</sup>

<sup>13</sup> <https://humanrights.gov.au/our-work/education/face-facts-older-australians>

<sup>14</sup> <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/social-and-economic-engagement/civic-and-social-participation>

<sup>15</sup> Source: Australian Bureau of Statistics (ABS), Labour Force, Australia, detailed—electronic delivery, cat. no. 6291.0.55.001, ABS, March 2018.

<sup>16</sup> Parliament of Australia, Department of Parliamentary Services Research Paper Series 2017-2018, Budget Review 2018-19. [https://www.aph.gov.au/About\\_Parliament/Parliamentary\\_Departments/Parliamentary\\_Library/pubs/rp/BudgetReview201819/Workforce](https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview201819/Workforce)

<sup>16</sup> <https://www.humanrights.gov.au/our-work/education/face-facts-older-australians>

## Considerations for Redland City

Opportunities to promote assistive technologies to assist residents to age in place.

Understanding current and expected increases in future demand for aged care services to ensure future supply.

Understand the need for continued supply of home care and personal support services in the community.

Increase the range of opportunities for older adults to volunteer for Council and community.

Advocate for increased support for carers.

Redland City Council as an 'Age-friendly Employer.'

Consideration of health and safety issues relating to older workers. Promoting Lifelong learning opportunities for older adults that support self employment and senior-entrepreneurship.

Opportunities for self-employment and senior-entrepreneurship.

## Lifelong learning

Learning throughout the lifespan can contribute to personal and economic wellbeing. Work-related training is vital to maximise employee capabilities, and to improve workforce participation. In 2016-17, the rate of participation in formal and non-formal learning for adults aged 65-74 years was 11 per cent.<sup>17</sup>

Personal interest learning, such as recreational and personal enrichment courses are important for improving both community and personal wellbeing. The participation rate in personal interest learning for those aged 55-64 years is 5.9 per cent and 6.4 per cent for those aged 65-74 years.<sup>18</sup>

## The digital divide

Many aspects of modern life have been transformed by the internet and digital technologies. However, people aged 65 and over are the least digitally included group and are often not able to access the many benefits that technology can bring. Digital inclusion also tends to continue to diminish with age. The affordability of network access as well as digital skills are the two main barriers. Gender also impacts inclusion, older women in Australia have lower levels of overall digital inclusion than males.<sup>19</sup>

## Health literacy

Health literacy is the ability to obtain, process and understand basic health information and health services. It influences decision making such as how often to take medication, when to access health care, and which services to access. Low health literacy is associated with higher rates of hospitalisation and emergency care use, premature death among older adults, and lower participation in preventative programs such as influenza vaccination or cancer screening, and poor adherence to medication regime. Australians aged 60-74 have the lowest levels of health literacy, in Australia approximately 78 per cent of adults in this age group may not have been able to exercise their choice or voice effectively when making healthcare decisions.<sup>20</sup>

<sup>17</sup> <https://www.abs.gov.au/work-related-training>

<sup>18</sup> <https://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4234.0Feature%20Article62016-17?opendocument&tabname=Summary&prodno=4234.0&issue=2016-17&num=&view=>

<sup>19</sup> Thomas, J, Barraket, J, Wilson, CK, Cook, K, Louie, YM & Holcombe-James, I, Ewing, S, MacDonald, T, 2018, Measuring Australia's Digital Divide: The Australian Digital Inclusion Index 2018, RMIT University, Melbourne, for Telstra.

<sup>20</sup> Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW.

## Considerations for Redland City

Promote lifelong learning and education opportunities for older adults.

Support organisations providing lifelong learning. Support Lifelong learning organisations that provide personal interest.

Provide free internet access and digital skills education in Redland City.

Promote health promotion messages to the community.

Promote health messages to individuals before they need to access the healthcare system (i.e. men in the workplace).

## Changes in demand for aged care and support

The aged care system provides in-home and residential care services to older adults. In 2016–17, aged care services were provided to more than 1.3 million Australians. The majority of these (784,927) received relatively low levels of support in the community through the Commonwealth Home Support Program. Another 97,516 received assistance through subsidised Home Care Packages. These packages assist residents to purchase a range of services and equipment to assist them living in their own home. The demand for Home Care Packages is expected to increase with the growing number of older adults choosing to 'age in place'. This will impact residential aged care, as the majority will not move to aged care until later in life or with the onset of disability, so those in aged care are likely to have a higher level of dependency.<sup>21</sup>

## Carers of older Australians

Women of working age provide the majority of care of older Australians. Nationally more than half of primary carers are also in the workforce, the increasing numbers of older adults working is likely to impact availability of family carers in the future. Population ageing will increase the demand for hospital care and require a corresponding increase in the medical labour force, forcing the aged care sector to compete for staff. The demand for personal carers has increased with the introduction of the National Disability Insurance Scheme and an increasing ageing population.<sup>22</sup>

## Elder Abuse

Elder abuse describes the physical, sexual, financial, psychological or social abuse, or neglect of an older person occurring within a relationship where there is an implication of trust, resulting in harm to the older person.

It is estimated that between 2–14 per cent of older Australians experience elder abuse each year.<sup>23</sup> In Queensland, 68 per cent of callers to Queensland's Elder Abuse Prevention Unit helpline for a five year period were female. The most common age group of victims was 80–84 years. Elder abuse is of increasing concern as the number and proportion of older adults in our community continues to grow.<sup>24</sup>

### Considerations for Redland City

Advocate for improved carer support and education opportunities for the aged care workforce.

Promote awareness of elder abuse within the community and provide access to information and support.

Continue to advocate for needs of older adults who are vulnerable.

<sup>21</sup> 2016 Deloitte Access Economics Pty Ltd Australia's Aged Care Sector: economic contribution and future directions.

<sup>22</sup> The labour market for personal care workers – in aged and disability care - Australia 2017 <http://lmp.gov.au/PortalFile.axd?FieldID=3159629&.pdf>

<sup>23</sup> <https://aifs.gov.au/publications/elder-abuse>

<sup>24</sup> [https://www.eapu.com.au/uploads/research\\_resources/EAPU%20Helpline\\_%20Results%20of%20an%20investigation%20of%20five%20years%20of%20call%20data\\_2015.pdf](https://www.eapu.com.au/uploads/research_resources/EAPU%20Helpline_%20Results%20of%20an%20investigation%20of%20five%20years%20of%20call%20data_2015.pdf)



## Burden of disease and leading cause of death

Coronary heart disease, dementia, and stroke are the primary causes of disease and leading cause of death among persons aged 75 years and over. In Queensland, men aged 65–74 years are significantly more likely to be overweight or obese than women of the same age. Men are also less likely to eat adequate amounts of fruit and vegetables, and more likely to consume alcohol at risky levels over their lifetime. Despite the frequency of chronic disease in later life, two-thirds of older Australians aged 75 and over rate their health as good, very good or excellent. Personal health behaviours contribute significantly to health and wellbeing in older age. Modification of lifestyle factors such as undertaking physical activity, eating a healthy diet, and stopping smoking and reducing alcohol use and seeking medical treatment for high blood pressure, diabetes and high cholesterol can reduce risk factors.<sup>25</sup>

## Increase in people living with dementia

Dementia is the term that describes a group of conditions which cause a progressive decline in a person's cognitive functioning; commonly memory loss but also speaking, thinking and moving. Dementia is a leading cause of illness and death amongst older Australians. It is estimated that 376,000 Australians were living with dementia in 2018, and by 2030 it is expected to affect 550,000 people. In Queensland approximately 84,940 people have dementia. Although it can also affect younger people, most people with dementia are older. Over 52 per cent of people living in residential aged care have a diagnosis of dementia. A longer life expectancy and an ageing population will see an increased number of older adults living with dementia in the community. It is vital that people with dementia are able to stay physically, mentally and socially active.<sup>26</sup>

## End of life experience

At the end of life most people would prefer to die at home or in a homelike environment, but for the majority of Australians this does not occur. It is not common to talk about death and this is a substantial barrier to quality end-of-life experiences where a person receives the care that they want. This leaves many patients, families and friends, and clinicians to make decisions about medical interventions under stress, which can impact on the quality of the end-of-life experience and result in unnecessary patient transfers to acute health care and unwanted treatment.

<sup>25</sup> Australian Institute of Health and Welfare 2018. Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW.

<sup>26</sup> <https://www.dementia.org.au/information>

## Considerations for Redland City

Promote community awareness and understanding of dementia.

Ensure Council's buildings are accessible to people with dementia.

Advocate for increased access to carer respite services for the mainland and islands.

Promote the importance of advance care planning and offer a range of options for burial or cremation services in Redland City.



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# 1 Outdoor Spaces and Buildings

Older residents can access and enjoy the city's community facilities and outdoor spaces.

The quality of the City's public buildings and the outdoor spaces are major influences on independence, mobility, and quality of life at every age. Older residents tend to spend much of their time in the local neighbourhoods. They shop locally and are regular users of the City's libraries, customer service centres, community halls, arts and cultural facilities and community centres.

We recognise the normal ageing process can bring a range of physical and cognitive changes. These can affect sensory function, perception, mobility, muscular efficiency, coordination, memory and orientation. Although the degree to which these

are experienced differs between individuals. We will design the City's outdoor spaces and public buildings to be safe, and inviting for people of all ages to access and enjoy; whether it's for shopping, relaxation, exercise, walking, swimming, fishing, boating, or connecting with nature.

Accessible outdoor spaces encourages and assists older residents to remain physically active helping to improve longevity and quality of life. Ensuring buildings and spaces are accessible to older adults provides benefits to residents of all ages and abilities.



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## What this means for the community:

- 1.1. Council's customer service centres, community facilities, libraries, arts and cultural facilities are welcoming and accessible to people of all ages and abilities.
- 1.2. It is easy for people of all ages to walk, wheel, cycle and be active in local neighbourhoods.
- 1.3. Outdoor spaces, streets and parks are safe, clean and graffiti free.

## We will measure success by:

- Proportion of public buildings fully compliant with Disability Standards and Guidelines.
- Proportion of older adults who report their neighbourhood is safe and accessible for walking, mobility scooter or wheelchair.

## Key Initiatives

**Dementia Friendly Council** – Review Council's Customer Service Centres, Redland City Libraries, Redland City Art Gallery and Redland Performing Arts Centre to identify opportunities to make it easier for people with dementia to navigate.

**Public Toilets Program** – Map the city's public toilets to assess accessibility, number, locations and distances in between. Undertake a program of renewal to ensure accessibility for people of all ages and abilities.

**City Bench Program** – Increase the amount of shaded seating available around the city's major walking routes, key walking circuits, pathways and centres to provide people of all ages with places to rest.





Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>1.1</b> Council's customer service centres, community facilities, libraries, arts and cultural facilities are welcoming and accessible to older adults.	1.1.1 Review Council's customer service centres, libraries, Redland Art Gallery and the Redland Performing Arts Complex for accessibility to comply with the <i>Disability Discrimination Act 1992</i> .	Deliver	City Operations (Facilities Services Unit)	Short Term
	1.1.2 Renew park seating to include arm and back rests in destination and community parks.	Deliver	City Infrastructure (Civic and Open Space Management)	Ongoing
	1.1.3 Provide information on the operation of safe and suitable buildings to lessors of Council's community and recreational buildings to ensure they are accessible for people of all ages and abilities.	Deliver	City Operations (City Sport and Venues)	Ongoing
<b>1.2</b> It is easy for people of all ages to walk, wheel, cycle and be active in local neighbourhoods.	1.2.1 Incorporate the "Walkable Neighbourhoods Planning and Design principles into new housing developments".	Deliver	City Planning and Assessment (Development Assessment)	Ongoing
	1.2.2 Maintain footpath surfaces in smooth condition and respond to customer requests where new trip hazards are identified.	Deliver	City Operations (Roads, Drainage and Marine Maintenance)	Ongoing
	1.2.3 Upgrade the footpath and cycle network to connect neighbourhoods with public parks, recreational facilities and community purpose land in accordance with SEQ Principal Cycle Network Plan and the Local Government Infrastructure Plan.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Ongoing
	1.2.4 Renew pathway kerb ramps to comply with disability standards and improve footpath safety.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Ongoing
	1.2.5 Renew stormwater gully grates with bicycle friendly grates to improve street safety for cyclists and people using wheelchairs through an annual renewal program.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Ongoing
	1.2.6 Ensure new housing development incorporates Walkable Neighbourhoods Planning and Design and includes infrastructure and facilities to support active lifestyles.	Deliver	City Planning and Assessment (Development Assessment)	Ongoing
	1.2.7 Install resistance training exercise equipment for adults in T1 and T2 parks across the city.	Deliver	City Infrastructure (Civic and Open Space Management)	Ongoing

# 2 Transport

Older residents find it easy to move about Redlands Coast.

Transport ensures older adults can move around the city to participate in activities, access services and enjoy all that Redlands Coast has to offer. Access to transport is essential for being able to age in place and retaining independence and quality of life in older age. The transport needs of older residents varies. While many people are healthy and active, regularly walking or cycling about the city, or travelling independently in their own vehicles, there are others who may continue to drive but tend to feel more comfortable travelling shorter distances, or restrict travel to daylight hours. Others no longer drive and are reliant on public transport or family and friends. There is another group who require

mobility assistance to attend medical appointments or to shop, who find using public transport difficult or confusing. This group tend to rely on community transport, or family and friends.

Redland City Council shares responsibility for transport with the state government and the private sector. The state government funds buses, trains and some ferries, the major road network and the rail network. Private providers operate buses, ferries and barges, taxis and community transport services. Redland City Council is responsible for local transport planning, designing, building and maintaining local roads, bus stops, footpaths, traffic management parking and street signage.



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## What this means for the community:

- 2.1 Transport infrastructure responds to the needs of older adults.
- 2.2 The pedestrian and cycle network connects people to village centres, neighbourhoods and public transport.
- 2.4 The safety of older drivers, pedestrians, and people using wheelchairs, mobility aids and scooters is prioritised.

## We will measure success by:

- Proportion of bus stops that meet Disability Standards and Guidelines.
- Number of reported traffic and scooter accidents involving older adults.

## Key Initiatives

**Connected Journeys Project** – In partnership with older residents identify missing links in the local transport network to inform planning and advocacy for improved transport connectivity.

**Community Transport Solutions** – Partner with community transport providers to identify and explore opportunities for more convenient and accessible community transport options such as demand responsive transport or aged care living shuttle services.

**City Wayfinding** – Improve signage in the city to make it easier for cyclists and pedestrians to locate council services and community facilities.



Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>2.1 Transport infrastructure responds to the needs of older adults.</b>	2.1.1 Consult with older adults in the development of Local Area Transport plans for the city's principal, major and specialist activity centres and key transport nodes.	Deliver	City Planning and Assessment (Transport Planning)	Medium Term
	2.1.2 Renew bus stops to the Disability Standards for Accessible Public Transport 2002 (Transport Standards).	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Short Term
	2.1.3 Explore opportunities for recreational vehicle (RV) Parking in the Redlands.	Deliver	City Operations (Civic and Open Space Management)	Short Term
	2.1.4 Complete upgrades of ferry passenger terminals at Russell Island, Macleay Island, Lamb Island and Karragarra Island to be compliant with the Disability Standards for Accessible Public Transport 2002.	Deliver	City Infrastructure (Marine and Waterway Assets)	Medium Term
	2.1.5 Promote community transport options through Council's website.	Deliver	Community and Economic Development (Strengthening Communities)	Short Term
	2.1.6 Fund eligible initiatives that strengthen the sustainability of community transport providers through the Community Grants Program.	Deliver	Community and Economic Development (Strengthening Communities)	Ongoing
<b>2.2 The pedestrian and cycle network connects people to village centres, neighbourhoods and public transport.</b>	2.2.1 Extend the principal cycle network and the Moreton Bay Cycleway.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Short Term
	2.2.2 Ensure new housing developments are accessible for pedestrians and cyclists and to public transport.	Deliver	City Planning and Assessment (Transport Planning)	Ongoing
<b>2.3 The safety of older drivers, pedestrians, and people using wheelchairs, mobility aids and scooters is prioritised.</b>	2.3.1 Renew standard footpaths to a minimum width of 1.5 metres where allowable and shared paths to a minimum width of 2 metres to accommodate safe use of wheelchairs, mobility aids and scooters.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	1-3 years
	2.3.2 Install pathway lighting in high priority areas to improve safety and security.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	1-3 years
	2.3.3 Promote driver safety education and refresher courses for all drivers on Council's website.	Partner	Community and Economic Development (Strengthening Communities)	Short Term
	2.3.4 Deliver the Scooter Safety Education Program to Aged Care providers in partnership with the Volunteers in Policing Program.	Deliver	Community and Economic Development (Strengthening Communities)	Ongoing
	2.3.5 Attend the Redlands Traffic Advisory Group meetings to identify and monitor road safety issues with the Department of Transport and Main Roads and the Queensland Police Service.	Partner	City Infrastructure Group (Traffic and Transport Planning)	Ongoing
	2.3.6 Maintain local roads in good condition and ensure landscaping at intersections and roundabouts is kept low to improve visibility and enhance pedestrian and driver safety.	Deliver	City Infrastructure Group (Traffic and Transport Planning)	Ongoing

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# 3 Housing

Older residents can access safe and secure housing.

A home is important for security and stability at any age, especially in older age. The familiarity of the local neighbourhood contributes to connection to home and place, providing a sense of belonging, safety and wellbeing. In an age-friendly community, older residents can access housing that is affordable, safe and accessible to essential services and facilities.

The majority of older residents have a strong desire to 'age in place', either to remain living in their own home as they age, or to move to a more suitable dwelling so they can live comfortably and independently in the community, and continue to maintain connections with friends and neighbours.

The ability to remain living in the local community in older age is dependent on having access to suitable housing that can meet the changing needs of occupants across their lifespan, and which can be modified easily to support independence and to be accessible to essential transport, community and health services.

Redland City Council is committed to ensuring that city planning provides for a diverse range of housing product and location, where people can remain connected to neighbourhoods and live independently for as long as possible.



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## What this means for the community:

- 3.1 A range of affordable housing options are available to meet the needs of older adults.
- 3.2 Housing is located in proximity to transport, shops, services and open space.
- 3.3 Housing is able to meet the changing needs of occupants across the life-span.

## We will measure success by:

- Proportion of older adults who want to remain in their current residence and are confident they will be able to afford to do so.
- Availability of community services to support ageing in place, home maintenance, support and personal care.

## Key Initiatives

**Ageing In Place Project** – Work with community and the State Government to identify and advance opportunities for older residents on the Southern Moreton Bay Islands to age in place.

**Home for a Lifetime** – Undertake advocacy to Australian Building Codes Board through the Local Government Association of Queensland (LGAQ) to incorporate universal design specifications into the National Construction Code to ensure that new housing is accessible to people of all ages and able to accommodate peoples changing needs across the lifespan.



Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>3.1</b> <i>A range of affordable housing options are available to meet the needs of older adults.</i>	3.1.1 Implement provisions set out in the Redland City Plan for affordable housing suitable for a diverse and changing community including families, single people, single-parent households, people with special needs and older adults.	Deliver	City Planning and Assessment (Strategic Planning)	Ongoing
	3.1.2 Deliver simplified assessment processes for development applications of a secondary dwelling to accommodate multi-generational living.	Deliver	City Planning and Assessment (Strategic Planning)	Ongoing
	3.1.3 Offer a concession on the General Rate to eligible pensioners.	Deliver	Financial Services (Financial Operations)	Ongoing
	3.1.4 Continue to advocate for needs of vulnerable older adults experiencing homelessness in Redland City with the Queensland Government.	Advocate	Community and Economic Development (Strengthening Communities)	Ongoing
<b>3.2</b> <i>Housing is located in proximity to transport, shops, services and open space.</i>	3.2.1 Ensure new housing developments are accessible to transport, health and social services, public open space and recreational facilities in accordance with the Redland City Plan.	Deliver	City Planning and Assessment (Strategic Planning)	Ongoing
<b>3.3</b> <i>Housing is able to meet the changing needs of occupants across the lifespan.</i>	3.3.1 Promote local home modification services and personal care services.	Partner	Community and Economic Development (Strengthening Communities)	Ongoing
	3.3.2 Fund eligible initiatives that strengthen the sustainability of organisations providing home modification programs and home maintenance in Redland City through the Community Grants Program.	Deliver	Community and Economic Development (Strengthening Communities)	Ongoing

# 4 Social Participation

Older residents can participate in a range of community activities and events.

Connections with others is the cornerstone of security and wellbeing for older residents. Having someone to call on for support in a time of need, participating in community activities, social groups or hobbies with others can contribute to fulfilment, sense of purpose and connection to the wider community.

Ageing brings with it a range of transitions that can place older adults at increased risk of social isolation and loneliness. Adult children leaving home, retirement from full time work, loss of a driver's licence, the death of a partner or breakdown of a relationship, or moving to a new community can increase those risks. Other barriers to social

participation include poor health, hearing loss, difficulties with mobility or disability, or caring for others.

We are committed to the design of public spaces to encourage social interaction, improve transport connectivity, and to offering activities and opportunities where connections can be made. We will improve our communication so that it is easier for older residents to find support and opportunities to meet others. We will promote community organisations that support isolated and vulnerable older adults, and continue to deliver events and entertainment for different interests and abilities to support health and wellbeing.



## What this means for the community:

- 4.1 A variety of events and performances that appeal to a range of ages will be held throughout the year.
- 4.2 Opportunities for social connections between residents is encouraged and promoted.
- 4.3 City centres and outdoor spaces are designed to encourage social interactions and connections between residents and generations.

## We will measure success by:

- Proportion of older adults among all reported visitors to Redlands Performing Arts Centre, Redland Art Gallery and local events.
- Availability of local recreation and learning programs specifically for older adults.

## Key Initiatives

**Social Events** – Engage older adults to explore opportunities to improve Council's promotion of social events and activities available on Redlands Coast for older residents.

**Resilient Communities** – Develop a program of activities that target social isolation and vulnerability to enhance community resilience.





Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>4.1 A variety of events and performances that appeal to a range ages will be held throughout the year.</b>	4.1.1 Offer a year-round balanced calendar of events that appeal to a wide audience and cross-sections of the community.	Deliver	Communications, Engagement and Tourism (Tourism and Events)	Ongoing
	4.1.2 Deliver an annual program of affordable, high quality cultural entertainment specifically for older adults.	Deliver	Community and Cultural Services (Creative Arts)	Ongoing
	4.1.3 Support artistic groups in the city that offer music, drama, dance and visual arts opportunities in which older adults can participate.	Advocate	Community and Cultural Services (Creative Arts)	Ongoing
	4.1.4 Deliver activities that engage older adults with a wide range of interests (E.g. author talks, book art, robotics for adults).	Deliver	Community and Cultural Services (Library Services)	Ongoing
	4.1.5 Provide meeting spaces to organisations that provide social opportunities for older adults.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	4.1.6 Schedule shows and events to coincide with ferry timetables to enable residents of the Southern Moreton Bay Islands to attend.	Deliver	Community and Customer Services (Creative Arts)	Ongoing
<b>4.2 Provide access to community halls and/or tenure arrangements with not-for-profit organisations to support delivery of social activities for older residents.</b>	4.2.1 Opportunities for social connections between residents is encouraged and promoted.		City Operations (City Sport and Venues)	Ongoing
	4.2.2 Provide opportunities for residents to connect with others in their local neighbourhoods through the visiting mobile library service.	Deliver	Community and Cultural Services (Library Services)	Ongoing
<b>4.3 Outdoor spaces encourage social interactions.</b>	4.3.1 Design new parks to facilitate social interactions and connections between residents and between the generations.	Deliver	City Infrastructure (Civic and Open Space Management)	Ongoing

# 5 Respect and Social Inclusion

Older residents are respected and included in all aspects of community life.

Age-friendly communities value people of all ages and foster a culture of respect and inclusion. Respect and social inclusion are the basis on which an age-friendly community is built, and both influence the quality of life of older adults, and their experience of ageing. Older adults are more likely to participate in the community when they feel they are valued and respected.

We want Redlands Coast to be a place where older residents play an active role in all aspects of community life. Redland City Council is committed to demonstrating respect by creating environments that bring together people of all ages and cultural backgrounds; promoting strong community

connections, building trust, challenging ageism through our positive communications and depictions of ageing, and creating opportunities for shared activities.

Council will continue to recognise the talents, skills and valuable contributions that older residents make to Redlands Coast community. We will draw upon their wisdom and experience by providing opportunities to influence council's decisions. We will recognise the diversity of our older residents and work toward creating connections between the generations to build positive relationships and respect.



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## What this means for the community:

- 5.1 Older residents are respected and their contribution to the community is recognised and valued.
- 5.2 Council's services are inclusive of older residents.
- 5.3 Older residents can share their knowledge and experiences with the community.

## We will measure success by:

- Proportion of older adults who report high level of satisfaction with social relationships.

## Key Initiatives

**Cooperative Research Centre Longevity** – Partner with academia and industry to attract investment, testing and trialing of products and services that serve an ageing population.

**Intergenerational Programs** – Facilitate partnerships that foster meaningful connections between the generations.





Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>5.1</b> <i>Older residents are respected and their contributions to the community are recognised and valued.</i>	5.1.1 Utilise positive images of older adults in relevant council publications to reflect the diversity of older adults in our community.	Deliver	Communications, Engagement and Tourism (Marketing, Digital and Design)	Ongoing
	5.1.2 Sponsor the annual Seniors Awards which recognise the significant contributions older residents make to Redlands Coast community.	Funding	Community and Economic Development (Strengthening Communities)	Ongoing
	5.1.3 Provide sponsorship opportunities for local community groups to deliver events that are aimed to thank local residents who volunteer their time to support Redlands Coast community.	Funding	Communications Engagement and Tourism (Tourism and events)	Ongoing
	5.1.4 Sponsor Senior's Week celebrations and activities.	Funding	Community and Economic Development (Strengthening Communities)	Ongoing
	5.1.5 Engage with Aboriginal and Torres Strait Islander community to recognise Elders in dual naming of open spaces in Redland City.	Deliver	Corporate Governance (Indigenous Partnerships and Programs)	Ongoing
	5.1.6 Deliver activities that generate understanding and respect between the generations (e.g. Grandparents day, story time).	Deliver	Community and Cultural Services (Library Services)	Ongoing
<b>5.2</b> <i>Council's services are accessible to older residents.</i>	5.2.1 Provide equitable access to Council's services to residents of all ages, language, ability or ethnicity through implementation of Council's Customer Experience Policy.	Deliver	Community and Cultural Services (Integrated Customer Contact Centre)	Ongoing
	5.2.2 Continue to provide outreach library services to nursing homes and to residents who are not able to visit the library due to illness, disability, visual impairment or caring responsibilities.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	5.2.3 Fund eligible initiatives that support older residents at risk of social exclusion through the Community Grants Program.	Deliver	Community and Economic Development (Strengthening Communities)	Ongoing
<b>5.3</b> <i>Older residents can share their knowledge, and experiences with the community.</i>	5.3.1 Provide opportunities for older residents to share their knowledge of local history with the community.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	5.3.2 Facilitate connections between Aboriginal and Torres Strait Islander Indigenous Elders and local senior's organisations and seniors networks.	Deliver	Corporate Governance (Indigenous Partnerships and Programs)	Ongoing

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# 6 Civic Participation & Employment

Older residents can participate in work, volunteering and decision making.

Older adults are active participants in the community and contributors to Redlands Coast economy through employment and business ownership.

Economic participation is enhanced by access to education and entrepreneurship opportunities. We will encourage older entrepreneurs who are launching their own businesses as a way for them to earn an income and participate in the workforce. Continued involvement in local decision making throughout the lifespan strengthens connections to the community.

Participation in volunteering supports self-esteem, and provides a sense of purpose, fulfilment and wellbeing. Redland City Council recognises the important role that volunteers and volunteerism plays in building a strong and vibrant community. We are committed to providing positive volunteer opportunities and experiences for older residents within Council's service areas. We value the significant contributions that older residents make through volunteering and we are committed to continuing to offer a range of fulfilling and meaningful volunteering opportunities for older residents.



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## What this means for the community:

- 6.1 Opportunities for life-long learning, retraining, entrepreneurship and skills development are available and accessible to older residents.
- 6.2 Council's planning and decision making is informed by the experiences of older residents.
- 6.3 Council offers a range of volunteering opportunities for older residents to share their skills, knowledge and experiences with the community.

## We will measure success by:

- Proportion of older adults who report engaging in volunteer activity.
- Proportion of older adults who were enrolled in education or training, either formal or non-formal, in the past year.

## Key Initiatives

**Centre of Excellence in Education for the Ageing** – Advance partnership opportunities for a Centre of Excellence for Education of the Ageing.

**Age-friendly Ambassadors** – Create a new program to recruit older adults to participate in Council's planning on key city projects.

**Experience Bank** – Partner with the community to identify opportunities to establish an "Experience Bank" for older adults to volunteer time to share their skills and experience to assist community groups.



Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>6.1 Opportunities for life-long learning, retraining, entrepreneurship and skills development.</b>	6.1.1 Promote training opportunities for Aged Care Workforce through the delivery of the Regional Skills Investment Strategy.	Partner	Community and Economic Development (Economic Development)	Short Term
	6.1.2 Assist older adults seeking employment with curriculum vitae/ resume development and low cost printing and photocopying services.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	6.1.3 Provide free public access to wireless internet (WiFi), computers and general computer help.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	6.1.4 Deliver the Ask IT, digital literacy program to older adults.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	6.1.5 Promote lifelong learning opportunities for older adults interested in self-employment and senior-entrepreneurship.	Deliver	Community and Economic Development (Economic Development)	Ongoing
	6.1.6 Develop a Council workforce plan to maximize the potential of workers across the lifespan.	Deliver	People, Culture and organisational Performance	Ongoing
<b>6.2 Council's planning and decision making is informed by the experiences of older residents.</b>	6.2.1 Engage with older residents on key Council projects.	Deliver	Communications, Engagement and Tourism (Media, Communications and Community Engagement)	Ongoing
<b>6.3 Council offers a range of volunteering opportunities for older residents to share their skills, knowledge, experiences with the community.</b>	6.3.1 Provide a variety of opportunities for older residents to volunteer in Council's arts and environmental programs.	Deliver	Environment and Regulation (Environment and Education) Customer and Cultural Services (Creative Arts)	Ongoing

# 7 Communication and Information

Older residents find it easy to find information about services, events and activities.

The internet and digital technology has rapidly changed the way information is communicated, and how services are delivered with many now online.

Although many older residents do access the internet, there are many others who are not yet online. We recognise that older residents often prefer to receive information through direct contact such as telephone calls, in person through our customer service centres, or in printed form.

In an age-friendly community it is easy to stay up to date with community news, find information

about local events, businesses and services and volunteering opportunities.

Redland City Council will communicate information about Council's services, events and activities in a range of formats to meet the needs of older adults with varying capacities, including people with vision and hearing loss. Council will work to increase access to the internet and digital technologies to ensure all residents are able to access Council's services and information in a range of formats.



## What this means for the community:

- 7.1 Older residents can access information they require when they need it.
- 7.2 Council's communications are inclusive of people of all ages and abilities.
- 7.3 Events, activities and volunteering opportunities for seniors are promoted widely.

## We will measure success by:

- Proportion of older people living in a household with internet access at home.
- Proportion of older people who report they are able to access information.

## Key Initiative

### "Hear Here Council!" Hearing Loss Training –

In partnership with Better Hearing Australia implement the new "Hear Here Council!" training package improve Council's communication with customers with hearing loss.





Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>7.1 Older residents can access information they require when they need it.</b>	7.1.1 Provide a range of library resources suitable for people with visual impairment and hearing loss (e.g. e-Audio, music, eBooks, large print, audio books).	Deliver	Community and Cultural Services (Library Services)	Ongoing
	7.1.2 Provide free public access to computers, internet and WiFi at Redland City Libraries.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	7.1.3 Provide spaces for community groups and organisations to offer senior's information to the community.	Deliver	Community and Cultural Services (Library Services)	Ongoing
	7.1.4 Deliver adult literacy and numeracy classes.	Deliver	Community and Cultural Services (Library Services)	Ongoing
<b>7.2 Council's communications are inclusive of people of all ages and abilities.</b>	7.2.1 Provide Hearing Loop technology in Redland City Libraries, Council's Customer Service Centres, and Redland Performing Arts Centre.	Deliver	City Operations (Facilities Services Unit)	Ongoing
<b>7.3 Events, activities and community services for seniors are promoted widely.</b>	7.3.1 Provide opportunities to community organisations and groups who support seniors to promote services and information in libraries.	Partner	Community and Cultural Services (Library Services)	Ongoing
	7.3.2 Publish updates on Council's initiatives, events and activities and community consultation projects through Redlands Coast Pulse Newsletter and the What's On Calendar.	Deliver	Communications, Engagement and Tourism (Tourism and Events)	Ongoing

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# 8 Community Support and Health Services

Older residents can access a range of services to support health and wellbeing.

Health needs often become more complex in older age, so access to these services is essential for wellbeing, and assists with maintaining independence for as long as possible.

Community support and health services are funded through a range of agreements with the Commonwealth and State Governments. Redland City Council plays an important role in planning, advocating, and influencing the number, range and location of these services within Redland City.

In an age-friendly community, residents can access support and health services to maintain their physical and mental wellbeing.

Council is committed to working with local health care providers to improve access to health services and health information. We will continue to build community resilience and ensure disaster management planning recognises the vulnerabilities and capacities of older adults.



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## What this means for the community:

- 8.1 Disaster planning recognises and responds to the vulnerabilities and capacities of older adults.
- 8.2 An adequate range of community services are available to support health and wellbeing.
- 8.3 Residents can access end of life support, advance care planning and a choice of burial or cremation options.

## We will measure success by:

- Proportion of older people who report that they know who to call if they need information about their health concerns and relevant services in their community.

## Key Initiatives

**Community Services Supply Analysis** – Work with Griffith University's Regional Innovation Data Lab to undertake mapping of community services in Redland City to identify gaps in the community services system to inform future planning.

**Investment in Health Services** – Advocate for development and expansion of local health services (including general practitioners and specialist services) in appropriate locations to address current per capita under-supply.

**Multi-purpose Community Centres** – Undertake social infrastructure planning for multi-purpose community centres to support the health and wellbeing of older adults.



Objective	Actions	Council's role	Lead Council service area	Timeframe
<b>8.1</b> <i>Disaster planning recognises and responds to the vulnerabilities and capacities of older residents.</i>	8.1.1 Undertake disaster planning and response activities with the Aged Care Providers Network and the Redlands Seniors network.	Deliver	Community and Economic Development (Strengthening Communities)	Ongoing
	8.1.2 Partner with Red Cross to deliver the Community Champions Program on the Southern Moreton Bay Islands to lead a community response for planning, preparation, response and recovery for the local community.	Partner	Corporate Governance (Disaster Planning and Operations)	Ongoing
<b>8.2</b> <i>An adequate range of resources and community services are available to support health and wellbeing.</i>	8.2.1 Advocate for increased government funding for services for seniors to provide for the needs of the city's ageing population.	Advocate	Community and Economic Development (Strengthening Communities)	Ongoing
	8.2.2 Attend seniors' networks to remain informed of current service trends and issues to support sustainability of services and networks.	Partner	Community and Economic Development (Strengthening Communities)	Ongoing
	8.2.3 Advocate for carer respite services on the Southern Moreton Bay Islands.	Advocate	Community and Economic Development (Strengthening Communities)	Ongoing
	8.2.4 Progress opportunities for a new multipurpose community hub in Cleveland to support coordinated community service delivery activities, programs and services to address social needs including needs of an ageing population.	Deliver	Community and Economic Development (Strengthening Communities)	Short to Medium
	8.2.5 Provide the Words for Wellbeing program to facilitate community access to useful, evidence-based self-help resources recommended by health professionals and organisations directly involved in healthcare to assist people to better understand their health.	Deliver	Community and Cultural Services (Library Services)	Ongoing
<b>8.3</b> <i>End of life support, advance care planning and a choice of burial or cremation options are available.</i>	8.3.1 Undertake planning and operational works to expand Redland City Council's Cemeteries to ensure sufficient, accessible, affordable burial, cremation and memorial options through Council's annual capital works program.	Deliver	City Operations (City Sport and Venues)	Short to Medium
	8.3.2 Acknowledge Sorry Business and engage with the Redlands Indigenous community to ensure that cultural burial practices are acknowledged.	Partner	Corporate Governance (Indigenous Partnerships and Programs)	Ongoing
	8.3.3 Promote advance care planning and recognise annual Advance Care Planning Week.	Partner	Community and Economic Development (Strengthening Communities)	Ongoing

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**15      REPORTS FROM INFRASTRUCTURE & OPERATIONS****15.1      REDLAND COMMUNITY CENTRE INC. - LEASE RENEWAL**

This report is being finalised.

## 15.2 AMITY POINT SHORELINE EROSION MANAGEMENT PLAN IMPLEMENTATION PLAN

### Objective Reference:

**Authorising Officer:** Anthony Burrows, Acting General Manager Infrastructure & Operations

**Responsible Officer:** Frances Hudson, Acting Group Manager City Assets

**Report Author:** Lachlan McClure, Acting Adviser, Marine Strategic Infrastructure Planning

**Attachments:** 1. Amity Point Shoreline Erosion Management Plan Implementation Plan [↓](#)

### PURPOSE

To present the Implementation Plan for the Amity Point Shoreline Erosion Management Plan to Council for adoption.

### BACKGROUND

#### Foreshore Erosion at Amity Point

Foreshore erosion has impacted both public and private land at Amity Point over a long period of time. Shoreline erosion at Amity Point is the result of the long term southerly migration of the Rainbow Channel and the incidence of episodic retrogressive flow slide 'events' that occur over relatively short periods of time.

Amity Point is a declared Erosion Prone Area (EPA) under the Coastal Protection and Management Act 1995 and identified as a high risk and high priority locality under Council's Coastal Adaptation Strategy.

#### Shoreline Erosion Management Plan

On 19 December 2019 Redland City Council (Council) resolved to adopt the Amity Point Shoreline Erosion Management Plan (SEMP). The Amity Point SEMF involved a detailed investigation of the underlying causes of coastal erosion at Amity Point, and established a framework and strategy for Council and landowners to manage the impacts of erosion.

The Amity Point SEMF recommended actions to manage erosion in the northern, central and southern reaches of the foreshore at Amity Point. The SEMF confirmed that the existing flow slide barrier has been effective at preventing the landward migration of flow slides in the central reach, and therefore recommended that the structure is formalised and maintained. The SEMF also recommended beach surveys and a coastal process study in the northern reach, and the construction of a buried seawall and sand nourishment in the southern reach.

#### SEMF Implementation Plan

The recommendations of the SEMF (particularly in the central reach) involve complex technical constraints, regulatory requirements, legal considerations and landowner engagement. The Amity Point SEMF Implementation Plan was commissioned to consider these factors and outline the best way of executing the recommendations of the SEMF.

The Amity Point SEMF Implementation Plan (Implementation Plan) is ready for Council to adopt and action.

## ISSUES

### Technical Inputs

Preparation of the Implementation Plan involved a number of technical inputs including:

- Technical review of the recommendations of the SEMP by a Coastal Engineer
- Legal review of the relevant environmental, planning and property law
- Financial analysis which compared estimated ongoing costs to projected benefits
- Rock supply study which considered options for sourcing and stockpiling rock

### Stakeholder Consultation

Formulation of the Implementation Plan also involved consultation with the following:

- Amity Point SEMP Community Reference Group (CRG)
- Amity Point foreshore landowners
- Quandamooka Yoolooburrabee Aboriginal Corporation (representative on CRG)
- Department of Natural Resources, Mines and Energy
- Planning Group, Queensland Treasury/ State Assessment and Referral Agency
- Queensland Parks and Wildlife Service, Department of Environment and Science
- Environment Policy and Planning, Department of Environment and Science

### Content of Draft Strategy

These technical inputs and stakeholder consultation allowed the identification and analysis of the different implementation scenarios for ownership of the flow slide barrier, responsibility for approvals and maintenance, as well the cost burden of these arrangements.

The overall approach recommended for Council is to assist landowners so that they can take reasonable steps to protect their own properties. Specific recommendations on key points are summarised as follows:

#### Ownership and responsibility

The Implementation Plan recommends that foreshore landowners retain ownership and responsibility for the flow slide barrier where it is protecting private land. The alternative was that Council assume responsibility and impose a levy to fund works. Continued private ownership and responsibility was the preference of a majority of foreshore landowners as it reflects historical precedent and does not necessitate a levy. This arrangement is also preferable to Council as it is consistent with Council's citywide position being that works to protect private land are a private responsibility.

It is important that landowners understand their responsibility to secure the necessary permits and approvals and undertake preventative maintenance work on the flow slide barrier (permits, approvals and notifications apply). Council will assist by providing information to landowners outlining their responsibilities. While landowners currently undertake responsive or reactive emergency works, the SEMP recommends that the flow slide barrier is proactively formalised and maintained by landowners within the scope of approved works.

#### Permits and approvals

Landowners in Amity Point have constructed the existing flow slide barrier over a period of time without the relevant permits and approvals. The Implementation Plan recommends that landowners apply for a development permit for the portion of the flow slide barrier that protects their land.

This is necessary for them to be able to lawfully maintain the structure, and importantly as once approved a development permit attaches to the land, and can require both current and future owners of the land to maintain the structure.

To assist landowners to navigate this process, the Implementation Plan recommends that Council apply for a high level preliminary approval over the length of the flow slide barrier. A preliminary approval could specify the alignment and general characteristics of the structure and formally establish the Queensland Government's in-principle support for it. This would make it much more straightforward for landowners to apply for a site specific development permit.

### **Maintenance Obligations**

A flow slide barrier is a dynamic structure that requires the placement of additional rock immediately following a flow slide event. The incidence and likelihood of a regressive flow slide is also difficult to predict. Because of this, maintenance requirements on a flow slide barrier are significantly higher than on a traditional rock seawall.

The Implementation Plan recommends that landowners retain responsibility for organising and funding ongoing maintenance of the flow slide barrier where it is protecting private land. Council is responsible for decisions regarding Council land and assets, and therefore Council is responsible for the maintenance of the flow slide barrier where it protects the functionality of a Council asset such as a local roads and park.

### **Rock Supply**

As a flow slide barrier requires frequent and timely maintenance, the ongoing availability and supply of rock is important. The rock supply study undertaken as part of the Implementation Plan identified that while rock can be sourced from the mainland, a supply from North Stradbroke Island was much more preferable in terms of supply cost, transport logistics and the timeliness of maintenance work.

To facilitate the continued availability of an island based supply rock for Council and residents to undertake emergency works on the flow slide barrier, the Implementation Plan recommends that Council take all reasonable steps to ensure that Council's quarry on North Stradbroke Island remains operational.

The supply of rock to private landowners from Council's North Stradbroke Island quarry (Island quarry) is only available for approved works to the flow slide barrier. No guarantee is given by Council as to the future price or availability of rock from Council's quarries. While an Island based supply of rock is currently the most convenient and economical option for landowners, rock can be sourced from the mainland if not available from an Island based supply such as Council's Island quarry. The price of rock from Council's Island quarry is listed in Council's fees and charges schedule based on cost recovery. If the rock available from Council's Island quarry is limited, priority will be given to ensure sufficient rock is retained for the maintenance of Council's assets and responsibilities.

## **STRATEGIC IMPLICATIONS**

### **Legislative Requirements**

The Implementation Plan is a non-statutory document. However, permits and approvals are required for most coastal protection works under the *Planning Act 2016*, the *Coastal Protection and Management Act 1995* and *Marine Parks Act 2004*.

The Implementation Plan outlines how these legislative requirements can be addressed, and the relevant permits and approvals secured for the flow slide barrier. Consultation with State Departments has ensured that there is in-principal support for the recommended approach.

### **Risk Management**

The existing and ongoing erosion hazard at Amity Point poses a risk to both private land and buildings and Council assets including roads, parks and beaches. The Implementation Plan will assist in addressing these risks by ensuring that coastal defences are properly engineered, approved, constructed and maintained. This will guide Council in addressing the risk to Council's land and assets and assist landowners as they address the risk to their land and assets.

### **Financial**

The adopted Amity Point Shoreline Erosion Management Plan recommends a number of actions for Council to undertake. Budget for these actions will be requested over the next 5 years through formal budget processes.

In addition to the actions recommended by the Amity Point SEMP, the Implementation Plan recommends that Council undertake the following actions. These actions will require the allocation of additional financial resources to:

- Prepare a concept design and secure a preliminary approval for the flow slide barrier from the relevant authorities.
- Undertake an annual structural audit of the flow slide barrier and share the results with foreshore landowners.
- Undertake the design and construction of those portions of the flow slide barrier that protect Council assets and land such as roads, parks and beaches.
- Maintain quarry operations to facilitate the continued supply of rock from Council's quarry for emergency maintenance works.

Private landowners are responsible for the costs involved in maintaining the portion of the flow slide barrier that protects their land, including:

- Site specific engineering design and certification as/if required
- Site specific development permit for the structure and/or works
- Ongoing maintenance works including sourcing, transporting and placing rock

### **People**

The Implementation Plan will assist asset managers and technical officers to manage the impacts of erosion on Council land and assets. It also clarifies what assistance foreshore landowners can expect from Council as they undertake private foreshore protection works.

City Assets currently has a single asset manager officer responsible for planning and managing all foreshore protection works through the City. The adoption of new Shoreline Erosion Management Plans is committing Council to an increasing number of actions and a higher level of service than Council currently provides. This will require additional human resources if there is to be no impact on existing priorities and operations.

### **Environmental**

There are no environmental implications with the adoption of the Implementation Plan.

## Social

There are no social implications with the adoption of the Implementation Plan.

## Human Rights

Adoption of the implementation plan does not infringe on any human rights.

## Alignment with Council's Policy and Plans

Adoption of the Amity Point SEMP Implementation Plan is consistent with Council's Operational Plan – it advances *Outcome 3 Embracing the bay*. Section 3.3 aims to ensure that 'the community is ready for and adapting to changing coastlines, storm tide and severe weather' and specifically Section 3.3.1(b) which commits to 'continue to develop implementation plans for the Amity Point and Coochiemudlo Island shoreline erosion management plans'.

## CONSULTATION

Consulted	Consultation Date	Comments/Actions
Group Manager, City Operations	Email – 03/07/2020 Meeting – 10/07/2020	Review and comment on Implementation Plan as it relates to the functions of City Operations
Service Manager, Roads Drainage and Marine Maintenance, City Operations	Email – 10/07/2020	Review and comment on Implementation Plan as it relates to the functions of City Operations
Service Manager, Marine Infrastructure Asset Management, City Assets	Multiple/ongoing Most recent – 12/10/2020	Review and comment of Implementation Plan and Council report
Adviser Waterway and Shoreline Assets, Marine Infrastructure Asset Management, City Assets	Multiple/ongoing Most recent – 12/10/2020	Review and comment of Implementation Plan as it related to future marine asset planning and works
Councillor, Division 2	CRG Meeting – 10/09/2020 Briefings – 23/07/2020 08/09/2020 02/11/2020	Chair of Community Reference Group Update on progress and content of Implementation Plan

## OPTIONS

### Option One

That Council resolves as follows:

1. To adopt the Implementation Plan for the Amity Point Shoreline Erosion Management Plan.
2. To lodge a development application for a preliminary approval for the flow slide barrier as recommended by the Implementation Plan.
3. To communicate with landowners regarding their responsibilities for permits, approvals and maintenance as outlined in the Implementation Plan.
4. To authorise the Service Manager, Marine Infrastructure Asset Management to revise and update the Implementation Plan in response to operational changes.

### Option Two

That Council resolves not to adopt the Implementation Plan for the Amity Point Shoreline Erosion Management Plan.

**OFFICER'S RECOMMENDATION**

**That Council resolves as follows:**

- 1. To adopt the Implementation Plan for the Amity Point Shoreline Erosion Management Plan.**
- 2. To lodge a development application for a preliminary approval for the flow slide barrier as recommended by the Implementation Plan.**
- 3. To communicate with landowners regarding their responsibilities for permits, approvals and maintenance as outlined in the Implementation Plan.**
- 4. To authorise the Service Manager, Marine Infrastructure Asset Management to revise and update the Implementation Plan in response to operational changes.**





# Report

## Amity Point SEMP Implementation Plan

Redland City Council

11 December 2020



### Document Status

Version	Doc type	Reviewed by	Approved by	Date issued
01	Draft SP1	Astrid Stuer	Astrid Stuer	26/07/2019
02	Final SP1	Astrid Stuer	Astrid Stuer	16/08/2019
03	Draft Report	POB, TMA	Tony McAlister	17/12/2019
04	Final Report	Astrid Stuer	Astrid Stuer	07/04/2020
05	Final Report	Astrid Stuer	Astrid Stuer	21/05/2020
06	Final Report	Astrid Stuer	Astrid Stuer	24/08/2020
07	Final Report	Astrid Stuer	Astrid Stuer	24/11/2020
08	Final Report	Astrid Stuer	Astrid Stuer	11/12/2020

### Project Details

<b>Project Name</b>	Amity Point SEMP Implementation Plan
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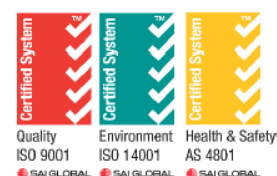


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11 December 2020

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Dear Alistair

### Amity Point SEMP Implementation Plan

We are delighted to present you with the draft Amity Point SEMP Implementation Plan.

This report contains a summary of the Amity Point SEMP, a Community and Stakeholder Engagement Plan, a technical review of the SEMP, an emergency rock source and supply study, a financial analysis as well as a discussion of possible implementation pathways and a recommended way forward.

This final version 07 also includes the review comments from the public, Council and State.

We would like to thank Council's project team and the Community for the invaluable assistance in putting this plan together.

Yours sincerely,

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## EXECUTIVE SUMMARY

The Amity Point Shoreline Erosion Management Plan (SEMP) was endorsed by Redland City Council in 2019. In consultation with stakeholders, including foreshore landowners, this Implementation Plan for the SEMP recommendations was prepared for the Southern, Central and Northern Reaches of Amity Point:



### Southern Reach – Camping Ground Foreshore

The SEMP recommendations for the Southern Reach were:

- Structural audit of the existing groynes and seawalls.
- Construction of additional seawalls.
- Beach nourishment within the beach pockets.

The financial analysis showed that there is a positive benefit to cost ratio to implement the works. This means that there is a benefit in following the recommendations from the SEMP despite the initial costs for the works. There are no technical or legal hindrances in implementing the works. It is therefore recommended to implement the Amity Point SEMP recommendations. Implementation of the works will need to be organised by the body that benefits from the works. Ongoing consultation is needed between Council and QYAC on the implementation of the recommended works. It is noted that the recommended works will principally protect the campgrounds, but there is also a community interest in the works where they facilitate public access to the foreshore and where there is Council land and assets.

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## Central Reach – Rock Flow Slide Barrier

The SEMP recommended strategy for the Central Reach includes the following actions:

- Support and enhance the existing flow slide barrier.
- Annual monitoring of the flow slide barrier.

The technical review confirmed this strategy as appropriate. The rock sourcing study showed that sufficient rock supply is available on the Island for use in the flow slide barrier. The financial review highlighted that there is a substantial cost benefit in maintaining the flow slide barrier compared to the 'do nothing' option. However, there may be issues in regard to ownership, tenure, access, rock supply and cost sharing arrangements.

The implementation plan for the Central Reach is based on extensive stakeholder consultation that was performed with Council, State and the freehold land owners to ensure that the implementation plan provides a sensible way forward and does not pose an unreasonable level of obligation, responsibility or liability on any party involved.

The following recommendations are made to implement the SEMP recommendations in the Central Reach:

- Continued individual ownership and responsibility of the flow slide barrier rather than Council controlled. This means that each individual landowner (be it State, Council or private) is responsible to maintain the Flow Slide Barrier fronting or within their site boundaries. This means that any works will need to be funded by the individual landowner, including but not limited to the costs involved to prepare and gain approvals, covenants and easements, as well as performing and paying for maintenance, including rock supply, transport and placement. This is also in line with how the flow slide barrier was managed in the past.
- Formal approval of the flow slide barrier is required to ensure continuous maintenance. It is recommended for Council to obtain a preliminary/variation approval for the whole flow slide barrier to seek in-principle approval of the structure, followed by the individual property owner obtaining detailed approval for their section of the structure.
- The establishment of a covenant is required by the landowners to implement maintenance obligations on current and future landowners. A covenant is a voluntary agreement and signature from both parties, the covenantor (owner of freehold land) and the covenantee (State or Local government) is required.
- Easements are required in some locations to ensure access to the flow slide barrier for maintenance activities. Easements would need to be established by the landowners.
- Council to continue to make available rock from the Council quarry in line with the emergency rock supply procedure and to work towards providing rock for proactive maintenance in the future by executing the actions in relation to rock supply. Noting that there might be circumstances where Council cannot guarantee rock supply due to statutory and technical complexities to the operation of the quarry.
- Adopt an emergency works procedure to ensure timely and smooth action in a flow slide event before all recommended strategies are implemented.
- Allow all available transport and placement contractors on the island to access rock from the quarry and perform transport and placement activities.
- Annual bathymetric survey of Rainbow Channel and structural audit of the flow slide barrier is to be undertaken by Council. The outcomes of the structural audit will need to be shared with all affected property owners and should contain clear instructions should pro-active maintenance be required

Those recommendations require the following actions to be undertaken:

1. Request Owners Consent from DNRME.

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2. Council to prepare an application to seek a preliminary/variation approval for in-principal support for the whole flow slide barrier and advice on Marine Park permits.
3. Council to seek pre-lodgement advice from SARA.
4. Council to provide detail of the variation approval and pre-lodgement advice to assist landowners as they prepare site specific development applications and Marine Park Permits.
5. Individual landowners to prepare and submit a development application for the section of the flow slide barrier protecting their property following approval of a variation/preliminary approval (or as otherwise required by legislation).
6. Council to consult with all affected properties to establish covenants for ongoing maintenance of the flow slide barrier. It is the responsibility of the landowner to action the covenant.
7. Individual landowners to continue maintaining the section of the flow slide barrier protecting their land as provided for in their development approvals or the emergency management procedure.
8. Council to consult with all affected properties to determine the exact location of easements. It is the responsibility of the landowner to action the easements.
9. Landowners to assist with the formalization of access to the flow slide barrier for maintenance activities by the granting of easements as necessary.
10. Council to take all reasonable steps to ensure to the best of its ability that the relevant sales permits and access arrangements are in place to facilitate the continued supply of rock from Councils quarry.
11. Council to establish and communicate emergency works procedure with all affected freehold landowners.
12. Council to take reasonable steps to provide access to rock from Councils Quarry for landowners to undertake emergency repairs. (Noting that there might be circumstances where Council cannot guarantee rock supply due to statutory and technical complexities to the operation of the quarry.)
13. Landowners to follow emergency works procedure including any necessary notifications and approvals.
14. Council to make available inductions and standing agreements with all available transport and placement contractors on the island.
15. Council to undertake annual bathymetric survey and structural audit.
16. Share findings with all affected freehold landowners.

### Northern Reach – Amity Beach

The SEMP recommended strategy for the Northern Reach is:

- 3-year Monitoring Survey Program.
- Coastal process assessment to determine necessity for erosion mitigation strategy.
- Following conclusion of the assessment, continuation of the Monitoring Survey Program.

It is recommended that Council start implementing these works as no technical or legal barriers have been identified in pursuing this strategy.

Council has been in ongoing dialogue with University of Queensland staff to conduct additional research at Amity Point and will continue to do so.

In the interim, property owners are able to investigate possibilities for erosion mitigation options. For example, beach nourishment and beach re-profiling can be undertaken with the relevant approvals in place. Residents can also consider building their own coastal protection works within their lot - provided they are granted the

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necessary approvals for such works. A communal approach regarding the design and construction of such a structure is highly recommended to reduce costs and increase effectiveness.

Actions:

1. Council to start the 3-year Monitoring Survey Plan this financial year.
2. Undertake coastal process assessments after conclusion of the 3-year monitoring program
3. Continue dialog with UQ
4. Council to support residents in the approval process should they choose to pursue their own protection works.

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## 1 INTRODUCTION

The township of Amity Point enjoys a rich diversity of seascapes and landscapes - providing extensive recreational and lifestyle opportunities that are considerably enhanced by local cultural, heritage and environmental values. The development is concentrated at the shoreline to enjoy the coastal views and activities. However, coastal processes cause erosion which threatens essential infrastructure as well as the coastal values of Amity Point.

Redland City Council (RCC) recognises the threat of shoreline erosion to Amity Point and adopted the Amity Point Shoreline Erosion Management Plan (SEMP, Water Technology 2019) in June 2019. The SEMP investigated coastal processes and determined the most cost-effective solutions to manage the foreshore. This plan provides a framework for sustainable management of the vulnerable foreshore for a 20-year planning horizon.

To implement the recommendations from the SEMP, RCC commissioned Water Technology to prepare an Amity Point SEMP Implementation Plan. The implementation plan is required to analyse how recommendations from the SEMP can be delivered, considering several legal issues and various land tenures. The implementation strategy will also consider that there is no disproportionate burden to any of the involved parties. The purpose of the Implementation Plan is to investigate possible implementation pathways and to recommend a plan for all stakeholders based on a consideration of effectiveness, technical and legal matters, an equitable allocation responsibility and the preferences of landowners.

The project is undertaken in several stages as outlined in Figure 1-1. A stakeholder and community engagement plan was prepared to identify all key stakeholders and to ensure their involvement in this study. This was followed by a review of management options, emergency response rock supply study, financial review and implementation scenario analysis. All stages of the project are then brought together in the Implementation Plan. This report also follows this structure.

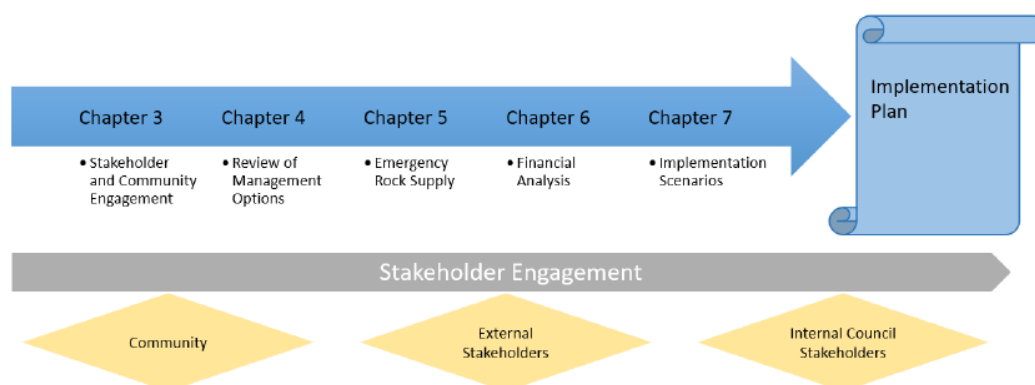


FIGURE 1-1 DELIVERABLES OF THE AMITY POINT IMPLEMENTATION PLAN

The recommendations of the report are put forward to Council for their consideration and are not Council policy until adopted by Council.

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## 2 BACKGROUND

Amity Point is located at the north-western tip of North Stradbroke Island (Island) within Moreton Bay near Brisbane, see Figure 2-1. The township is within the Redland City Council Local Government Area (LGA) and has been subject to substantial erosion, due to migration of the Rainbow Channel and re-occurring retrogressive flow slide events at the foreshore. Because of this, the community has been challenged by the significant costs associated with erosion mitigation, along with concerns regarding the appropriateness and long-term viability of such works.



FIGURE 2-1 LOCALITY PLAN

Dominant coastal processes causing the erosion are explained in the SEMP prepared by Water Technology (2019). The SEMP has been developed to provide a framework for sustainable use, development and management of the vulnerable foreshore. The outcomes of the SEMP are envisaged to provide information to contribute to the development and adaptation of an Implementation Plan for future shoreline management.

The SEMP recommends a shoreline erosion mitigation strategy for three distinctive areas along Amity Point foreshore, the Southern, Central and Northern Reaches, see Figure 2-2.

The Southern Reach extends from the southern end of the campground to the boat ramp and includes a 355 m long beach frontage with groynes and a 215 m long rock-armoured seawall. The Central Reach is along the rock armoured foreshore from the boat ramp near Claytons Road to the northern end of Millers Lane, the rock armoured foreshore is approximately 955 m long. The Northern Reach includes 1.4 km of the sandy foreshore of Amity Beach.

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FIGURE 2-2 THREE AREAS: SOUTHERN, CENTRAL AND NORTHERN REACH

A Shoreline Erosion Study of the area had previously been carried out by BMT WBM (2013). This study investigated the local coastal processes and considered a range of social, environmental, cultural and economic values; and identified a range of erosion management options. The preferred erosion mitigation strategies for each of the precincts considered above were:

- Southern Reach: beach nourishment was the recommended management strategy for this precinct. This would *"provide added protection to the assets and minimise the need for other structural protection measures in the future"* and would *"retain natural processes and provide an improvement to the beach amenity"*.
- Central Reach: planned retreat was the recommended strategy for this precinct as it was considered to have the *"highest likelihood of success, lower cost and will leave the foreshore in a natural State"*.
- Northern Reach: The *"do nothing"* option supported by monitoring of the *"location of the shoreline"* was the recommended strategy for this precinct.

The subsequent SEMP notes that the planned retreat for the Central Reach (i.e., along the frontage of Amity Township) met with considerable opposition from the local community.

## 2.1 Recommendations of the Amity Point SEMP

The recommended erosion mitigation strategy from the SEMP is outlined below, each reach is considered separately.

### 2.1.1 Southern Reach

The SEMP recommends undertaking a structural audit of the most southern existing rock-armoured seawall located to the south of the three beach compartments to confirm its future effectiveness as a foreshore defence structure. The beaches are backed by an existing seawall in some areas along the Southern Reach and construction of an additional approximately 165m of seawall is recommended to fill the gaps: 55m within the northern beach compartment and 110m in the southern compartment. Also, beach nourishment of approximately 5,000 m<sup>3</sup> of sand between the groynes is recommended, with the actual characteristics of the works to be determined by detailed coastal engineering design. It is also recommended that the performance of the beach nourishment be monitored by annual surveys of the foreshore profile; and to implement renourishment campaigns as required to reinstate beach widths. A summary of the erosion mitigation strategies is presented in Figure 2-3 below.

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FIGURE 2-3 RECOMMENDED EROSION MITIGATION STRATEGY – SOUTHERN REACH, SOURCE SEMP (2019)

### 2.1.2 Central Reach

The SEMP confirmed that the existing flow slide barrier has been effective in preventing the development of retrogressive flow slides at the Central Reach. Therefore, it is recommended to seek formal approval of the existing barrier as substantially completed tidal works and to consider it as necessary coastal protection works required to manage the erosion threat.





It is important to continue repairs and improvements to the flow slide barrier and to reinstate the foreshore whenever flow slide events occur. A Safety Management Plan (SMP) – Flow Slide Barrier has been presented with the SEMP. The emergency rock source study (defined in this report) will supplement the technical specifications for such work.

Regular bathymetric surveys have been recommended by the SEMP to identify emerging vulnerabilities to potential flow slide events and to detect structural reinforcement and repair needs. Consequently, a formal maintenance regime should be put in place to mitigate the threat of flow slides. Once approved, where this is within the footprint of the existing structure it can be considered as maintenance works required to preserve the integrity and function of the flow slide barrier.

Special attention must be given to the foreshore near Old School House Park as there is merit in adopting a proactive strategy of reinforcing the existing flow slide barrier at this location - by placing approximately 45 m<sup>3</sup>/m of additional armour rock.

### 2.1.3 Northern Reach

The recommended erosion mitigation strategy along the Northern Reach is to implement a Monitoring Survey Program to obtain detailed knowledge of shoreline behaviour. There is benefit in further investigations to better understand local processes and to predict emerging threats. It is recommended that the following monitoring aspects be included in the strategy for erosion mitigation on the Northern Reach:

- Monitoring Survey Program: Stage 1: 3D survey during low spring tide, twice yearly for three years, with extra surveys undertaken as soon as possible after major erosion events on Amity Beach.
- Coastal Processes Assessment: upon completion of three years Stage 1 monitoring survey program.
- Following outcomes of the Coastal Processes Assessment – Monitoring Survey Program: Stage 2: likely to entail yearly 3D surveys.

Necessity of any erosion mitigation strategy for the Northern Reach would be addressed by the Coastal Processes Assessment.

Individual property owners along the foreshore of the Northern Reach can undertake interim maintenance work such as beach re-profiling or beach nourishment - provided the relevant approvals are in place.

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### 3 COMMUNITY ENGAGEMENT

The SEMP recommends development of a process to implement management options that are mutually beneficial, and which do not overly burden any party or stakeholder. Molino Stewart was subcontracted by Water Technology to facilitate community engagement throughout the project to assist in achieving that objective. Stakeholder and community engagement is a critical component of the project to develop the final Implementation Plan. Engagement needs to be built on trust and community involvement.

The SEMP indicates that there will be difficulties and challenges to engage the local community. Challenges include deciding with the local community and other stakeholders on how to facilitate physical works and how to implement erosion mitigation strategies. This includes sourcing and placing of materials, how to fund placement and what governance arrangements are needed to manage these activities.

These combined complexities and the range of stakeholders with varying perspectives have the potential to cause discord and non-acceptance of the implementation plan. Therefore, there is a need to develop and implement a stakeholder and community engagement plan to highlight issues, sensitivities and risks and how they can be overcome by engaging with the relevant stakeholders. The stakeholder and community engagement plan for the Implementation of the Amity Point SEMP is included in Appendix A.

#### **Northern and Central Reach Community Engagement Activities**

Two workshops were held with both the Northern Reach and Central Reach communities. The first workshop was held on 15 Oct 2019 at Amity Point to discuss the status of the Implementation Plan and the second on 27 Nov at the Cleveland library to present the Draft Implementation Plan.

In addition to the workshops one on one phone interviews were undertaken with the majority of the affected residents.

All feedback gained during those workshops has been incorporated in the development of the Implementation Plan.

#### **Southern Reach Community Engagement Activities**

Council undertakes a number of projects where consultation with QYAC is required. Therefore, to streamline consultation efforts Council is directly engaging with QYAC with regard to the Implementation Plan for the Southern Reach.

#### **State Agencies Engagement Activities**

All relevant State agencies were consulted during development of the SEMP Implementation Plan, namely:

- Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)
- Department of Agriculture and Fisheries (DAF)
- Queensland Parks and Wildlife Service (QPWS)
- Department of Natural Resources, Mines and Energy (DNRME)
- Department of Environment and Science (DES)

Their feedback has been incorporated in the development of the Implementation Plan. While all effort was undertaken to align the implementation plan with preferences from the departments, in some instances there were contradicting inclinations. In those cases, all stakeholder preferences (e.g. State Departments, Community and Council) were considered together to develop a plan that aligns with most stakeholders.

All State agencies should be presented with the Draft Implementation Plan before it is finalised. A pre-lodgement meeting should be scheduled to progress with the development application for the flow slide barrier.

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## 4 REVIEW OF MANAGEMENT OPTIONS

A review of the management options proposed by the SEMP has been undertaken as part of this commission to develop an Implementation Plan. A technical review was undertaken, focussing on the technical aspects to ensure that implementation of the works is suitable and feasible. A legal review was undertaken, focussing on environmental, planning, property and tort law to assess whether the recommendations of the SEMP are manageable for all involved stakeholders and do not pose an unreasonable level of obligation, responsibility or liability on any one party. The legal review supports the recommendations in this Implementation Plan.

### 4.1 Coastal Technical Review

The complete technical review can be found in Appendix B, performed by Dr. Andrew McCowan, an internationally acknowledged expert in the fields of coastal engineering, flood hydraulics and water quality. The following discussion highlight the key outcomes of Dr. McCowan's technical review.

The purpose of the present SEMP is to set out *"an agreed framework and management strategy for responding to existing erosion problems and possible future erosion threats"* at Amity Point. It has been developed through consideration of *"the physical coastal processes"* occurring in the area *"in conjunction with the environmental, cultural, social and economic values of the shoreline"*.

The reviewer agrees with the overall methodology used in its development. A key consideration for the purposes of this review is that the SEMP is a relatively short to medium-term management plan with a 20-year planning horizon. This provides an opportunity for monitoring and review of the effectiveness of the plan before committing to longer-term management strategies.

The SEMP reviews the Guiding Principles for shoreline erosion management and describes the main non-structural and structural options available for managing erosion at Amity Point. An assessment is then carried out to determine the most appropriate management option for each of the coastal Reaches under consideration.

#### 4.1.1 Southern Reach

*"The recommended erosion mitigation strategy along the Southern Reach is to undertake beach nourishment within each of the three existing beach compartments; and to construct cut-off seawalls behind each beach where an appropriate structure does not already exist"*

This strategy includes beach monitoring (through annual beach surveys) and maintenance of the nourished beaches on an as needs basis. It also includes annual bathymetric surveys to monitor the rate at which Rainbow Channel is migrating eastward and thereby potentially increasing the risk of flow slides adversely affecting the foreshore.

A minor point missing from the strategy is that there is no contingency for the possible need to reinstate part or all of a groyne should it become affected by subsidence due to a flow slide.

The recommended strategy is consistent with the recommendations of the previous Shoreline Erosion Study carried out by BMT WBM (2013).

#### 4.1.2 Central Reach

*"The recommended erosion mitigation strategy for the Central Reach is to support and enhance the effectiveness of the current erosion management practice of repairing damage to the existing flow slide barrier whenever necessary following flow slide events - by placing additional rock armouring."*

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This strategy includes monitoring the continued structural adequacy of the existing flow slide barrier, through regular bathymetric surveys to identify emerging vulnerabilities to potential flow slides - and to inform structural reinforcement and repair needs.

The recommended strategy is, however, at odds with the "planned retreat" approach that was the recommended in the previous Shoreline Erosion Study carried out by BMT WBM (2013). The main source of the discrepancy is that the earlier work of BMT WBM (2013) considered that a structural solution would require "the design and construction of a full rock revetment at an estimated cost of \$15M" and that there would be "the expectation that this will need to be extended in the future as Rainbow Channel continues to realign".

The strength of the current SEMP is that it recognises the value of the existing rock wall for providing a barrier to further subsidence caused by flow slides. This provides a relatively low-cost option for maintaining the existing coastline, at least for the medium-term.

#### 4.1.3 Northern Reach

*"The recommended erosion mitigation strategy along the Northern Reach is to maintain the existing strategy of non-intervention, but to monitor future shoreline behaviour."*

This strategy includes detailed twice-yearly beach surveys for the first three years. This is to be followed by a Coastal Processes Assessment to determine future monitoring requirements and the need (or otherwise) for the development of an erosion mitigation strategy.

The recommended strategy is consistent with the "monitoring coastal processes" recommendation of the previous Shoreline Erosion Study carried out by BMT WBM (2013). The outcome of the monitoring will provide a long-term strategy for this Reach.

#### 4.1.4 Conclusion

The main conclusions of the technical review of the SEMP are as follows:

- For a 20-year planning horizon, the recommendations provided in the SEMP are appropriate and manageable and (subject to the findings of the legal review) should not place unreasonable obligations on any involved stakeholders.
- A potential issue for the implementation of the strategy for the Southern Reach is the need for a suitable source of sand for beach nourishment and for a suitable source of rock for seawall construction.
- A great strength of the current SEMP is that it recognises the value of the existing rock wall as a "flow slide barrier" for providing a low-cost option for reducing the risk of further subsidence caused by flow slides along the Central Reach.
- The implementation of the recommended strategy for the Central Reach will, however, be dependent upon:
  - The development of maintenance obligations on foreshore property owners to maintain the integrity of the Flow Slide Barrier;
  - The development of an appropriate funding arrangement for future maintenance works;
  - The development of formal agreement between foreshore property owners to provide access that may become necessary for future repair work to the flow slide barrier; and
  - The availability of suitable rock for emergency repair works and the ability to carry out these works as soon as possible after a flow slide event.
- The inclusion of the Coastal Processes Assessment after the first three years of the implementation of the Northern Reach strategy will provide an opportunity to review the situation, based on more detailed data provided by the monitoring program. Interim maintenance work can be undertaken by individual property owners with relevant approvals in place.

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## 5 EMERGENCY RESPONSE ROCK SOURCE AND SUPPLY

There are two rock quarries on Stradbroke Island, the Council-operated Council Quarry (Lot 1 on SP304064) and a Private quarry (Lot 101 on SP299983) that is operated under private ownership (and is also known as the 'old Meithke quarry') which is now subject to an exclusive native title determination. In the past, rock from these two Island-based quarries has been used to progressively build a flow slide barrier along the foreshore of the Central Reach. The private landowners along that foreshore have non-written agreements in place to communally protect their bayside frontages from flow slide events by dumping rock on the foreshore.

However, recent native title consent determinations have affected the sourcing of rocks on the island. Consequently, there is a need to secure a reliable rock supply to maintain the effectiveness of the flow slide barrier. The SEMP recommends having rock ready to be placed during or soon after retrogressive flow slides occur, either stockpiled at a location near Amity point or at an Island-based quarry.

This chapter discusses rock specifications and the volume of rock required for placement during or shortly after a retrogressive flow slide event. An investigation of different rock sourcing options is conducted, stockpile locations are investigated and methods for transportation and placement of rock is outlined to determine the best strategy for rock supply and placement.

This rock source study builds on the technical specifications for works offered in the Safety Management Plan – Flow Slide Barrier (SMP) and the Concept Design for a Flow Slide Barrier, both from SEMP Water Technology (2019), Appendices G and H respectively.

### 5.1 Rock Specifications

The SEMP includes a conceptual flow slide barrier design (Figure 5-1) and specifies the rock material for emergency repairs to any damaged sections of the flow slide barrier. The suggested material specifications are:

- Specific Gravity of at least 2.60
- Armour Rock size between 50kg and 4 tonnes
- Rocks are well graded, clean, free from overburden, spoil, shale and organic matter
- Individual rocks shall be slightly weathered to fresh; durable; sound and suitable for use as armour in a marine environment
- All rocks must be free of any defects which would result in breakdown of individual stones in the foreshore environment of the works
- Rocks displaying cleavage planes and weak seams shall not be used

These specifications are used for the rock sourcing study. It is recommended to progress with a detailed design of the flow slide barrier to further refine rock specifications and requirements.

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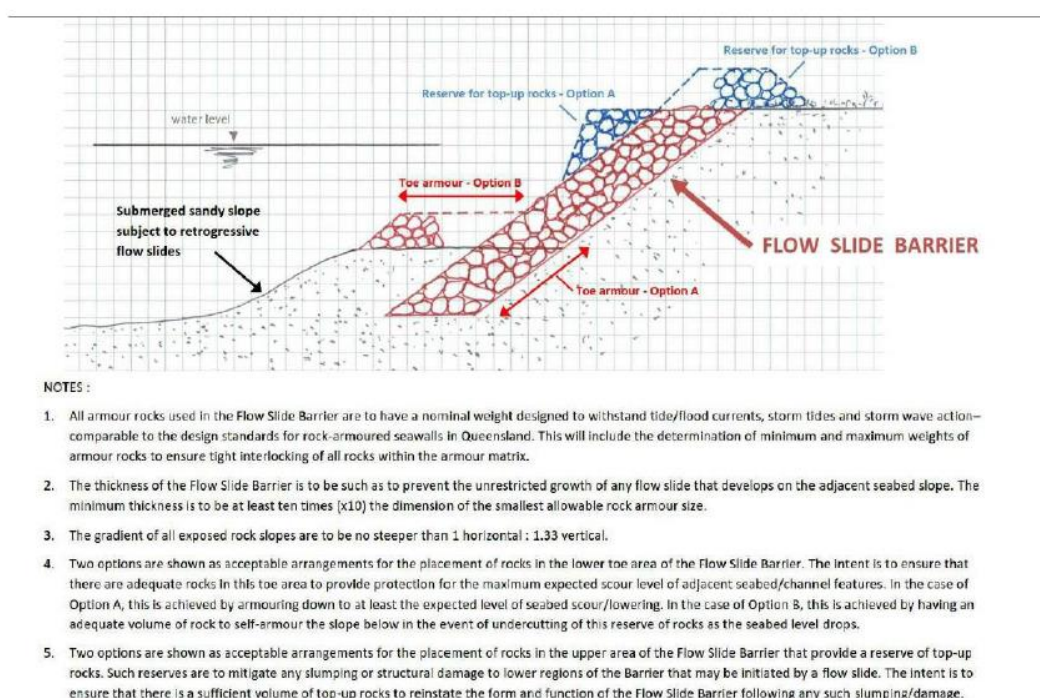


FIGURE 5-1 CONCEPTUAL FLOW SLIDE BARRIER DESIGN, SOURCE SEMP WATER TECHNOLOGY (2019)

## 5.2 Rock quantities

The SEMP indicates that flow slide events can occur anywhere along the Amity Point foreshore and can be of a varying size. Depending on the location of the flow slide event and the existence and condition of the flow slide barrier, rock quantities required for each event will vary. In order to estimate rock volume requirements for an emergency event, it is therefore useful to look at past events. Table 5-1 presents a summary of the amount of rock that has been used in various historical flow slide events. This list does not represent a complete inventory of all flow slide events that have occurred over the years, but does provide an overview of rock quantities that were used in those identified events.

TABLE 5-1 ROCK DUMPED AFTER FLOW SLIDE EVENTS, SOURCE RCC (2019) AND \*ARUP (2018)

Event	Location	Amount of Rock Dumped [tonnes]
2006	Unconfirmed	741
2010	Unconfirmed	2,362
2011	Old School House Park	2,386
2017 - September	North of 9A Millers Lane	3,029*
2017 - November	North of 9A Millers Lane at the beach.	1,217*

Some of the listed events occurred at locations where the existing flow slide barrier was insubstantial (e.g. fronting Old School House Park during the event in 2011) or in locations where there was no previous rock



protection in place (e.g. North of 9A Millers Lane during the November 2017 event). Therefore, the rock quantities required to repair the flow slide barrier at those locations and for those events are possibly greater than what might be typical.

The size and location of a future flow slide event is unpredictable. The amount of rock required for placement during a flow slide event should be sufficient to respond to a substantial event. Based on the historical information, it is estimated that 1,000 to 3,000 tonnes of rock should be stockpiled for one significant flow slide event. The stockpile should be immediately restocked after a flow slide event - to ensure that there is sufficient rock available to respond to another event.

### 5.3 Rock Sources

There are two options regarding armour rock sourcing - firstly from the Island itself or secondly from the mainland. Both locations have advantages and disadvantages as outlined below. It is important to ensure that the supplied rock meets the material specifications defined in Section 5.1.

#### 5.3.1 Island-based quarries

As discussed previously, there are two Island based quarries located at the north-eastern side of the Island as highlighted in Figure 5-2. These are the Private quarry (previously operated by Peter Meithke) and the Council quarry also known locally as 'Fisherman's Track quarry'. Both quarries have previously provided quality rock to Amity Point to mitigate the effects of flow slide events.



FIGURE 5-2 LOCATIONS OF TWO ISLAND BASED QUARRIES, SOURCE QLD GLOBE

#### Council Quarry

Groundwork Plus (2012) prepared a report for the Council-operated quarry, reviewing slope stabilities in the quarry and presenting a quarry development plan. Groundwork Plus indicates rock can be sourced at five development stages and more rock is available below +20m AHD. The report does emphasise that the quarry consists of an excellent source of quarry material - being suitable for use as high-quality aggregates as well as foreshore protection works. It is pertinent to note that sand suitable for beach nourishment purposes also exists within the confines of the approved quarry area.

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About 20,000 m<sup>3</sup> rock has been blasted during activities in 2005 (Orica, 2005), at the time mostly smaller granules suitable for roadworks were desired and any larger rocks that resulted from blasting operations were put aside. Some of the larger rocks were later used to repair the flow slide barrier when significant events occurred. It is estimated that approximately 14,000 m<sup>3</sup> of rock is left on the floor of the quarry in various sizes. These could be loaded and transported to Amity Point in response to future flow slide events. The density of the rock is 2.7 kN/m<sup>3</sup> which is similar to the specific gravity of 2.6 that is specified for the flow slide barrier.

The Council-operated quarry is currently not actively operated but is reputedly in standby mode. This means that Council has no machinery in the quarry, and it would need to be brought into the quarry to sort and move the rock. Council currently has a Panel of Providers of earthmoving companies that have the required machinery and expertise that could be used to provide rock from the quarry in preparation for, and during, a flow slide event. In the past both Meithke Earthmoving and Mazzonis Plant Hire have been engaged to provide services to repair and enhance the flow side barrier.

The price for rocks from the Council-operated quarry has previously been costed at \$10.40/ tonne. This includes blasting and sales permit royalties but does not include any handling or transport.

#### Private Quarry

The Private Quarry has previously been operated by Mr. Peter Meithke who, has over time, supplied the rocks for the ongoing construction of the flow slide barrier. The quarry is now within an exclusive native title declaration, which could have further legal implications for providing emergency rocks.

Nevertheless, the rock will have to be tested to confirm the technical specifications as outlined in chapter 5.1. Even though the rock has previously been used to construct the flow slide barrier, it doesn't guarantee the rocks were up to the specified standard at the time. Rock characteristics will have to be determined by means of testing before obtaining rocks from this quarry.

Based on available information from previous quarry operations there is sufficient rock available in the quarry for use on the flow slide barrier. Several quotes indicate the combined price for purchase and transportation of rock to the Amity Point foreshore would be between \$40-\$55/tonne, where a body truck is able to carry between 10-14 tonnes of rock per load.

#### 5.3.2 Mainland-based quarries

There are many well established quarries on the mainland in and around Brisbane. Most of those quarries have been operating for a long time and have appropriate quality management systems in place. Each load can be weighed and samples for the grading curve of the rock can be provided.

If rock is sourced from the mainland, trucks equipped with dog-trailers will need to be transported by barge to and from North Stradbroke Island. This will increase rock supply costs since barge fees and the inevitable waiting time of trucks during journeys will need to be incorporated in the price per tonne. A dedicated barge could be hired for \$450/hr and can do two trips each day carrying a maximum of two trucks equipped with dog-trailers. The ferry fees are estimated to be around \$350/truck and dog-trailer each way.

Based on quotations from two mainland-based quarries (Boral and Karreman), it is evident that the price for rock (including delivery to Amity Point township) would be around \$85-\$90/tonne. This cost per tonne of supplied rock is about twice that from an Island-based quarry.

#### 5.4 Stockpile location

The SEMP discusses the need for a readily available rock source. If the rock source is from one of the Island-based quarries, the quarry itself can be used as a stockpile location. If the rock is imported from the mainland, a local stockpile location is required. Several options have been considered, such as leasing industrial areas,

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stockpiling at Amity Point Recreation Reserve at 24-42 Claytons Road (Figure 5-3) or at an old landfill area near 46-80 Claytons Road (Figure 5-3) and the Island-based quarries. No suitable industrial areas of sufficient size could be identified as available for stockpiling of the rock.

An option could be to use a section of the Council-owned Amity Point Recreation Reserve, since other areas have implications with regard to native land title. The former landfill location has been identified to be transferred to the State as the location does not have a designated purpose yet. Leasing of land from QYAC to secure a stockpile location is another option. Other than the implications regarding native title, other environmental and cultural significance restrictions need to be addressed.



FIGURE 5-3 LOCALITY OF TWO STOCKPILE SITES, SOURCE QLD GLOBE

The area of Amity Point Recreation Reserve is rather large and is a recreational area for public use. A cricket ground, the Community Club and a mini golf course are located within the reserve. The former landfill area is largely overgrown, and this might be a more suitable location since it has lesser visual impacts.

It should be noted that both locations are within the coastal management district and partly within the erosion prone area, see Figure 5-4. A large area of the recreation reserve is within Category X vegetation management mapping (clearing is exempt on freehold, Indigenous and leasehold land). Furthermore, the entire area of the former landfill and part of the recreation reserve is within essential habitat area and Category A or B area that is a least concern regional ecosystem, see Figure 5-4. The former landfill has also been identified for cultural significance - which would need to be considered in the plans. Additional environmental requirements have to be met if Council decides to clear land at either of the two locations.

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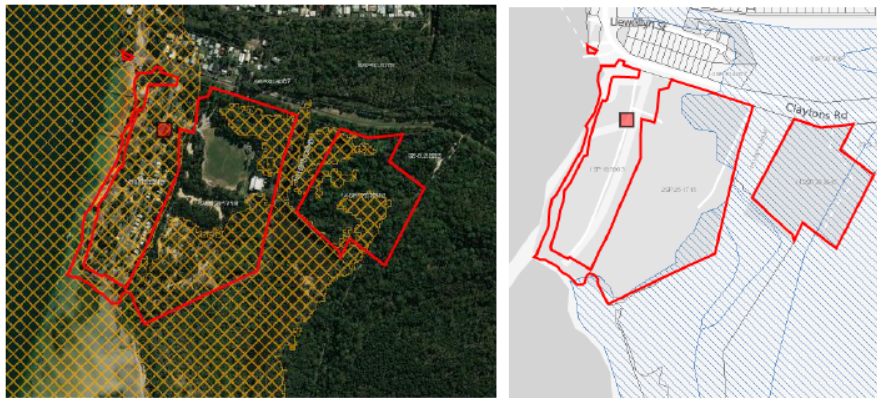


FIGURE 5-4 LEFT: EXTENDED EROSION PRONE AREA AND RIGHT: ESSENTIAL HABITAT AREA, SOURCE QLD GLOBE

Geotechnical investigations would give the necessary details regarding the stability of the ground and whether these locations need to be sheeted with base material. This is especially so if the landfill area is used as a stockpile location. Previous landfill should not be uncovered or mixed with any overburden. Nonetheless, the stockpiled material could be fenced for safety and to deter undesired trespassers. An area of about 0.4-0.6 hectares would need to be prepared to accommodate the rock stockpile, truck movements and appropriate buffer to fencing. Depending on the exact location, a road may need to be cleared as well.

Considering the nature and extent of further investigations into legal and environmental constraints of these stockpile locations in the vicinity of Amity Point, in conjunction with their high capital expenditure for establishment, it would be better to use existing local quarries as a stockpile location for rock supplied from the mainland.

However, while a local quarry would limit the need to setup a local stockpile, the rock would need to be double handled on the island. Firstly, from the barge landing point to the quarry, and then again from the quarry to the site of any flow slide event. This will further increase rock supply costs, that are already significant for rock supplied from the mainland.

## 5.5 Transport and Placement

As recommended in the SEMP, appropriate rock should be placed as soon as possible after the start of a flow slide event to limit the extent of its damage. The rock would be loaded directly onto trucks by an excavator and the delivered to the foreshore, where it would be dumped directly from each truck onto the flow slide event. Dumping of rock directly from a truck has been the most successful practice in the past, since the event happens very quickly and an immediate response is required to halt any actively developing flow slide. However, it is recommended to use appropriate construction methods when building any new seawalls, for example as recommended at the Southern Reach.

There are currently two contractors on the island that are able to undertake the transport and placement of rock and have done so in the past, these being Meithe Earthmoving and Mazzonis Plant Hire. The owners and managers of those firms understand the urgency of undertaking works in response to flow slide events and have generally been available at short notice to respond as needed in the past.

Transport of rock is undertaken by truck with a driver and is quoted to be \$100/h on average. An excavator with an operator costs around \$120/h.

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## 5.6 Costing

Costing are presented in Table 5-2 and Table 5-3 for Island-based quarries and Table 5-4 for mainland-based quarries.

Transport from the two Island-based quarries to the foreshore of Amity Point takes around 30 minutes. However, including loading and unloading operations, a roundtrip will take about 1.25 to 1.5 hours. Typically transport and placement activities can operate 8 hours each day, with a truck capacity of approximately 12 tonnes. Consequently about 60-70 tonnes rock could be moved per day per truck. It would therefore take an operation using two trucks about 7-8 working days to move 1,000 tonnes, 14-17 working days to move 2,000 tonnes and about 21-25 working days to move 3,000 tonnes rock. The time for transport and placement of rock could decrease should more trucks be used, or if relief drivers and loading crew are able to work extended hours as an emergency response during a critical flow slide event.

Loading the rock from the quarry is relatively quick, and transport of the rock is the limiting factor. The total price for rock sourced from the Council-operated quarry, placement and transport will be about \$63,000 - \$187,000 for 1,000 to 3,000 tonnes, see Table 5-2. This is based on a price for the rock which includes transport.

**TABLE 5-2 COSTING COUNCIL QUARRY**

Works	Unit price	Total 1,000 tonne (min)	Total 3,000 tonne (max)
Rock sourcing + transport	\$55/ tonne	\$55,000	\$165,000
Loading (1 excavator)	\$120/h	\$7,680	\$22,080
<b>Total</b>		<b>\$62,680</b>	<b>\$187,080</b>

The Private quarry is located almost the same distance as the Council-operated quarry and it takes about 1.25 to 1.5 hrs round trip to supply rock from the quarry to the Amity Point foreshore. For costing purposes, it is assumed that the price for rock and transport is similar to previous rates used when the quarry was under Peter Meithke's operation. Assuming again that two trucks are available for transport and placement, the following costing has been prepared, see Table 5-3.

**TABLE 5-3 COSTING PRIVATE ISLAND QUARRY**

Works	Unit price	Total 1,000 tonne (min)	Total 3,000 tonne (max)
Rock sourcing + transport	\$55/tonne	\$55,000	\$165,000
Loading (1 excavator)	\$120/hour	\$7,680	\$22,080
<b>Total - minimum</b>		<b>\$62,680</b>	<b>\$187,080</b>

The cost from both quarries are very similar. However, because the Private quarry is currently not in a commercial position to sell the rock the cost estimate needs to be considered with caution. Therefore, it would be prudent to allow a 20% contingency to any costing associated with the Private quarry.

If rocks are sourced on the mainland and the rocks are stockpiled near the foreshore at a designated area, the price is as shown below in Table 5-4. It is assumed that a stockpile location near the Amity Point foreshore is available. The same methodology for transporting and placing rock as for the Island-based quarry is used in response to a flow slide event. However, the rock must be ready at the stockpile location and the costs for establishing a local stockpile increases the overall price. Again, it is envisaged using two trucks and one excavator, so that loading, transporting and dumping will take about 20 minutes round trip, this can take longer



when the flow slide barrier is not easily accessible and the truck has to manoeuvre to and at the site. When one truck is being loaded the other truck is dumping so it will be a continued process of loading and dumping. Based on 12 tonnes per truck it will take about 2 days to place 1,000 tonnes, 3-4 days to place 2,000 tonnes and about 5 days for 3,000 tonnes, based on an eight-hour workday. The costs for setting up a stockpile location are unknown at this stage. A contingency of 20% has been added to the cost estimate.

**TABLE 5-4 COSTING LAND-BASED QUARRIES AND LOCAL STOCKPILE AT AMITY**

Works	Unit price	Total 1,000 tonne (min)	Total 3,000 tonne (max)
Rock sourcing + transport to Amity	\$90/ tonne	\$90,000	\$270,000
Stockpile setup		tbd	tbd
Stockpile lease (if required)		tbd	tbd
Transport (2 trucks)	\$100/h	\$3,200	\$8,000
Loading (1 excavator)	\$120/h	\$1,920	\$4,800
Contingency	20%	\$19,024.0	\$56,560.0
<b>Total</b>		<b>\$114,144*</b>	<b>\$339,360*</b>

\*plus cost for stockpiling at Amity Point

The other option is to source rock from the mainland but use the quarry as a stockpile location. This will increase costs due to the increased transport to and from the quarry. The unit price per tonne of rock will be similar since the barge landing is at Dunwich and a similar distance will be driven towards Amity Point, or the Council quarry. Once a flow slide event occurs, the rock has to be transported to the flow slide location which will take 1.5 hours round trip and the same time constraint as sourcing rock from the Council or Private quarry. The costing is presented in Table 5-5.

**TABLE 5-5 COSTING LAND-BASED QUARRIES AND STOCKPILE AT A QUARRY**

Works	Unit price	Total 1,000 tonne (min)	Total 3,000 tonne (max)
Rock sourcing + transport to quarry	\$90/ tonne	\$90,000	\$270,000
Transport from the quarry (2 trucks)	\$100/h	\$12,800	\$36,800
Loading (1 excavator)	\$120/h	\$7,680	\$22,080
Contingency	20%	\$22,096.0	\$65,776.0
<b>Total</b>		<b>\$132,576</b>	<b>\$394,656</b>

Stockpiling costs are uncertain at this stage, depending on the cost of setting up and possibly leasing a stockpile location at Amity Point. Based on the technical review, rock sourced from one of the quarries on North Stradbroke Island is preferred. Therefore, rock from the mainland can only be justified if there is no legal solution to using rock from either one of the two quarries on the island. Therefore, at this stage, there is no need to investigate those costs further. However, should the implementation phase reveal that the local rock cannot be legally obtained and rock would need to be brought in from the mainland this will need to be revisited.

The above considerations are only valid for emergency works. Should a large amount of rock be needed for other works without the need for a local stockpile location, such as the construction of the seawall in the Southern Reach, this option can be reconsidered.



It must be noted that all costing is based on using two trucks for transporting and placing rock at the site of each flow slide event. If more trucks are available, the response time will decrease and the costing will change slightly as well.

#### 5.7 Summary and recommendations

In summary, rock can technically be sourced from either of the two Island quarries (not considering any legal restrictions) or from the mainland. The rock from the mainland is about double the price due to increased transport rates via barge.

Should the rock be sourced from the mainland, a local stockpile location on the Island will need to be established. The rock can either be stockpiled locally near Amity Point or at either of the quarries. This will further increase the costs when using rock from the mainland. Therefore, from a technical and costing viewpoint, using rock from the local quarries is preferred.

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## 6 FINANCIAL ANALYSIS

### 6.1 Introduction

A financial analysis was undertaken by Molino Stewart. The scope of the financial analysis was to assess whether the shoreline recession control strategies proposed in the SEMP are economically worthwhile. This was achieved through a cost-benefit analysis (CBA). The CBA estimated the socio-economic benefits of the proposed erosion control strategies (i.e. in terms of the expected reduction of erosion damages) and compared these with the costs of implementation and maintenance. In line with the SEMP, the CBA was undertaken over a time span of 20 years and included the following tasks:

- Generation of an erosion worst credible scenario, estimating the probable location of the shoreline in 20 years' time if no protection strategies were put in place;
- Identification of the assets that would be lost *without* the proposed erosion control strategies in place (i.e. "Do Nothing" scenario). These include public and private items such as beaches, coastal infrastructure and amenities (i.e. boat ramp, coastal reserves), residential lots and buildings, coastal landscape and ecosystems;
- Identification of the assets that would be lost *with* the proposed erosion control strategies in place, and estimate of the reduction in damages that the strategies would provide (i.e. the strategies "benefits");
- Financial analysis to discount the strategies benefits and costs to their Present Value (PV);
- Calculation of a Benefit to Cost ratio for each strategy to assess if this would be economically worthwhile (i.e. Cost/Benefit Analysis).

Because the SEMP did not recommend any protection measures for the Northern Reach other than a monitoring plan, this section of the study area was excluded from the scope of the financial analysis. The aim of the monitoring campaign proposed in the SEMP will be to provide reliable and timely consistent information to Council regarding the erosion rate of Amity Beach and the adjoining properties. To date it is not possible to predict if and when coastal protection measures will become necessary, their costs or what type of benefits these will provide. It is recommended that a financial analysis of these measures is undertaken when this information becomes available.

### 6.2 Methods

#### 6.2.1 Generation of Erosion Scenarios

##### 6.2.1.1 "Do Nothing" Scenario

In order to generate a credible erosion scenario projected 20 years into the future, if no erosion protection strategies were implemented, the following assumptions were made:

- For all the sandy sections of shoreline (i.e. in the Southern Reach), the Erosion Prone Area (EPA) as calculated by the Queensland Government (<https://www.qld.gov.au/environment/coasts-waterways/plans/hazards/erosion-prone-areas>) was used as the worst-case erosion scenario for year 2100. In Amity Point, this equates to a linear distance landward from the current shoreline of 145m. For the 20-year planning horizon, it was assumed that this would correspond to an erosion buffer of 90m<sup>1</sup>.

<sup>1</sup> The Erosion Prone Area for the Southern Reach has been re-calculated for the shorter planning horizon of 20 years using the Coastal Hazard Technical Guide, Determining coastal hazard areas, DEHP, 2013, Equation 1. The long term erosion rate has been adopted from the SEMP with 2m/year, a short term erosion rate of 17m has been applied as an average size of a flow slide event in this specific area, erosion due to sea level rise is 5m and a dune scarp component of 3.



This approach may be considered conservative as the Southern Reach is currently protected by a seawall, however the SEMP emphasized that its structural integrity is uncertain. As such, in the absence of reliable information on the capability of the Southern Reach seawall to provide long term protection, a conservative approach based on the EPA was adopted. It was also assumed that erosion would progress at a constant rate over the next 20 years, resulting in an erosion rate of 4.5m per year.

- In the Central Reach, if the current flow slide barrier (FSB) was not maintained (i.e. "Do Nothing" scenario), this will stop serving its purpose of preventing future flow slides penetrating into the private properties. Under such a scenario, it would be appropriate to assume that foreshore erosion would maintain its historical trend, which from 1970 to 2015 was on average 1.8m/year along the entire length of the Central Reach. This would result in a total linear recession of 36m over the 20-year planning horizon.

The shoreline recession buffer in the "Do Nothing" scenario is shown in Figure 6-1.

#### 6.2.1.2 Erosion protection strategies in place

Even if the SEMP erosion protection measures were put in place, it would be unrealistic to assume that shoreline erosion would cease completely. In this case, a 10m total linear recession in 20 years was assumed for the Central and Southern Reaches to allow for some slumping of the structure in line with the Coastal Hazard Technical Guide – determining coastal hazard areas, DEHP, 2013. The shoreline recession buffer with the SEMP control measures in place is shown in Figure 6-2.

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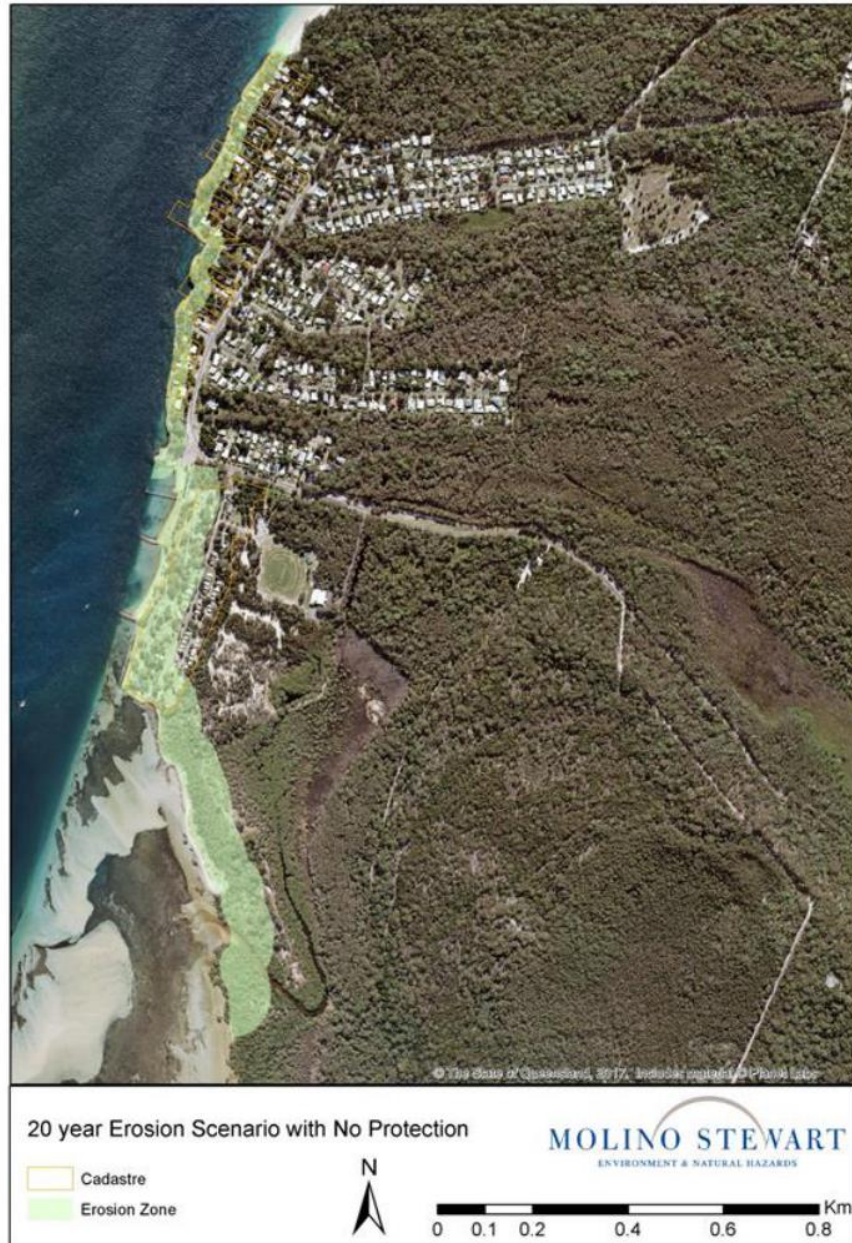


FIGURE 6-1 SHORELINE RECESSION BUFFER WITHOUT COASTAL PROTECTION MEASURES ("DO NOTHING" SCENARIO) IN 20 YEARS





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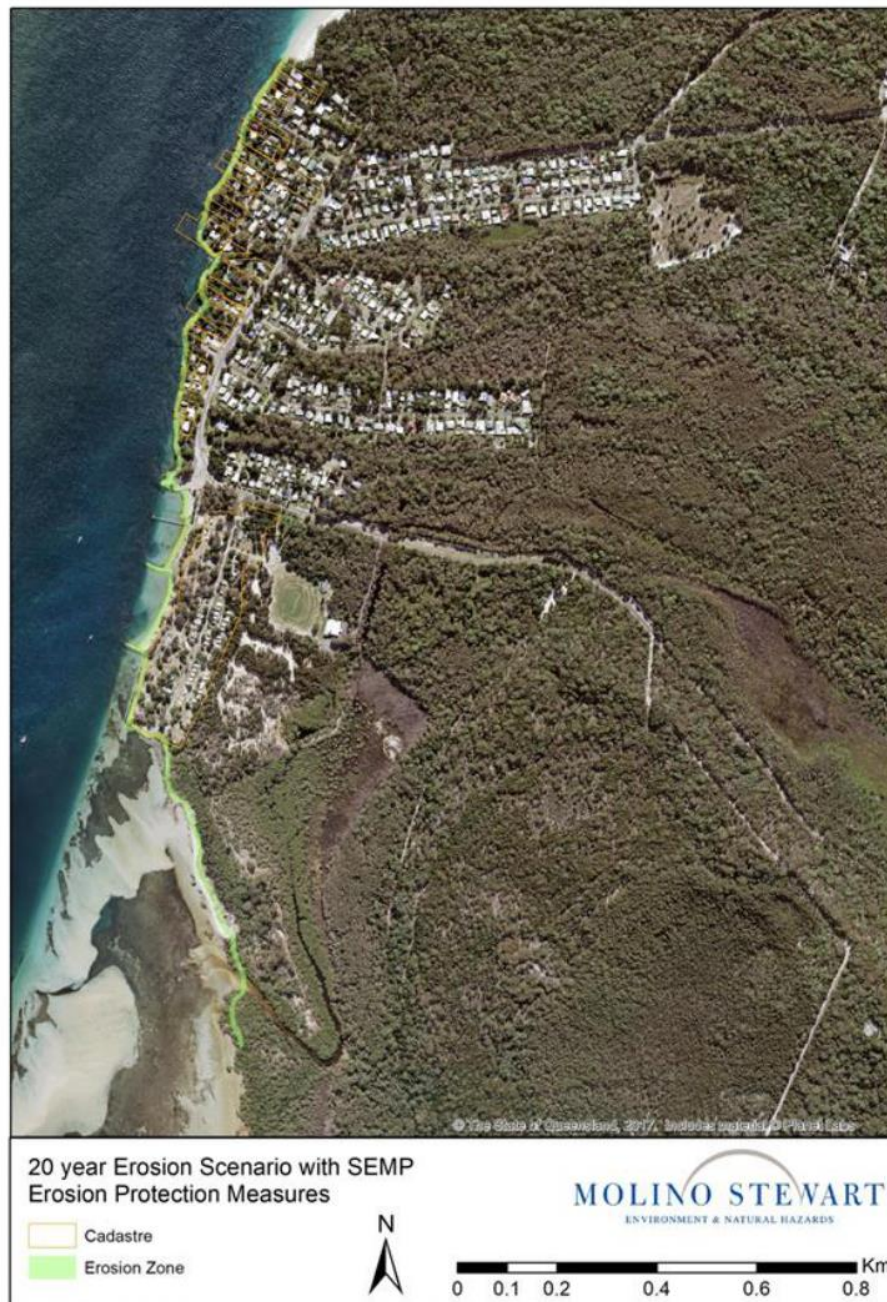


FIGURE 6-2 SHORELINE RECESSION BUFFER WITH THE SEMP COASTAL PROTECTION MEASURES IN PLACE IN 20 YEARS.

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## 6.2.2 Assets exposed to erosion

### 6.2.2.1 “Do Nothing” scenario

Under the scenario in which no erosion protection strategies are implemented, the following assets would be affected within the 20-year time horizon:

- 34 residential lots and 26 buildings. These were all located in the Central Reach except one, which is in Amity Point Camping Ground (Southern Reach);
- Boat ramp;
- Amity Point's Camping Ground Beach (100% loss);
- Old Schoolhouse Park, Cabarita Park, Amity Point Picnic Park, part of Amity Point Recreation Reserve;
- About 250m of local roads; and
- Local utilities distribution network servicing the affected properties.

### 6.2.2.2 Erosion protection strategies in place

If the SEMP recommended erosion protection strategies were implemented, the following items will be exposed to erosion damages in the next 20 years:

- 20 residential lots and 3 buildings, all located in the Central Reach;
- Boat ramp;
- Part of the Old Schoolhouse Park and Cabarita Park;
- About 30m of local roads; and
- Local utilities distribution network servicing the affected properties.

## 6.2.3 Erosion Damages Assessment

Erosion damages were quantified in monetary terms and converted to their Present Value (PV) to discount future costs to present day values to account for the time value of money. Damages were assessed under the “Do Nothing” option and if the SEMP erosion control measures were put in place. The following damages were assessed:

- Damages to properties, infrastructure and public assets;
- Damages caused by the loss of the beach along the Southern Reach; and
- Social and intangible damages, affecting the local environment, cultural values and community identity.

### 6.2.3.1 Built Environment

Figure 6-3 summarises the possible types of damages to the built environment from natural hazards (DIPNR, 2015, modified). The two main categories are tangible and intangible damages. Tangible damages are those that can be more readily evaluated in monetary terms. Intangible damages relate to the social cost of natural hazards and are more difficult to quantify.

Tangible and intangible damages are further divided into direct and indirect damages. Direct damages relate to the loss (or loss in value) of an object or a piece of property caused by erosion. Indirect damages relate to consequences of direct damages such as additional accommodation or relocation costs. The following subsections explain how each damage type was assessed for buildings and infrastructure.

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The analysis was undertaken using a dataset in GIS format containing only cadastre lots across the area. Building footprints and infrastructure were not provided. The dataset also did not contain information on individual buildings, such as use or number of storeys. This information, when available, was collected from real estate datasets. Where no data was available, buildings were assumed to be single storey and residential, because this is the most common building type in the study area.

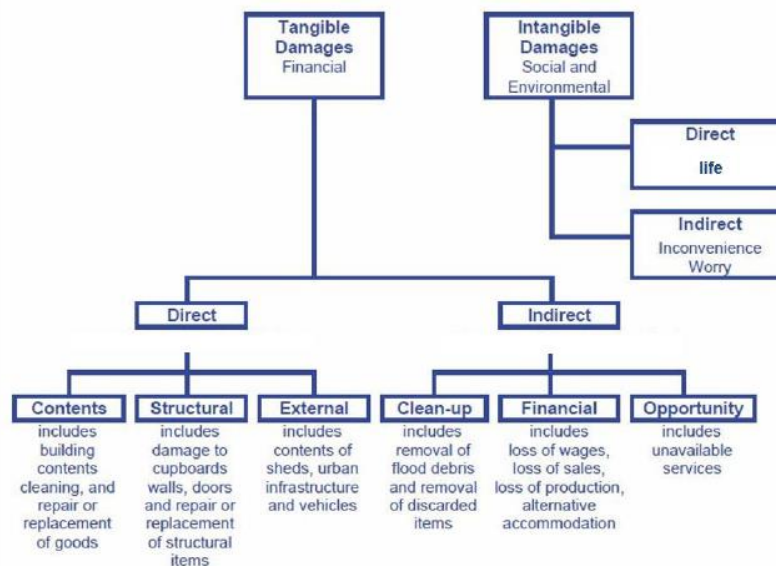


FIGURE 6-3 TYPES OF DAMAGES TO THE BUILT ENVIRONMENT (DIPNR, 2005, MODIF.)

#### a) Properties

##### Direct Damages

Direct damages were assessed based on the expected loss of value of the building structure and the land. Building contents was not considered as it was assumed that there would be sufficient time and notice to move the contents elsewhere before the building is undermined. It is acknowledged that buildings located within 10m from the shore, or from the flow slide barrier if this is installed, could become affected by erosion on a shorter term (e.g. overnight), however these are a small number compared to the total number of buildings within the erosion buffer. As such, a contents loss for these buildings would not affect the outcomes of the present financial analysis.

The value of the building structure for each of the above mentioned building types was obtained from average 2018 construction costs per square metre for Australian buildings estimated for tax depreciation purposes (<https://www.bmtqs.com.au/construction-cost-table>). The average area of each building type was obtained from 2017 aerial imagery and multiplied by the number of storeys. The overall building replacement costs were obtained by augmenting construction costs by a factor of 1.2, to account for demolition and clean up (Geoscience Australia, 2012) Table 6-1.

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TABLE 6-1 REPLACEMENT COSTS FOR RESIDENTIAL BUILDINGS IN THE STUDY AREA

Dwelling type	Construction cost (per m <sup>2</sup> )	Total Replacement cost per m <sup>2</sup> (incl. demolition)
Single Storey	\$1,849	\$2,218
Double Storey	\$1,849	\$2,459

Finally, the unimproved value of the land for each lot was obtained from the Queensland Department of Natural Resources, Mines and Energy via the online web GIS platform "Queensland Globe" (<https://qldglobe.information.qld.gov.au/>).

#### Indirect Damages

For the residential sector, indirect damages caused by natural hazards usually include clean-up costs and the costs of alternative accommodation while the house is being repaired and cleaned up. In case of buildings undermined by erosion, these costs were considered irrelevant as clean-up would be unnecessary and in most instances the building occupants would have sufficient notice to organise a permanent alternate accommodation. As such, a household relocation cost of \$2,000 was used as the only residential indirect damage.

#### b) Building Damage Model

Direct damages to properties affected by erosion were assumed to be equal to the total building replacement value, plus the value of the portion of eroded land. It is acknowledged that in some instances, depending on the specific characteristics of the affected lots and the exact location of building within the lot, the overall lot value may be lost more quickly, as even the non-eroded land may depreciate because it is too small to be habitable. This effect was however assumed to be small and partially balanced by a likely increase in value of the next row of buildings, which would become waterfront. It was also assumed that the damage from erosion would be permanent and that in most instances this would result in the building owner not being able or willing to rebuild at the same location.

While the damage to the land was assumed to occur consistently across the 20 year time horizon (i.e. same amount of damage each year), damage to buildings was assumed to occur at a specific point in time, obtained by dividing the distance of the building from the shoreline by the erosion rate.

#### 6.2.3.2 Infrastructure

Consistent with most floodplain risk management studies in Australia, this study quantified overall damages to infrastructure, public assets and local environmental features as a proportion (i.e. 15%) of the total building and land damages.

#### 6.2.3.3 Beach width loss

The loss of beach width caused by shoreline recession is associated with a range of socio-economic impacts, including:

- Degraded landscape and views;
- Loss of amenity for recreational and social activities;
- Loss of access to the water for swimming/water based activities;
- Loss of protection against storm bite and inundation; and
- Loss of the beach and dune ecosystem.

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The literature on valuation of coastal environment assets provides several examples of attempts to estimate the economic value of a beach, through an analysis of the services it provides to the community.

Travel Cost Methods (TCM) have been used to estimate the recreational value provided to beach goers. The theory behind the TCM is that beach users will only yield the expenses of a trip to the beach if these are smaller than the utility they gain from the trip (SCCG, 2013). These expenses include travel costs, onsite costs, and time. Information regarding the number of trips taken at different travel costs is then used to create a demand function for a specific beach (Pendleton et al., 2007).

The TCM is a popular method in environmental valuation, as it relies upon observations of real behaviour. The main limitation it has however is that it only estimates the value obtained from accessing and using the beach. As such, it does not account for other values such as improved views/landscape, or environmental and ecological values of a beach (SCCG, 2013).

Another popular method to estimate beach value is based on Hedonic Pricing Methods (HPM). These are usually applied to estimate the contribution to property value made by different environmental attributes. In the case of properties located on or in proximity to a beach, these may include distance from the beach and a measure of beach quality (e.g. beach width). In HPM, real estate sales records are correlated to these attributes to obtain an estimate of the market's Willingness to Pay (WTP) for the privilege of living near a beach of a given width.

This study investigated the suitability of TCM and HPM to estimate the value of the beach along the Southern Reach of the study area. Amity Point Beach, in the Northern Reach, was excluded from the financial analysis for the reasons described in Section 6.1.

When assessing the applicability of the TCM, it was noted that the Southern Reach beach is mostly used by members of the local community and by tourists. Tourists may include people owning a holiday property in Amity Point, and people staying at the camping ground or renting any of the local cottages/vacation homes. The cost that these people would have to pay to travel from their accommodation to the beach was considered negligible due to the very short distance. The cost for tourists to travel from their homes to their accommodation in Amity Point is more significant, but this is already reflected in the market value of such properties (i.e. the property value includes a measure of the owner WTP to have access to accommodation near the beach), which was considered in the damages assessment exercise.

Generating an ad-hoc HPM-based model to estimate the value of properties in Amity Point as a function of their distance from the beach and the beach width was not possible because of the relatively small number of properties and limited information on real estate sales and beach width fluctuations. As such, a suitable ratio between property value and beach width was obtained from a study undertaken by Gopalakrishnan et al. (2011) in a comparable environmental coastal context (i.e. the property market in coastal town on the barrier islands of North Carolina, US), also affected by high beach erosion rates.

Gopalakrishnan et al. (2011) used four different models and estimated that, depending on the model used, a 1% increase in beach width could generate an increase in the value of beachfront properties of up to 0.5%. However, of the four models used, the only one that produced results consistent with previous, well referenced work (e.g. Pompe and Reinhart, 1995) estimated a +0.08% beach-front property value increase as a result of a +1% increase in beach width. As such, this figure was considered the most appropriate for the context of Amity Point.

Gopalakrishnan et al. (2011) also noted that the effect of beach width on property value decreases exponentially with the distance from the beach and becomes negligible at a distance of 100 m. In Amity Point, it was assumed that the only property whose value would be affected by beach width fluctuations is the Amity Point Camping Ground, currently valued \$2,750,000 (Queensland Globe, 2019).

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#### 6.2.3.4 Social and intangible impacts

The most important social impact of natural hazards is the possible loss of lives, however this does not generally apply to coastal erosion, as building occupants are able to leave the premises well before they experience any significant structural instability. Other than risk to life, additional social and intangible impacts of severe coastal erosion may include implications on:

- Community identity and cohesion;
- Landscape and environmental degradation;
- People's overall well-being; and
- Loss of items of sentimental value.

These impacts are difficult to quantify. Attempts have been made in some floodplain risk management studies to include intangible damages estimates as a proportion of total residential and commercial tangible damages (usually 20-25%). Consistently with this approach, this study estimated social/intangible damage to be 25% of total tangible property damages.

### 6.3 Cost-Benefit Analysis

#### 6.3.1 Southern Reach

##### 6.3.1.1 Costs of proposed erosion controls

For the Southern Reach, the SEMP proposed the following erosion control measures:

- Construction of approximately 165m of seawalls to be buried at the rear of the northern and southern beach compartments. This consists of approximately 55m along the northern compartment and 110m on the Southern compartment;
- Placement of approximately 5,000 m<sup>3</sup> of sand (of appropriate grading and size) within the existing three beach compartments. This consists of approximately 800 m<sup>3</sup> along the northern compartment, approximately 1,700 m<sup>3</sup> on the Central compartment, and approximately 2,500 m<sup>3</sup> on the Southern compartment;
- Undertaking a structural audit of the existing rock-armoured seawall to the south of the three beach compartments to confirm its future effectiveness as a foreshore defence structure;
- Monitoring the performance of the beach nourishment by annual surveys of the foreshore profile;
- Undertake future beach renourishment campaigns to reinstate beach widths should sand losses result from severe storms and/or future climate change. It is estimated that on average there will be a re-nourishment every 4 years with 1,200 m<sup>3</sup> of sand; and
- For the purposes of developing cost estimates, it is assumed that local sources of sand for beach nourishment and armour rocks for seawall construction are available on North Stradbroke Island;

Table 6-2 summarises the cost estimates for the above listed works:

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**TABLE 6-2 CAPITAL AND MAINTENANCE COST OF THE SEMP EROSION CONTROL MEASURES IN THE SOUTHERN REACH**

Activity	Capital Cost	Annual Cost
<b>Design and Approvals</b>		
Site survey	\$5,000	
Sand sourcing study	\$15,000	
Structural audit of existing seawall	\$7,500	
Design of seawalls & beach nourishment	\$30,000	
Obtain appropriate approvals	\$17,500	
<b>Construction Works</b>		
Construct approx. 165m of buried rock seawall	\$112,500	
Procure and place 5,000m <sup>3</sup> of sand	\$87,500	
Allowance for annual renourishment		\$5,000
<b>Project Monitoring</b>		
Annual survey of beach		\$5,000
<b>Totals</b>	<b>\$275,000</b>	<b>\$10,000</b>

Table 6-3 shows the above costs spread across the 20-year time horizon, and calculates their Present Value using a discount rate of 7%, consistent with the guidance provided by Building Queensland and Infrastructure Australia.

**TABLE 6-3 PRESENT VALUE OF THE COSTS ASSOCIATED WITH THE EROSION CONTROL MEASURES IN THE SOUTHERN REACH**

Year	Costs	Present Value (7% discount rate)
1	\$275,000	\$275,000
2	\$10,000	\$9,346
3	\$10,000	\$8,734
4	\$10,000	\$8,163
5	\$10,000	\$7,629
6	\$10,000	\$7,130
7	\$10,000	\$6,663
8	\$10,000	\$6,227
9	\$10,000	\$5,820
10	\$10,000	\$5,439
11	\$10,000	\$5,083
12	\$10,000	\$4,751
13	\$10,000	\$4,440
14	\$10,000	\$4,150
15	\$10,000	\$3,878

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Year	Costs	Present Value (7% discount rate)
16	\$10,000	\$3,624
17	\$10,000	\$3,387
18	\$10,000	\$3,166
19	\$10,000	\$2,959
20	\$10,000	\$2,765
	<b>Total Present Value</b>	<b>\$378,356</b>

#### 6.3.1.2 Benefits of proposed erosion controls

The economic benefits of the proposed erosion controls were assessed as the associated reduction in erosion damages, plus the increase in value of beach-front properties (i.e. the camping ground) driven by the availability of a wider beach (post-nourishment). The reduction in damages was estimated by subtracting the damages with the erosion controls in place from the damages in the “Do Nothing” scenario.

##### a) Damages in the “Do Nothing” scenario

If no coastal protection measures were implemented, the beach and about 60% of the camping ground would be lost over the selected time horizon of 20 years. The current land value of the camping ground is \$2,750,000 (Queensland Globe, 2019).

According to the erosion scenario used in this analysis, the beach would entirely erode before the camping ground is affected. Namely, in the worst-case scenario of an erosion rate of 90m in 20 years (i.e. 4.5m per year), the beach would erode within the first three years. As discussed in Section 2.3.3, a complete loss of the beach would result in a decrease of the value of the camping ground of about 8%, corresponding to \$220,000. This loss would be experienced in the first three years (i.e. a loss of approximately \$73,333 per year).

The remaining value of the camping ground after the beach has disappeared would be \$2,530,000. Sixty per cent of such value, corresponding to \$1,518,000, would be lost over the following 17 years, at a pace of about \$89,294 per year.

It is acknowledged that this is a simplification of the erosion process as in an unaltered natural system the erosion of the camping ground would nourish the beach, which would continue to exist to some extent. However, it was deemed more likely that the existing seawall will prevent any erosion of the camping ground land before the beach is completely eroded.

Finally, as discussed in Section 6.2.3.2 and 6.2.3.4, an allowance of +15% and +25% of the total tangible damages to property was included to account for damages to infrastructure/public assets and intangible damages respectively.

Table 6-4 summarises the above mentioned damages over the time horizon of 20 years, and calculates their present value.

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**TABLE 6-4 PRESENT VALUE OF THE DAMAGES IN THE SOUTHERN REACH IN THE “DO NOTHING” SCENARIO.**

Year	Tangible Damages	Infrastructure Damage (15%)	Intangible Damages (25%)	Total	Present Value
1	\$73,333	\$11,000	\$18,333	\$102,667	\$102,667
2	\$73,333	\$11,000	\$18,333	\$102,667	\$95,950
3	\$73,333	\$11,000	\$18,333	\$102,667	\$89,673
4	\$89,294	\$13,394	\$22,324	\$125,012	\$102,047
5	\$89,294	\$13,394	\$22,324	\$125,012	\$95,371
6	\$89,294	\$13,394	\$22,324	\$125,012	\$89,132
7	\$89,294	\$13,394	\$22,324	\$125,012	\$83,301
8	\$89,294	\$13,394	\$22,324	\$125,012	\$77,851
9	\$89,294	\$13,394	\$22,324	\$125,012	\$72,758
10	\$89,294	\$13,394	\$22,324	\$125,012	\$67,998
11	\$89,294	\$13,394	\$22,324	\$125,012	\$63,550
12	\$89,294	\$13,394	\$22,324	\$125,012	\$59,392
13	\$89,294	\$13,394	\$22,324	\$125,012	\$55,507
14	\$89,294	\$13,394	\$22,324	\$125,012	\$51,875
15	\$89,294	\$13,394	\$22,324	\$125,012	\$48,482
16	\$89,294	\$13,394	\$22,324	\$125,012	\$45,310
17	\$89,294	\$13,394	\$22,324	\$125,012	\$42,346
18	\$89,294	\$13,394	\$22,324	\$125,012	\$39,576
19	\$89,294	\$13,394	\$22,324	\$125,012	\$36,986
20	\$89,294	\$13,394	\$22,324	\$125,012	\$34,567
<b>Total Present Value</b>					<b>\$1,354,337</b>

**b) Damages with SEMP erosion controls in place**

The recommended beach nourishment and associated protection would bring the width of the beach in the Southern Reach from about 15m (today) to about 40m. Periodic re-nourishments would then be undertaken on average every 4 years (this may vary depending on erosion rates). Each of these would use about 1,200 m<sup>3</sup> of sand in an attempt to reduce the beach erosion rate. It was assumed that these measures would result in a total beach loss of about 10m over 20 years, corresponding to a rate of 0.5m/year.

An initial beach width of 40m, under the scenario in which the coastal protection measures proposed in the SEMP are implemented, was then used to estimate the increase in property value of the camping ground in year 1. Increasing the current beach width (i.e. about 15m) to 40m would represent a width variation of +266%. The corresponding increase in beach-front property value, according to Gopalakrishnan et al. (2011), would be +21.3%. This would correspond to an increase of the camping ground lot value from a total of \$2,750,000 to a total of \$3,335,500, for a benefit of \$585,750 in year 1 (i.e. when the nourishment is undertaken).

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The beach would then erode at an average rate of 0.5m/year, generating a corresponding decrease of the camping ground lot value in the following 20 years calculated as the percentage of beach loss times 0.08%. This corresponds to an average yearly loss of \$3,336.

Table 6-5 summarises the above-mentioned damages over the time horizon of 20 years and calculates their present value.

**TABLE 6-5 PRESENT VALUE OF THE DAMAGES IN THE SOUTHERN REACH WITH THE SEMP EROSION CONTROL IN PLACE**

Year	Damages	Present Value
1	-\$582,414	-\$582,414
2	\$3,336	\$3,118
3	\$3,336	\$2,914
4	\$3,336	\$2,723
5	\$3,336	\$2,545
6	\$3,336	\$2,378
7	\$3,336	\$2,223
8	\$3,336	\$2,077
9	\$3,336	\$1,941
10	\$3,336	\$1,814
11	\$3,336	\$1,696
12	\$3,336	\$1,585
13	\$3,336	\$1,481
14	\$3,336	\$1,384
15	\$3,336	\$1,294
16	\$3,336	\$1,209
17	\$3,336	\$1,130
18	\$3,336	\$1,056
19	\$3,336	\$987
20	\$3,336	\$922
	<b>Total Present Value</b>	<b>-\$547,937</b>

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### 6.3.1.3 Benefit to cost ratio

The Benefit to Cost Ratio (BCR) of the proposed erosion control measures in the Southern Reach would be 5.0. This means that the proposed controls would yield a significant economic profit.

<b>Present Value of Damages (Do Nothing)</b>	\$1,354,337
<b>Present Value of Damages with Erosion Control in Place</b>	\$-547,937
<b>Net Present Value of Benefits</b>	\$1,902,275
<b>Net Present Value of Costs</b>	\$378,356
<b>Benefits to Costs Ratio (BCR)</b>	5.0

## 6.3.2 Central Reach

### 6.3.2.1 Costs of proposed flow slide controls

The SEMP proposed the following controls in the Central Reach to mitigate flow slides:

*"to support and enhance the effectiveness of the current erosion management practice of repairing damage to the existing flow slide barrier whenever necessary following flow slide events - by placing additional rock armouring."*

The costs associated with the above strategy vary depending on the source of the rocks (i.e. from the islands vs. from the mainland). The SEMP implementation plan estimated the cost of rock supply from the mainland to be significantly higher than using a source on the island. Because sourcing rocks from the mainland would not bring any advantages over using a source from the mainland, the latter option was disregarded.

As discussed in the SEMP Implementation Plan Report, rocks can be sourced from two quarries within the island: (1) a Council quarry, or (2) a Private quarry. Both quarries would be able to supply the necessary quantity of rocks, which was estimated to on average 1,000 tonnes per year. The cost of the rocks (i.e. \$55 per tonne), loading (i.e. \$120 per hour) and stockpiling would be the same regardless of the quarry. The only difference in terms of costs and benefits would be that the Council quarry already has a sales permit, which will need to be renewed in 2020, while the Private quarry needs a new sales permit before any supply can begin. For simplicity, it was assumed that the cost of a permit renewal and a new permit would be of the same order of magnitude, and that both costs would have to be absorbed in year 1. Table 6-6 summarises the costs of the flow slide controls as described in the SEMP.

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**TABLE 6-6 CAPITAL AND MAINTENANCE COSTS OF THE SEMP MEASURES TO CONTROL FLOW SLIDES IN THE CENTRAL REACH**

Activity	Capital cost	Annual cost
Quarry Sales Permit	NA	NA
Annual bathymetric survey of Rainbow Channel		\$17,500
Annual structural audit of flow slide barrier		\$7,500
Rock sourcing + transport (1,000 tonne per year @ \$55 per tonne)		\$55,000
Loading (1 excavator @ \$120/hour)		\$7,680
<b>Total</b>	<b>NA</b>	<b>\$87,680</b>

Table 6-7 shows the above costs spread over the 20-year time horizon, and calculates their Present Value using a discount rate of 7%.

**TABLE 6-7 PRESENT VALUE OF THE COSTS OF IMPLEMENTATION AND MAINTENANCE OF THE SEMP EROSION CONTROL MEASURES IN THE CENTRAL REACH**

Year	Costs	Present Value (7% discount rate)
1	\$87,680	\$87,680
2	\$87,680	\$81,944
3	\$87,680	\$76,583
4	\$87,680	\$71,573
5	\$87,680	\$66,891
6	\$87,680	\$62,515
7	\$87,680	\$58,425
8	\$87,680	\$54,603
9	\$87,680	\$51,031
10	\$87,680	\$47,692
11	\$87,680	\$44,572
12	\$87,680	\$41,656
13	\$87,680	\$38,931
14	\$87,680	\$36,384
15	\$87,680	\$34,004
16	\$87,680	\$31,779
17	\$87,680	\$29,700
18	\$87,680	\$27,757
19	\$87,680	\$25,941
20	\$87,680	\$24,244

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Year	Costs	Present Value (7% discount rate)
	<b>Total Present Value:</b>	<b>\$993,905</b>

### 6.3.2.2 Benefits of the proposed flow slides controls

The economic benefits of the proposed flow slides controls were assessed as the associated reduction in damages from flow slides over the selected 20-year time horizon. The reduction in damages was estimated by subtracting the damages with the controls in place from the damages in the "Do Nothing" scenario.

#### a) Damages in the "Do Nothing" scenario

If no flow slides controls were implemented in the Central Reach it was assumed that the shoreline would recede by 36m over 20 years, corresponding to a recession rate of 1.8m per year. This would affect coastal properties in two ways:

- By progressively reducing the area of the affected lots (loss of land); and
- By undermining the foundations of any buildings within 36m from the shoreline (loss of buildings).

In addition to the above, any infrastructure and public assets within the erosion zone would be entirely lost and there would be intangible social impacts. These additional types of damage were estimated as a proportion of direct damages to properties as described in Section 2.3.2 and 2.3.4.

Table 6-8 and Table 6-9 summarise the damages to buildings and land respectively (including the proportional allowance for infrastructure and intangible damages) over the 20 year time horizon, in the "Do Nothing" scenario. The Present Value is also calculated, using a discount rate of 7%. It is noted that in years with a zero loss no buildings will be affected, although erosion will continue at the same rate.

**TABLE 6-8 PRESENT VALUE OF THE DAMAGES TO BUILDINGS IN THE CENTRAL REACH IN THE "DO NOTHING" SCENARIO**

Year	Tangible Damages	Number of affected buildings	Infrastructure Damage (15%)	Intangible Damages (25%)	Total	Present Value
1	\$0	0	\$0	\$0	\$0	\$0
2	\$0	0	\$0	\$0	\$0	\$0
3	\$0	0	\$0	\$0	\$0	\$0
4	\$0	0	\$0	\$0	\$0	\$0
5	\$1,066,365	3	\$159,955	\$266,591	\$1,492,910	\$1,138,934
6	\$224,967	1	\$33,745	\$56,242	\$314,954	\$224,558
7	\$1,379,393	3	\$206,909	\$344,848	\$1,931,150	\$1,286,807
8	\$1,101,840	2	\$165,276	\$275,460	\$1,542,576	\$960,639
9	\$519,557	1	\$77,934	\$129,889	\$727,380	\$423,342
10	\$609,619	1	\$91,443	\$152,405	\$853,466	\$464,229
11	\$1,180,611	3	\$177,092	\$295,153	\$1,652,855	\$840,228
12	\$1,563,977	1	\$234,597	\$390,994	\$2,189,568	\$1,040,248
13	\$0	0	\$0	\$0	\$0	\$0
14	\$1,015,972	2	\$152,396	\$253,993	\$1,422,361	\$590,229

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Year	Tangible Damages	Number of affected buildings	Infrastructure Damage (15%)	Intangible Damages (25%)	Total	Present Value
15	\$774,057	2	\$116,109	\$193,514	\$1,083,679	\$420,270
16	\$1,498,051	2	\$224,708	\$374,513	\$2,097,272	\$760,148
17	\$772,966	1	\$115,945	\$193,242	\$1,082,153	\$366,563
18	\$260,024	1	\$39,004	\$65,006	\$364,034	\$115,244
19	\$1,241,051	3	\$186,158	\$310,263	\$1,737,471	\$514,055
20	\$0	0	\$0	\$0	\$0	\$0
<b>Total Present Value</b>						<b>\$9,145,492</b>

TABLE 6-9 PRESENT VALUES OF THE LOSS OF LAND IN THE CENTRAL REACH IN THE "DO NOTHING" SCENARIO

Year	Tangible Damages	Infrastructure Damage (15%)	Intangible Damages (25%)	Total	Present Value
1	\$410,685	\$61,603	\$102,671	\$574,958	\$574,958
2	\$410,685	\$61,603	\$102,671	\$574,958	\$537,344
3	\$410,685	\$61,603	\$102,671	\$574,958	\$502,190
4	\$410,685	\$61,603	\$102,671	\$574,958	\$469,337
5	\$410,685	\$61,603	\$102,671	\$574,958	\$438,632
6	\$410,685	\$61,603	\$102,671	\$574,958	\$409,937
7	\$410,685	\$61,603	\$102,671	\$574,958	\$383,118
8	\$410,685	\$61,603	\$102,671	\$574,958	\$358,055
9	\$410,685	\$61,603	\$102,671	\$574,958	\$334,630
10	\$410,685	\$61,603	\$102,671	\$574,958	\$312,739
11	\$410,685	\$61,603	\$102,671	\$574,958	\$292,279
12	\$410,685	\$61,603	\$102,671	\$574,958	\$273,158
13	\$410,685	\$61,603	\$102,671	\$574,958	\$255,288
14	\$410,685	\$61,603	\$102,671	\$574,958	\$238,587
15	\$410,685	\$61,603	\$102,671	\$574,958	\$222,978
16	\$410,685	\$61,603	\$102,671	\$574,958	\$208,391
17	\$410,685	\$61,603	\$102,671	\$574,958	\$194,758
18	\$410,685	\$61,603	\$102,671	\$574,958	\$182,017
19	\$410,685	\$61,603	\$102,671	\$574,958	\$170,109
20	\$410,685	\$61,603	\$102,671	\$574,958	\$158,980
<b>Total Present Value</b>					<b>\$6,517,495</b>

The total Present Value of damages in the Central Reach in the "Do Nothing" scenario is \$15,662,987.


**b) Damages with SEMP flow slides controls in place**

It was assumed that with the SEMP flow slides control in place the shoreline recession would be contained to 10m in 20 years, corresponding to a recession rate of 0.5m per year. In this scenario the amount of land and the number of buildings lost would reduce significantly. Table 6-10 and Table 6-11 summarise the damages to buildings and land respectively (including the proportional allowance for infrastructure and intangible damages) over the 20 year time horizon, with the SEMP flow slides control options in place. The Present Value is also calculated, using a discount rate of 7%.

**TABLE 6-10 PRESENT VALUE OF THE DAMAGES TO BUILDINGS IN THE CENTRAL REACH WITH THE SEMP FLOW SLIDES CONTROL MEASURES IN PLACE**

Year	Tangible Damages	Number of affected buildings	Infrastructure Damage (15%)	Intangible Damages (25%)	Total	Present Value
1	\$0	0	\$0	\$0	\$0	\$0
2	\$0	0	\$0	\$0	\$0	\$0
3	\$0	0	\$0	\$0	\$0	\$0
4	\$0	0	\$0	\$0	\$0	\$0
5	\$0	0	\$0	\$0	\$0	\$0
6	\$0	0	\$0	\$0	\$0	\$0
7	\$0	0	\$0	\$0	\$0	\$0
8	\$0	0	\$0	\$0	\$0	\$0
9	\$0	0	\$0	\$0	\$0	\$0
10	\$0	0	\$0	\$0	\$0	\$0
11	\$0	0	\$0	\$0	\$0	\$0
12	\$0	0	\$0	\$0	\$0	\$0
13	\$0	0	\$0	\$0	\$0	\$0
14	\$0	0	\$0	\$0	\$0	\$0
15	\$0	0	\$0	\$0	\$0	\$0
16	\$225,566	1	\$33,835	\$56,392	\$315,793	\$114,458
17	\$0	0	\$0	\$0	\$0	\$0
18	\$840,798	2	\$126,120	\$210,200	\$1,177,118	\$372,645
19	\$0	0	\$0	\$0	\$0	\$0
20	\$0	0	\$0	\$0	\$0	\$0
<b>Total Present Value</b>						<b>\$487,103</b>

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**TABLE 6-11 PRESENT VALUE OF THE LOSS OF LAND IN THE CENTRAL REACH WITH THE SEMP FLOW SLIDES CONTROL MEASURES IN PLACE.**

Year	Tangible Damages	Infrastructure Damage (15%)	Intangible Damage (25%)	Total	Present Value
1	\$52,546	\$7,882	\$13,137	\$73,565	\$73,565
2	\$52,546	\$7,882	\$13,137	\$73,565	\$68,752
3	\$52,546	\$7,882	\$13,137	\$73,565	\$64,255
4	\$52,546	\$7,882	\$13,137	\$73,565	\$60,051
5	\$52,546	\$7,882	\$13,137	\$73,565	\$56,122
6	\$52,546	\$7,882	\$13,137	\$73,565	\$52,451
7	\$52,546	\$7,882	\$13,137	\$73,565	\$49,019
8	\$52,546	\$7,882	\$13,137	\$73,565	\$45,813
9	\$52,546	\$7,882	\$13,137	\$73,565	\$42,816
10	\$52,546	\$7,882	\$13,137	\$73,565	\$40,014
11	\$52,546	\$7,882	\$13,137	\$73,565	\$37,397
12	\$52,546	\$7,882	\$13,137	\$73,565	\$34,950
13	\$52,546	\$7,882	\$13,137	\$73,565	\$32,664
14	\$52,546	\$7,882	\$13,137	\$73,565	\$30,527
15	\$52,546	\$7,882	\$13,137	\$73,565	\$28,530
16	\$52,546	\$7,882	\$13,137	\$73,565	\$26,663
17	\$52,546	\$7,882	\$13,137	\$73,565	\$24,919
18	\$52,546	\$7,882	\$13,137	\$73,565	\$23,289
19	\$52,546	\$7,882	\$13,137	\$73,565	\$21,765
20	\$52,546	\$7,882	\$13,137	\$73,565	\$20,341
<b>Total Present Value</b>					<b>\$833,903</b>

The total Present Value of damages in the Central Reach, with the SEMP flow slides control options in place, is \$1,321,006.

#### 6.3.2.3 Benefit to cost ratio

The Benefit to Cost Ratio (BCR) of the proposed flow slides control measures in the Central Reach is 14.4. This means that the proposed controls would be economically worthwhile.

<b>Present Value of Damages (Do Nothing)</b>	\$15,662,987
<b>Present Value of Damages with Erosion Control in Place</b>	\$1,321,006
<b>Net Present Value of Benefits</b>	\$14,341,981
<b>Net Present Value of Costs</b>	\$993,905
<b>Benefits to Costs Ratio (BCR)</b>	14.4

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## 6.4 Conclusions

The financial analysis showed that the coastal protection measures proposed in the Amity Point SEMP for the Central and Southern Reach yield significant socio-economic net profits, having a benefit to cost ratio of 14.4 and 5.0 respectively.

For the Central Reach, there is no significant difference, from a financial perspective, between sourcing the rocks from the Council quarry or the Private quarry, assuming that the Private quarry would charge the same amount for the rocks. The most practical option should be pursued.

The unusually high benefit to cost ratios are consistent with the analysis' assumptions about erosion rates, namely:

- An erosion rate of 4.5m per year was used in the Southern Reach for the "Do Nothing" scenario. Such rate, in the selected time horizon of 20 years, would produce a shoreline recession of 90m, which is consistent the EPA buffer zone for Amity Point for year 2100. The recession rate was reduced to 0.5m per year with the SEMP erosion control measures in place.
- In the Central Reach, a recession rate of 1.8m per year was used for the "Do Nothing" scenario. This is consistent with historical recession rates for this section of the coast and would produce a total recession of 36m over 20 years. The recession rate was reduced to 0.5m per year with the SEMP erosion control measures in place.

Additional assumptions/limitations include:

- Use of a 7% discount rate to calculate the Present Value (PV) of future costs and benefits, in line with the guidance provided by Queensland Treasury and Infrastructure Australia;
- The value of building contents was not considered as it was assumed that in most instances the building occupants would be able to move the contents elsewhere before the building is affected;
- The cost of double accommodation while buildings are repaired was not considered as it was assumed that in most instances, if no erosion control measures are in place, buildings that are undermined by erosion would not be repaired, and there would be sufficient time for the occupants to find a permanent accommodation elsewhere before having to leave the building;
- The loss of land value was assumed to be proportionate to the area of eroded land. A loss in value of the non eroded land was not considered as this was deemed negligible and partly balanced by fluctuations in land value across the area driven by coastal recession; and
- The costs of erosion control in the Central Reach did not include items such as covenant, local law and easement costs.
- While the financial analysis identified a net cost benefit to the proposed approach, there is no differentiation of costs and benefits between landowners and Council. It is recognized that the financial benefits are predominantly private and the costs should be therefore borne by private. However, as highlighted throughout the SEMP, collective management is key for the success of the SEMP recommendations and Councils involvement is therefore warranted.

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## 7 MANAGEMENT OPTION IMPLEMENTATION SCENARIOS

This section of the report brings together all previous chapters, namely the technical and legal review, emergency rock supply and financial analysis. All implementation options are presented, and their advantages and disadvantages outlined. Extensive stakeholder consultation has been performed with Council, State and the residents to ensure that the implementation plan provides a sensible way forward and that it does not pose an unreasonable level of obligation, responsibility or liability on any party involved.

### 7.1 Stakeholder consultation

Appendix A outlines the details of the community engagement activities undertaken during development of this Implementation Plan. In particular, two workshops were held with both the Northern Reach and Central Reach communities. The first workshop was held on 15 Oct 2019 to discuss the status of the Implementation Plan and the second on 27 Nov to present the Draft Implementation Plan. Council is directly engaging with QYAC with regard to the Implementation Plan for the Southern Reach. The feedback gained during the workshops has been incorporated in the development of all options.

In addition to this, all relevant State agencies were consulted during development of the SEMP Implementation Plan, namely:

- Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)
- Department of Agriculture and Fisheries (DAF)
- Queensland Parks and Wildlife Service (QPWS)
- Department of Natural Resources, Mines and Energy (DNRME)
- Department of Environment and Science (DES)

All State agencies should be presented with the Draft Implementation Plan before it is finalised. A pre-lodgement meeting should be scheduled to progress with the development application for the flow slide barrier.

Stakeholder consultation formed an important part in the development of the implementation plan and a brief summary of the stakeholder preferences on the individual issues has been incorporated into the following chapters.

### 7.2 Southern Reach

The SEMP recommendation for the Southern Reach is a combination of a structural audit of the existing seawalls, construction of additional sections of seawall and beach nourishment.

The technical review confirmed that this strategy is appropriate for the location and is also consistent with the previous BMT WBM (2013) SEMP. The recommendation from the review is to include a contingency for the possible need to reinstate a part or all of the groyne, should it become affected by subsidence due to a flow slide event.

The entire Southern Reach is held in one single land tenure. Any foreshore protection works will benefit the campground which is managed by QYAC. The majority of the proposed works are likely to be located on State land with some being located within the boundaries of the land parcel.

The legal review highlighted that there are no major legal obstacles that prevent the works from being implemented.

Based on this assessment, the works proposed at the Southern Reach can be implemented. Implementation of the works will need to be organised by the body that benefits from the works. Ongoing consultation is needed between Council and QYAC on the implementation of the recommended works. It is noted that the

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recommended works will principally protect the campgrounds, but there is also a community interest in the works where they facilitate public access to the foreshore and where there is Council land and assets.

QYAC also flagged ground water issues as a potential key contributor to the flow slide events. Flow slide events are not yet fully understood and there is more research required to understand them in more detail and to determine what actually causes them. The SEMP was able to recommend the maintenance of the existing flow slide barrier, because it has been shown that it is effective in halting erosion, regardless of the exact cause. However, to increase our understanding of flow slide events, Council has requested that UQ led research considers whether the impact of ground water conditions on flow slide events warrant further investigation. Council is to assist with and support the research into ground water impacts on flow slide events.

### 7.3 Central Reach

The Amity Point foreshore property owners have been active in protecting their property by dumping rocks on the foreshore whenever a flow slide event occurred. Historically, once a flow slide occurs, the property owners have a mutual agreement which allows for immediate action. Access via neighbouring properties would be provided, acting on behalf of absent residents was agreed and payment for the works would be arranged after rocks were placed. The SEMP recommends legally streamlining these informal agreements in order to guarantee the future effectiveness of the flow slide barrier.

Construction of the flow slide barrier to its current extent and standard has taken many years. Several different materials have been used during those years, depending what was available at the time. The layout of the structure has not been designed, assessed or signed off by an appropriate chartered professional engineer. Currently, there is no Development Application granted for the flow slide barrier. One of the great strengths of the SEMP is that the plan recognises the value of the existing flow slide barrier in the mitigation of the erosion threat. However, a legal framework must be defined to obtain its formal recognition. Furthermore, there is a need to legally define the duties and obligations of all concerned stakeholders in order to ensure the flow slide barrier continues to be functional in the future.

#### 7.3.1 Ownership and Responsibilities

The flow slide barrier runs continuously along the foreshore of the Central Reach. Consequently, the land parcels on which the flow slide barrier is located are of varied tenures. The tenure of these properties ranges from freehold, reserve (Council), road reserve (Council) and State land. It is important to define where the flow slide barrier is situated relative to land parcel boundaries to enhance clarity of the duties and obligations to maintain the flow slide barrier's functionality.

The maintenance responsibility for the flow slide barrier generally lies with the owner of the land parcel on which the structure is located. However, the majority of the flow slide barrier is located on unallocated state land fronting the private or Council parcels. For unapproved structures (the flow slide barrier is currently still an unapproved structure) the land holder or person who constructed the works without a development permit may be required to remove the works. Once the flow slide barrier is approved (the approval process is set out in this Implementation Plan) the right to construct, use and maintain the works in a safe condition lies with the holder of the development approval for the works. As this is a legislative obligation though, it extends to any subsequent purchasers of the land.

Generally, because the State has no assets at risk and does not fund the protection of private property, the State does not have any direct interest in protecting the land and therefore of maintaining the flow slide barrier. There is no common benefit for the State to protect the land. However, the State does acknowledge the positive impacts of the flow slide barrier if it is maintained properly. Therefore, the State indicated that it would allow Council and private property owners to use and maintain the flow slide barrier where it is located on State land. Formal confirmation would be obtained as part of the approval process, which is detailed in the following chapter.

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Council is responsible for all public spaces, such as road reserves and parks. The flow slide barrier on two parks (Old School House Park and Cabarita Park) were recently maintained during the months of September and October 2019.

Specific examples (red outline) are explained below for information only (legend: State land, Freehold, Reserve (Council) and Road parcel (Council); Source: Qld Globe)

#### 1. Responsibility is with the private property owner:

##### Example A



The flow slide barrier is located within the property boundary of the private land parcel.

##### Example B



The flow slide barrier is located on Unallocated State land (non-shaded area) fronting the private land parcel. If the private property owner was granted a development permit to construct tidal works on State tidal land the private property owner is granted a right to use and occupy the State land for constructing, maintaining and using the structure and is required to maintain it in a safe condition.

##### Example C



Similar to Example B, the flow slide barrier is located on state land (tidal non-shaded area and grey shaded lot) fronting the private parcel. This case should be treated the same way than Example B, but will need to be considered in more detail with all relevant state agencies (DNRME and DES) in a pre-lodgement meeting.

It must be noted however, that the adjoining freehold lot has no entitlements to use any part of the state lot for any private use (other than maintenance of the flow slide barrier with all relevant approvals in place). If the adjoining owner wishes to use the state lot for any other private purposes, they would need to make an application to purchase the areas under the Land Act 1994, and pay current market value for the land.

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Example D



The flow slide barrier is located on Unallocated State tidal land, Reserve and private property fronting the private land parcel.

In its current state, as Council is not the owner of the works not have the works been approved, Council has responsibility to remove unlawful works or make arrangements with the owner of the lot that receives the benefit to seek approvals. There is no public access to this part of the reserve and there are no public assets in the area of the reserve fronting the private property and therefore there is no common benefit for Council to protect the land and Council should seek to have responsibility for the barrier taken-up by the owner of the lot which benefits from the structure. It is advised for Council to revoke the part of the reserve fronting the private properties<sup>2</sup>. The land can either be handed back to the state and classified as unallocated state land or can be purchased by the freehold owner at market value. Both options would enable the freehold owner to maintain the part of the flow slide barrier protecting their private property (with all relevant approvals in place) as per Example A or B.

## 2. Responsibility is with Council:

Example A



The flow slide barrier is located within the property boundary of the Council parcel (Road Reserve).

Example B and C



The flow slide barrier is located on State tidal land abutting the Council parcel. Generally, the State will be liable to maintain, however, if Council was granted a development permit to construct tidal works on State tidal land Council is required to keep it in a safe condition.

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<sup>2</sup> This might not be required, should the local law be preferred over the covenant. The local law could define waterfront land in a similar way to how it is defined in the Gold Coast Local Law No. 17 - Maintenance of Works in Waterway Areas





Alternatively, another option for maintenance responsibilities of the flow slide barrier is that Council could take responsibility, regardless of the tenure of the land. Maintenance would then be implemented by Council. However, in order for Council to fund the maintenance activities of the whole flow slide barrier, a levy may need to be implemented. A levy is an additional fee on top of the normal rates, that would fund the works on the flow slide barrier. Council may also be taking on liability if the flow slide barrier fails and properties are damaged.

**TABLE 7-1 PRO AND CONS OWNERSHIP AND RESPONSIBILITIES**

Responsibilities	Advantages	Disadvantages
Responsibility depending on tenure	Close to current (informal) arrangements. Each owner to take care of their property.	Property owners who don't want/ can't pay for maintenance. Additional legal regulations will have to be set into place. New property owners might not be aware of the obligations when purchasing the property.
Council to take responsibility	Easier to obtain rocks from Council quarry. Continuous maintenance of the flow slide barrier assured. Equal spread of costs.	Levy to be placed on property owners. Loss of control for the property owner. Additional management costs would occur. Increased liability for Council.

Council, State agencies and affected landowners were all consulted through this projects' Community Engagement process regarding their preferences. Council and affected landowners were in favour of keeping the maintenance of the flow slide barrier as close to historical arrangements as possible, where the maintenance was organised and performed by the individual property owner. Most State departments are in favour of Council taking control of maintenance - for quality control and efficiency reasons. Quality control can however also be realized by implementing other controls such as training and instructing all contractors that can perform the works on the flow slide barrier and RPEQ and/or Council sign off on constructed works.

### 7.3.2 Development Application

In order to be able to legally maintain the flow slide barrier it needs firstly to gain a development approval (DA) under the Planning Act 2016. Because it is an existing structure, a development application (DA) will need to be prepared retrospectively.

A permit under the Marine Parks Act will also be required. The works are (partially) located within the Conservation Park Zone of the Moreton Bay Marine Park with HAT (Highest Astronomical Tide) being the boundary of the marine park, with freehold property excluded.

Prior to the DA, owner's consent will be required from the State (DNRME) for properties where the flow slide barrier is located outside of the private property - to address the issue of the flow slide barrier being located on State land. Once owners' consent is granted the DA can be prepared and submitted to SARA (State Assessment and Referral Agency) for referral to relevant State agencies. As part of the approval process, the State can put conditions on the approval of the flow slide barrier, such as implementing a covenant on the property as outlined in more detail in the Section 7.3.3.

There are different ways in which the DA can be prepared and submitted:

1. Council to apply for development approval for the entire structure.



This option avoids the need for the private property owners to navigate through the approval process. However, the DA would span a combination of private, State and Council land - which will make it a difficult DA process. Also, conditions on the DA will be difficult to tie to individual property owners. As highlighted in Section 7.3.1, both Council and residents prefer to maintain the individual management of the flow slide barrier and this would be very difficult to implement with one overarching DA from Council. It also raises the issue as to why Council would take on the liability for a structure that is intended to protect private property.

2. Private property owners and Council to apply for DAs individually for each of their sections of the flow slide barrier.

This option will ensure that each DA is tailored to the individual lot and the existing land tenures (for scenarios where the flow slide barrier located either on State land or within private lot). Conditions can be imposed on individual property owners. Each individual will be responsible for their section of the flow slide barrier and have the obligation to manage their own risk and to maintain the structure. This arrangement is also the preferred strategy of most State agencies.

The downside of this option is that it can be difficult for private landowners to navigate through the approval process. This can be overcome by Council guiding applicants through this process. Another complication is with the State-issued Marine Park permit. Unlike other permits, a Marine Park permit applies to the applicant rather than the land parcel for the parts of the barrier in tidal water forming the Moreton Bay Marine Park. This means, should the owner of a property change, then the relevant Marine Park permit would need to be transferred to the new landowner.

3. Another option is for Council to obtain a variation (preliminary) approval for the entire structure. This would seek in-principle approval of the structure, to then be followed by individual property owners submitting a DA for their length of the structure (including detailed engineering drawings).

This option will make it easier for individual owners to undertake the approval process, but also provides all the benefits of individual DA's as outlined above. The issue of the Marine Park Permit applying to an individual should be addressed in a pre-lodgement meeting.

A streamlined process like this, lodging all DA's at the same time will provide significant efficiencies for the applicants and the assessment agencies.

The advantages and disadvantages of each option are outlined in Table 7-2.

**TABLE 7-2 PRO AND CONS DA APPLICATION STRATEGY**

Option	Advantages	Disadvantages
Council to get DA for entire structure	Streamlined process. No obligation for private property owners. No transfer of Marine Park permit required.	Varying land tenures. Conditions to be put on entire structure rather than on individual parcels where conditions might apply. Responsibility is with Council.
Property owners to obtain a DA for their length of the flow slide barrier	Conditions are tied to the individual land parcel. Responsibility is with the individual.	Can be a difficult process to go through by each individual. Preparation, lodgement and assessment of several individual DA's would be required. Transfer of Marine Park permits required in the event of changed ownership.

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Option	Advantages	Disadvantages
Council to obtain preliminary approval, then property owners to obtain individual approval	Streamlined process. Conditions are tied to the individual land parcel. Responsibility is with the individual.	Transfer of Marine Park permits required in the event of changed ownership.

Most State departments and Council are either in favour or impartial to individual DA's - with the exception of the Queensland Parks and Wildlife Service (QPWS) which administers the Moreton Bay Marine Park. QPWS prefers one consolidated DA from Council for the entire structure for the reasons outlined above.

### 7.3.3 Maintenance

Once the flow slide barrier is an approved structure and legally binding maintenance obligations are imposed, maintenance obligations for the flow slide barrier are assigned. The SEMP highlighted that the flow slide barrier will need to be maintained as a continuous structure. Any weak areas (e.g. insufficient rock) will increase the risk of a flow slide event occurring in this area. Protection of the Amity Point foreshore can only be guaranteed if the barrier is maintained properly and topped up after each flow slide event, or following any subsidence or erosion of rock. Most residents have lived in the area for a long time and understand this obligation to maintain an effective flow slide barrier. Should there be an instance where a foreshore landowner does not fulfil the maintenance obligations, Council can compel the owner to undertake maintenance and repairs.

At the moment, maintenance is performed by every individual foreshore property owner on an as-required basis. Many existing foreshore property owners have witnessed flow slide events in the past and understand the implications of the threat to their property and the importance of acting quickly in response to a flow slide event. However, future foreshore landowners may not be aware of this unique threat and the (currently informal) maintenance obligations that come with it. Should any future owner then decide on a wait-and-see approach, it could create a structurally weak section of the flow slide barrier. This could then potentially expose neighbouring properties to an increased risk of a flow slide event adversely affecting their land. Therefore, it is important to formalise and enforce maintenance obligations. These can be achieved by adopting one of the following methods:

#### 1. Statutory Covenant

A statutory covenant is defined under the *Land Title Act 1994* (Qld) and is registered on land title. A covenant is a written agreement between a State/local government and a landholder regarding use of the lot, preservation of a native animal, plant or natural or physical feature of the lot that is of cultural or scientific significance, or restricting future transfer of the land. A covenant is registered on a land title and binds future owners, thereby creating a mechanism to ensure that landholders comply with the obligation. At Amity Point, a covenant may be used where the flow slide barrier is located on privately owned land. However, it would not be applicable where the structure is located on State land. Under that scenario, the Coastal Protection and Management Act 1995 would apply, binding landowners to maintenance obligations through the development application process).

The covenant obliges property owners to maintain the flow slide barrier, which could fall within 'use of the lot'. This is not clear however, and legal advice from a qualified solicitor should be sought. The advantage of this option is that the obligations of landowners automatically transfer to any new owner once the lot is sold, and the maintenance obligations are evident at the time of sale - due to being registered on the land title.

Private landholders will need to consent to the covenant to be placed on their title. Generally, during the community consultation, this was seen as beneficial as it enables the landholder to actively impact on

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conditions within the agreement (unlike the local law as discussed below). Should applying statutory covenants be the preferred means of formalising maintenance obligations but some residents not agree with this option, a covenant could be imposed on landholdings as a condition in the DA process. It is the responsibility of the landowner to implement the covenant.

## 2. Local Law

Implementation of a local planning law for the Amity Point locale could be considered. Maintenance obligations could be applied to both State and freehold land, where Council has the authority to oblige landowners to maintain the flow slide barrier. The local law applies to properties where the work/structure is located on (or which receives the benefit of) the prescribed work. If the landowner breaches the local law, Council can enforce compliance. The exact details of the local law would be drafted by Council.

A local law is not registered on land titles and any new landowner might not be properly informed regarding maintenance obligations prior to the purchase of foreshore land. This could be overcome by implementing procedures into the local law that require disclosure of the local law in the sales contract.

A local law has been established at the Gold Coast for the construction of a seawall. A step-by-step plan has been set out for any development on beachfront properties, whereby the local law ensures that the development meets the seawall location, construction and maintenance requirements. The Gold Coast City Council's local law contains a clear definition of waterfront land and a disclosure obligation that is intended to alert prospective buyers of relevant lots to the operation of the local law. However, Council can only compel a person to build a seawall when they undertake a major renovation (material change of use) on the property. In the case of the Amity Point foreshore, the flow slide barrier is mostly already built, but is deemed to be unlawful since it requires a DA. The local law could be enforced during the DA process.

The local law can define the specifics of what is stipulated as waterfront land. This can remove the need for Council to revoke parts of the Old Schoolhouse Park Reserve as outlined in Section 7.3.1

## 3. Development Permit

As part of the DA process, conditions can be placed on the development. Conditions can oblige property owners to maintain the flow slide barrier. A development approval applies to premises and binds future owners (*Planning Act 2016* (Qld) s 73). However, similar to the local law, this is not registered on the land title and there is no mechanism in place to inform future property owners of those obligations.

## 4. Council to have maintenance obligations

Alternatively, Council could be responsible for maintenance of the entire flow slide barrier. For this to be financially viable for Council, it would likely require a levy to be put in place to enable Council to fund the work.

The maintenance obligations include regular monitoring of the flow slide barrier, accompanied by periodic 'topping up' of the structure with rocks when required and undertaking emergency works during or following a retrogressive flow slide event. The last two obligations relate to each specific land parcel. Whereas the first obligation relating to monitoring of the entire structure should be funded by all affected stakeholders. It is recommended that Council undertake monitoring of the flow slide barrier (to ensure appropriate quality control and monitoring methodology) regardless of which strategy is adopted with regard to ongoing maintenance obligations and any emergency works to the flow slide barrier. This is the monitoring process advocated for both the Northern and Southern Reaches, with the SEMP recommendation for a three-year monitoring program along the Northern Reach to be implemented and paid for by Council. Advantages and disadvantages are described in Table 7-3.

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TABLE 7-3 PRO AND CONS FOR MAINTENANCE OPTIONS

Option	Advantage	Disadvantage
Covenant	Will be registered on land title.	Will come with a cost for the property owner (approx. \$200). Clarification should be sought from a qualified solicitor to determine if the flow slide barrier falls within the definitions of a covenant.
Local Law	All property owners (existing and future) will be bound to this law. Council to bear cost for implementation of the local law.	Is not registered on land titles, but the law can include provisions for the local law to be disclosed in property sales documentation.
Maintenance conditions within development application	Indication of maintenance upon approval application.	Not registered on land title, future purchasers may not have knowledge of obligations.
Council to take ownership	Make use of the Council quarry without many legal difficulties. Quality control is maintained.	Levy means that specific residents will have to contribute to maintaining the flow slide barrier, where it might not be directly benefitting their property.

The residents that participated in the consultation process are generally in favour of the covenant as it enables the owner to comment on any conditions that are put in place as part of the covenant because it is an agreed arrangement from both parties. A local law in comparison could change over time with limited opportunity for the individual to shape the changes. Being registered on the title was also seen as a great advantage as it enables all future owners to be aware of the maintenance obligations and should ensure a continuously strong flow slide barrier. Council is also generally in favour of the covenant over the local law.

### 7.3.4 Access to the flow slide barrier for maintenance/repair purposes

If emergency or maintenance works need to occur to sections of the flow slide barrier, the foreshore should be readily accessible for the appropriate machinery. The legal review undertaken for this project advised for the implementation of a series of easement under the terms of the Land Title Act 1994 (Qld). Access paths can potentially (subject to legal advice) be defined as "public utility easements", which would allow Council to register easements over private properties.

An easement is described as a right attached to land, which gives another party the right to use a pre-defined section of the land for a specific purpose - even though they are not the landowner. It is registered on land titles. To register an easement, a survey plan is needed depicting the physical extent of the easement. Parties may also negotiate specific terms (e.g. that grass/garden beds if destroyed by machinery accessing a flow slide location during an emergency response to an event) must be reinstated. Property owners must not obstruct any easement. If the property owners wish to build on an easement, they would need to negotiate with Council to obtain formal approval. An easement is not designed to allow unauthorised persons to traverse the property, or to declare a portion of the property as Council land. It will be defined as the right to use the land for a specific purpose, such as for emergency or maintenance works on the flow slide barrier.

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Some sections of the flow slide barrier can currently be accessed from public roads through private properties. However, the flow slide barrier along the frontages of some properties will have to be accessed by heavy vehicles traversing through neighbouring properties. In the past, private property owners had informal agreements in place whereby access was approved, and any damages caused were rectified to the cost of the landowner undertaking the works to their section of the flow slide barrier. This has relied on the goodwill of the neighbouring residents. Nevertheless, formal agreement is required to ensure that all future property owners provide access for maintenance and emergency works, and these make-good requirements are formalised.

A 3.5-metre-wide easement is proposed to allow for access of trucks and excavators. This width does not provide a turning area and trucks will need to be backed up when delivering rocks to the flow slide barrier. This will need to be incorporated on appropriate cadastral plans. The easement should be located directly behind the flow slide barrier for ease of construction and to limit the size of easements required, however, this area is prone to erosion. Should part of the easement erode in the future alternative access would need to be determined. **Error! Reference source not found.** and **Error! Reference source not found.** provide an indicative overview of where easements might be required. A detailed assessment and negotiations will need to be undertaken with the affected group of residents in between the road ends.

The need for easements is understood by all owners that participated in the consultation process and they are generally in agreement with establishing easements to enable access.

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FIGURE 7-1 INDICATIVE ACCESS ROUTES AND EASEMENTS – NORTH



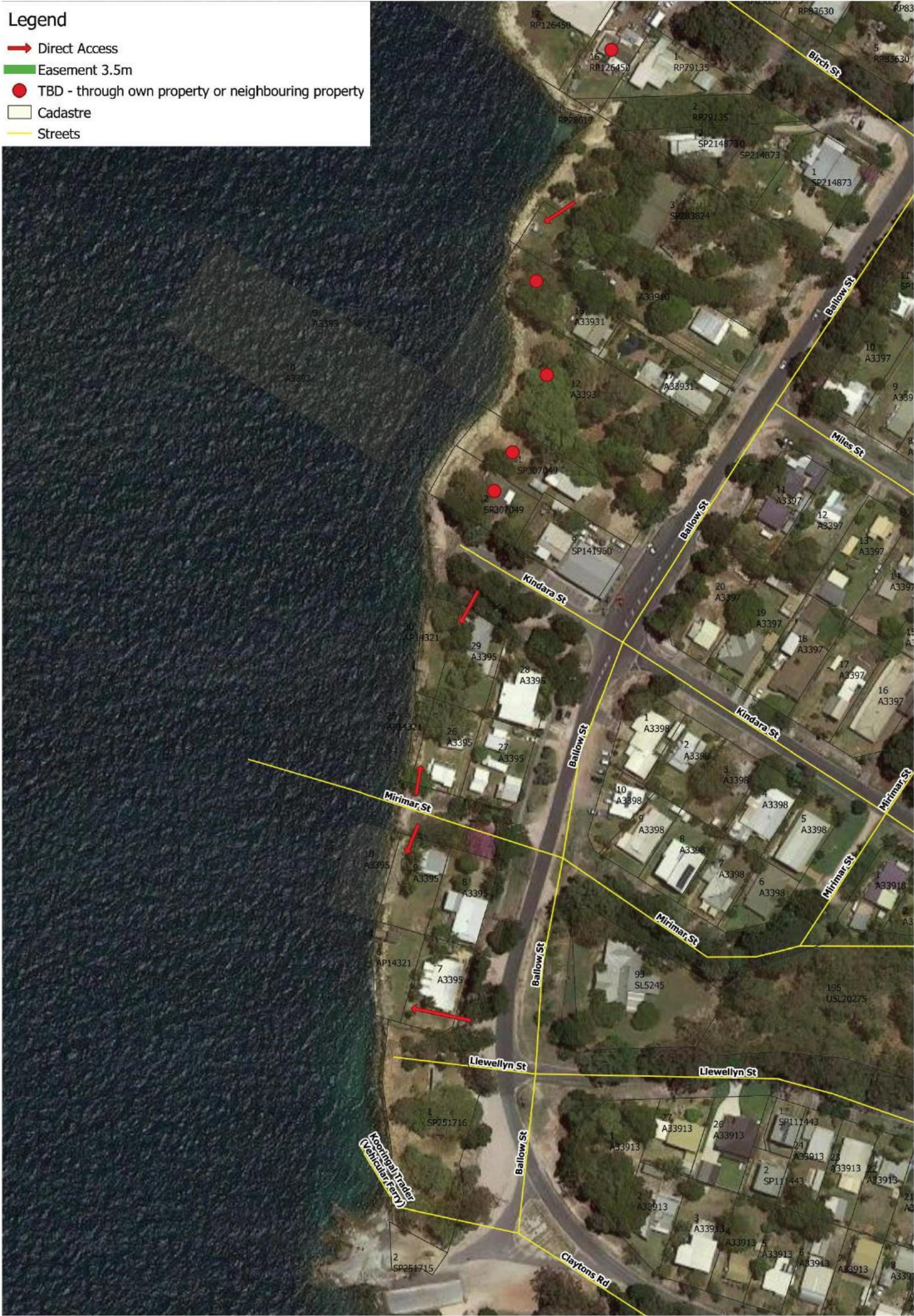


FIGURE 7-2 INDICATIVE ACCESS ROUTES AND EASEMENTS - SOUTH

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### 7.3.5 Rock Sourcing

Maintenance and emergency work on the flow slide barrier will require a rock source. Previously, rocks have been sourced from two local island-based quarries. To date, rock used for construction of the flow slide barrier has been appropriate and of good quality.

#### 7.3.5.1 Council quarry

Previously, the Council quarry has provided rock for repairs and enhancement of the flow slide barrier. To operate the quarry, a third party is engaged to load the rock and transport it to the Amity Point foreshore. Council has a sales permit valid until 2020. This permit (in principal) allows Council to sell rock from this quarry. As the sales permit is only valid till next year, Council will need to seek an extension of this permit. During this process it should be clarified and determined in writing within the sales permit document that the renewed sales permit allows Council to sell the rock to third parties. For the implementation plan to work Island based rock supply is required. Therefore, Council will need to be pro-active in managing the quarry, ensuring sufficient and qualitative rock supply and establishing a stockpile in the quarry. Blasting needs will need to be identified well in advance to ensure the rock supply. Council will also need to ensure that all the right permits are in place on an ongoing basis.

Regardless of the sales permit arrangements, Council is permitted to use rock for its own purposes (such as for maintenance of the flow slide barrier on Council land). This means should Council have maintenance obligations of the entire flow slide barrier (see chapter 7.3.3), the rock can be supplied in accordance with the sales permit. However, a financial mechanism may need be put in place to recoup any costs (e.g. levy).

Council has established an internal procedure to enable the provision of rock to foreshore property owners during and following a flow slide emergency. A strong recommendation of the SEMP is for rock reserves in the flow slide barrier to be proactively managed. This means supplying rock to at-risk sections of the structure identified by the monitoring (bathymetric survey). Council's procedure should be expanded to also allow for rock supply to those at-risk sections.

The emergency rock supply procedure enables residents to use rock from the Council quarry for protecting foreshore properties at Amity Point if a rock slump or movement is detected. The procedure is currently drafted as follows:

1. After a slump or movement is detected, the Owner must contact Redland City Council. A Council officer will arrange a time to inspect the property to determine the extent of the emergency before the rock will be made available to the Owner.
2. If rock is made available for emergency work, the work must be done in accordance with Safety Management Plan that forms part of the Amity Point Shoreline Erosion Management Plan (**SEMP**) (appendix G). A copy of the SEMP is available for download at <https://yoursay.redland.qld.gov.au/18927/documents/108068>. Additionally, owners are advised they are responsible for the relevant State Agency notifications, including where it is proposed to enter the Moreton Bay Marine Park.
3. Rock will only be supplied to Owners whose land immediately adjoins the foreshore at Amity Point.
4. Owners are responsible for organising all works, including all costs incurred for the purchasing, sorting, loading, transportation and placement of rock.
5. It is the Owner's responsibility to ascertain quantities of rock required.
6. The Owner is responsible for ensuring that all necessary insurances, approvals and or permits are obtained prior to commencement of work. Owners should be aware that work may require other approvals, including from Council.

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7. Works using Council-supplied rock must be carried out by an approved contractor nominated by Council.
8. Any persons accessing Redlands City Council Fisherman quarry must have Sibelco cross lease induction and site induction for Fisherman Quarry prior to works starting.
9. Applications to access this rock must be made by using form CSOM 002 NSI and signing the Indemnity form these can be obtain at (TBA) the cost of rock for 2019-20 has been set at \$15.00 per cubic metre gst inclusive.
10. The supply of rock is subject to change and availability.

#### 7.3.5.2 Private Island quarry

It is understood that most of the rock provided to the flow slide barrier originated from this Private quarry. While there is appropriate rock of sufficient quality available in this quarry, Council will need to liaise with State agencies to assess if this rock is available as a rock source into the future.

#### 7.3.5.3 Mainland-based

As discussed in the preceding Section 5.3, a local rock source should be the first preference when undertaking works on the flow slide barrier - since it provides the most timely and cost effective source. However, a mainland-based quarry source has also been investigated.

There are no adverse legal implications to this option. However, it is not favoured because of its high cost, adverse environmental impacts (long transport routes cause high carbon dioxide emissions) and adverse social impacts (hauling of heavily laden construction vehicles on major roads through and residential streets). Sourcing rock from the mainland will also mean that a local stockpile location will need to be made available. This is unfavourable in light of the rock available on the island.

#### 7.3.6 Stockpile Location

Should rock be sourced from the Island, there is no need to have a local stockpile located at Amity Point. The relevant quarry will suffice as a stockpile location. A stockpile location is however required should mainland-based rock be used. Legal and environmental implications make it difficult to find a suitable location at Amity Point. Most of the State-owned land parcels around Amity Point are on the list of non-exclusive native title areas. There are also time implications as the establishment of a new local stockpile location requires long timeframes for planning and establishment. Therefore, even if mainland rock is sourced, one of the island-based quarries should be the preferred emergency stockpile location.

As highlighted under the rock sourcing chapter, exploring all island-based options should be the first priority. Further investigation into local stockpile locations should only be pursued if it has been determined that both island-based rock quarries are unable to supply rock to the flow slide barrier and cannot stockpile rock from the mainland. In that case, alternative materials such as concrete blocks can also be explored.

#### 7.3.7 Transport and Placement

The two local companies on Stradbroke Island that can currently transport and place armour rock are Meitthke Earthmoving and Mazzoni Plant Hire. Each of those contractors understand the importance for repair works to the flow slide barrier to be undertaken as quickly as possible following the commencement of a flow slide and in the past have generally been available at short notice to respond to such events. QYAC has also expressed an interest to be involved in the rock supply. However, until more details are known as to QYAC's plans and commercial arrangements, it is assumed that only those two companies will be available in the short-term.

Mazzoni Plant Hire is currently an approved and inducted contractor to transport and place rock from the Council quarry. However, it is recommended that Council establish standing agreements with both contractors

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to improve the likelihood of having a contractor available at all times as well as enabling a healthy competition to ensure affordable prices to the residents. At times of a big flow slide event it might even be required to have both contractors operating at the same time.

In the past, most rock was sourced from the Private quarry which was operated by Meithke Earthmoving. That contractor also provided transport and placement of rock. Common procedure in the past whenever a flow slide caused damage to the flow slide barrier was for affected landowners to call Meithke Earthmoving to arrange the purchase, transport and placement of rock. Since recent native title determinations, and Meithke Earthmoving no longer operating the Private quarry, there are now more parties involved in the recommended transport and placement procedure. While Council is overseeing the Council quarry, a contractor is doing the transport and placement of the rock. This highlights the need for an emergency response plan to ensure that all stakeholders and rock supply contractors understand their obligations and required actions, to have contact arrangements and backup plans on hand in case of a flow slide emergency. The emergency response plan is included in Chapter 9.

### 7.3.8 Monitoring

The Amity Point SEMP recommendations include an annual bathymetric survey of Rainbow Channel and an annual structural audit of the flow slide barrier.

There are theoretically two options for undertaking the survey and audit, either as a whole by Council or on an individual basis. However, the practicalities of undertaking the monitoring works as a whole far outweigh the individual monitoring due to economies of scale and consistency in quality and timing of the works. It is therefore recommended to undertake all monitoring works for the whole structure.

All other implementation strategies discussed above support the individual ownership and maintenance and there is no support for a levy from the local residents. Therefore, it was investigated if Council could bear the cost for monitoring of the whole flow slide barrier. The annual cost of monitoring are estimated to \$25,000. This is not considered too onerous for Council to fund the monitoring in the central reach. This would also provide the same level of service that is provided to the northern reach where an ongoing 3-year monitoring program is to be funded by Council.

### 7.3.9 Cost sharing

Cost sharing arrangements will vary depending on the preferred implementation strategy and are outlined in more detail in chapter 8.2.

## 7.4 Northern Reach

The SEMP recommendation for the Northern Reach is for continuous monitoring of the shoreline and undertaking a detailed coastal process assessment to better understand the erosion processes.

The technical review undertaken for this Implementation Plan confirmed that this strategy is appropriate for the location. The legal review highlighted that there are no legal obstacles that prevent the recommendations from being implemented. Based on this assessment, the works proposed at the Northern Reach can be implemented by Council.

In the meantime, should they wish to do so residents can construct coastal protection works within their property boundary provided the relevant approvals are obtained. They can also perform minor works such as restricted beach re-profiling or beach nourishment with relevant approvals in place.

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## 8 IMPLEMENTATION PLAN

This chapter provides an outline of the recommended implementation plan. While the previous chapter presents and outlines all options, this chapter describes the recommended way forward.

### 8.1 Southern Reach

The recommendations for the Southern Reach are:

- Structural audit of the existing groynes and seawalls.
- Construction of additional seawalls.
- Beach nourishment within the beach pockets.

The financial analysis showed that there is a positive benefit to cost ratio to implement the works. This means that there is a benefit in following the recommendations from the SEMP despite the initial costs for the works. There are no technical or legal hindrances in implementing the works. It is therefore recommended to implement the Amity Point SEMP recommendations.

In general construction and maintenance of erosion control works is the responsibility of those parties that will benefit from the works. Landowners have a responsibility to manage that erosion impacting land they own and manage, while Council has an interest in managing erosion impacts on their assets and on public facilities.

### 8.2 Central Reach

The recommendation was given to support and enhance the effectiveness of the current erosion management practice. This means, repairing damage to the existing flow slide barrier and reinstating the foreshore whenever necessary (following a flow slide event) by placing additional rock armouring.

The recommendation has been split up in several steps, which are listed below:

- a. Adopting the flow slide barrier as the necessary coastal protection work.
- b. Recognition of the flow slide barrier and seeking formal approval as substantially completed tidal works.
- c. Monitoring the flow slide barrier regularly to identify weak spots and to inform structural reinforcement and repair needs.
- d. Formalise a maintenance regime to preserve the integrity and function of the flow slide barrier.

The Amity Point SEMP was endorsed by Redland City Council in 2019. This means that the flow slide barrier has been adopted as the necessary coastal protection work. In addition, the technical review contained in this report confirms this approach and the financial analysis found that there is a significant financial benefit to implement the recommendations (maintain the flow slide barrier) from the SEMP, compared to the "Do Nothing" option.

Steps b. to d. are discussed in more detail within this implementation plan.

Based on the technical and legal review of the SEMP recommendations, the emergency rock supply source and the financial analysis discussed in the previous chapters 4-6 a number of management options have been assessed and discussed in detail in Chapter 7. As such, the below outlined implementation plan is based on the technical viability and effectiveness, the fair and equitable allocation of costs and benefits and also the preferences of landowners, Council and State Government Departments. Extensive stakeholder consultation has been undertaken and informed the SEMP Implementation Plan throughout all the different stages.

In order to implement the SEMP recommendation in the central reach the following options and actions are recommended:

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### Ownership and responsibilities

The flow slide barrier is crossing various land tenures, Council, State and freehold. Generally speaking, two options have been considered in terms of ownership and responsibilities, Council to own and maintain the structure or the individual. Should Council be the owner of the flow slide barrier and be responsible for maintenance a cost recovery scheme (e.g. a levy or body corporate) would need to be established. Stakeholder consultation identified a clear preference from both, Council and freehold landowners, for individual ownership and responsibilities. This is also in line with how the flow slide barrier was managed in the past. Therefore, it is recommended to maintain the individual ownership of the flow slide barrier.

### Development Application

Formal approval of the flow slide barrier is required to ensure continuous maintenance. A number of different pathways have been investigated. The recommended approach is for Council to obtain a variation approval for the whole flow slide barrier to seek in-principle approval of the structure, followed by the individual property owner to obtain a formal development approval for their section of the structure. This is the recommended approach to maintain a relatively simple process for the individual, to streamline the approval process and to maintain the individual ownership and responsibilities identified above.

In order to proceed with this recommended pathway owners consent by DNRME will be required first. A Marine Park permit will also be required.

#### Actions:

1. Request Owners Consent from DNRME.
2. Council to prepare an application to seek a preliminary/variation approval for in-principal support for the whole flow slide barrier and advice on Marine Park permits.
3. Council to seek pre-lodgement advice from SARA.
4. Council to provide detail of the variation approval and pre-lodgement advice to assist landowners as they prepare site specific development applications and Marine Park Permits.
5. Individual landowners to prepare and submit a development application for the section of the flow slide barrier protecting their property following approval of a variation/preliminary approval (or as otherwise required by legislation).

### Maintenance

To ensure ongoing maintenance of the flow slide barrier from current and future land holders a mechanism has to be put in place that legally binds the individual owner to perform maintenance. It is expected that the flow slide barrier is moving and adjusting to any flow slide events happening in the area. Any weaknesses in the flow slide barrier will expose that location to increased movement and erosion of the abutting land. Ongoing maintenance is therefore of very high priority.

A covenant has been identified as the most suitable mechanism to implement maintenance obligations on current and future landowners. This has also been confirmed during stakeholder engagement activities (November workshop), however, it should be noted that not all affected residents participated in the consultation process. A covenant is a voluntary agreement and signature from both parties, the covenantor (owner of freehold land) and the covenantee (State or local government) is required. Should a covenant not be able to be implemented with all relevant parties a local law would need to be established. In addition to the covenant or local law maintenance obligations can be put on the individual landowner by means of DA conditions.

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- Actions:
1. Council to consult with all affected properties to establish covenants for ongoing maintenance of the flow slide barrier. It is the responsibility of the landowner to action the covenant.
  2. Individual landowners to continue maintaining the section of the flow slide barrier protecting their land as provided for in their development approvals or the emergency management procedure.

#### Access

Access to the flow slide barrier for maintenance activities can be limited and access via neighbouring properties is required in some cases. Access should be established via easements. Indicative maps have been prepared to identify where easements might be required. This is based on past practices and existing arrangements between neighbours. Some affected properties require detailed clarification to ensure that either sufficient access is available via the property itself or via an easement across a neighbouring property.

- Actions:
1. Council to consult with all affected properties to determine the exact location of easements. It is the responsibility of the landowner to implement the easements.
  2. Landowners to assist with the formalization of access to the flow slide barrier for maintenance activities by the granting of easements as necessary.

#### Rock sourcing

The rock supply study found that there are no technical issues with the sourcing of suitable rock from the island. However the appropriate permits will need to be renewed to ensure the ongoing availability of rock from island-based quarries. It is important for the implementation of the SEMP that there is continuous and affordable supply of rock. The best option for this at the present time is Councils quarry.

Council has established an emergency rock supply procedure to enable the provision of rock from the Council quarry for emergency repairs to the flow slide barrier.

No local stockpile location at Amity Point is recommended, instead, sufficient rock will need to be stockpiled in Councils quarry to be readily available for emergency works as well as pro-active maintenance works.

- Actions:
1. Council to take all reasonable steps to ensure to the best of its ability that the relevant sales permits and access arrangements are in place to facilitate the continued supply of rock from Councils quarry.

#### Emergency Works Procedure

An interim emergency works procedure is required to ensure timely and smooth action in a flow slide event before all recommended strategies are implemented. An emergency works procedure has been drafted in chapter 9.

- Actions:
1. Council to establish and communicate emergency works procedure with all affected freehold landowners.
  2. Council to take reasonable steps to provide access to rock from Councils Quarry for landowners to undertake emergency repairs. (Noting that there might be circumstances where Council cannot guarantee rock supply due to statutory and technical complexities to the operation of the quarry.)
  3. Landowners to follow emergency works procedure including any necessary notifications and approvals.

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### Transport and Placement

Two companies are capable, available and have experience in transporting and placing rock on the flow slide barrier. Currently only one company is inducted in the quarry which is required to be able to take rock from the Council quarry. It is recommended that both companies are inducted so that both can access rock from the quarry and perform the transport and placement of it. Should additional resources become available in the future they should also be inducted.

- Actions:
1. Council to make available inductions and standing agreements with all available transport and placement contractors on the island.

### Monitoring

An annual bathymetric survey of Rainbow Channel and an annual structural audit of the flow slide barrier is recommended in the Amity Point SEMP. Due to the nature of this work and benefit of scales it is recommended that the monitoring to be undertaken for the whole flow slide barrier at once and to be organised and funded by Council. This report contains a similar recommendation for the northern reach (Chapter 8.3) and therefore provides consistent services to both reaches. The outcomes of the structural audit will need to be shared with all affected property owners and should contain clear instructions should pro-active maintenance be required.

- Actions:
1. Council to undertake annual bathymetric survey and structural audit.
  2. Share findings with all affected freehold landowners.

### Cost sharing arrangements

The majority of the stakeholders prefer to maintain the management of the flow slide barrier as similar as possible to past arrangements. This means, no centralised management but individual ownership and responsibilities. Landowners want to maintain control over their part of the structure as well as control and manage their own expenses. In line with this any works will need to be funded by the individual landowner, including but not limited to the costs involved to prepare and gain approvals, covenants and easements, as well as performing and paying for maintenance, including the rock supply and transport and placement.

Council is expected to bear the costs for their land parcels (e.g. road ends and parks), establish arrangements to enable them to sell rock to third parties as well as organising and funding the monitoring for the whole flow slide barrier.

## 8.3 Northern Reach

The SEMP recommended strategy for the Northern Reach is:

- 3-year Monitoring Survey Program
- Coastal process assessment to determine necessity for erosion mitigation strategy
- Following conclusions of the assessment continuation of the Monitoring Survey Program

It is recommended that Council start implementing those works as there are no technical or legal issues identified in pursuing this strategy.

Council has been in ongoing dialogue with University of Queensland to conduct additional research at Amity Point and they will continue to do so.

In the interim, property owners are able to investigate possibilities for erosion mitigation options. For example, beach nourishment and beach re-profiling can be undertaken with the relevant approvals in place. Residents can also consider building their own coastal protection works within their lot provided that they are granted the

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necessary approvals for such works. A communal approach regarding the design and construction of such a structure would be highly recommended to reduce costs and increase effectiveness.

**Actions:**

1. Start the 3-year Monitoring Survey Plan this financial year.
2. Undertake coastal process assessment after conclusion of the 3-year monitoring program
3. Continue dialog with UQ
4. Council to support residents in the approval process should they choose to pursue their own protection works.

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## 9 RECOMMENDATIONS FOR IMPLEMENTATION OF EMERGENCY WORKS PROCEDURE

The below outlined Emergency Works Procedure is an interim plan to provide rock to residents in an emergency. It is required to ensure timely and smooth action in a flow slide event and to provide clarity to all affected residents.

The procedure describes the steps the affected residents must follow once a flow slide event has been detected. It is the aim to ensure all residents (temporary and permanent) understand what they must do and who to contact. It must be highlighted that properties are not always occupied by the owner, but by permanent (long term lease) or temporary (holiday rentals) tenants. Therefore, it is recommended to prepare fridge magnets (Figure 9-1), handouts and to place this procedure on Council's webpage to ensure that everyone is aware of the flow slide events and what to do when one is encountered. It should also be considered to place signs along the flow slide barrier in the vicinity of holiday rentals. It is important that the registered operator, inducted contractor and affected property occupant and owner act in a timely manner.

Contact details, phone numbers and email addresses should be obtained from all affected properties so that arrangements can be made in a timely and efficient manner, especially when access via other properties is required.



FIGURE 9-1 EXAMPLE FRIDGE MAGNET

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TABLE 9-1 PROVISIONAL EMERGENCY WORKS PROCEDURE

Step	Action	Responsibility	Comments
1	A flow slide event is observed and movement is detected in the flow slide barrier.	Resident	-
2	Landowner (or authorised representative) is to assess and determine if a threat to the flow slide barrier requires emergency works under the Safety Management Plan for the Amity Point Flow Slide Barrier (Appendix G of the Amity Point SEMP).	Landowner (or authorised representative)	This will enable Council to release rock in a timely manner. Council should review this arrangement if it becomes clear that works are being done in situations that are not emergencies.  Landowners to consider, and seek advice on whether they authorize another party to act on their behalf when they are not present or contactable and emergency works are required to the flow slide barrier on or adjoining their property.
3	Landowner (or authorised representative) contacts Council on Ph 3829 8999 to request that rock is made available for emergency works to the flow slide barrier. Landowner (or authorised representative) to: <ul style="list-style-type: none"> <li>- Confirm that threat is consistent with a situation identified as requiring emergency works that the Amity Point Safety Management Plan.</li> <li>- Confirm that works will be carried out according to the concept design for a flow slide barrier contained in the Amity Point Safety Management Plan.</li> <li>- Confirms that they understand the legislative requirements for notification and approvals for emergency work under S166 of the Planning Act.</li> </ul>	Landowner (or authorised representative)	-
4	Council to establish an internal procedure to direct calls in regards to a rock wall emergency at Amity Point to one specific team that is trained to deal with those instances and with on-call officers to be able to respond 24/7: <ul style="list-style-type: none"> <li>- Council to notify Council quarry (and inducted contractor(s)) of emergency works requirements</li> </ul>	Council	Lines of communications will need to be established. Owner, quarry operator and contractor will need to be contactable 24/7.

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Step	Action	Responsibility	Comments
5	Landowner (or authorised representative) to organise works (quantity, sorting, loading, transport and placement of rock) by a contractor authorised to access Council's quarry.	Landowner (or authorised representative)	Quality Assurance to be implemented, documentation of event required (date, time, rock quantities etc.).
6	Landowner (or authorised representative) and contractor to undertake works in accordance with the specifications of the Amity Point Safety Management Plan.	Landowner (or authorised representative)	-
After the flow slide event:			
7	Make good of all impacted sites (turfing, fencing etc.), including areas that were used for access.	Landowner (or authorised representative)	-
8	Payment for the works to all relevant parties (e.g. contractor for transport and placement, Council for the rock - rates as per fees and charges schedule).	Landowner (or authorised representative)	-
9	Notify Council and any relevant State agencies and seek approval for the works as required under the Planning Act.	Landowner (or authorised representative)	Letter or email to Council to state the details of the event (extent, rock quantities etc.).

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## 10 REFERENCES

**BMT WBM (2013)** *Amity Point Shoreline Erosion Management Plan*. Draft Report. May 2013. Prepared for Redland City Council.

**DEHP (2017)** *Code for accepted development for tidal works or works completely or partly in a coastal management district*. August 2017.

**Department of Planning, Infrastructure, and Natural Resources (2005)**. *Floodplain Development Manual*.

**Geoscience Australia (2012)**. *Storm Surge Vulnerability Functions for Australian Buildings, Summary of Current Geoscience Australia Model Suite*, compiled by M. Wehner.

**Gopalakrishnan, S., Smith, M. D., Slott, J. M., & Murray, A. B. (2011)**. *The value of disappearing beaches: a hedonic pricing model with endogenous beach width*. *Journal of Environmental Economics and Management*, 61(3), 297-310.

**Groundwork Plus (2012)** *Slope Stability Review and Quarry Development Plan*. Final Report. January 2012. Prepared for Redland City Council.

**Orica (2005)** *Blast result Council Quarry Fisherman's Road, Stradbroke Island*. Blast Report. April 2005. Prepared for Redland City Council.

**Pendleton, L., Atiyah, P., & Moorthy, A. (2007)**. *Is the non-market literature adequate to support coastal and marine management*. *Ocean & Coastal Management*, 50(5-6), 363-378.

**Pompe, J. J., & Rinehart, J. R. (1995)**. *Beach quality and the enhancement of recreational property values*. *Journal of Leisure Research*, 27(2), 143-154.

**Queensland Globe (2019)**. *Queensland Online Spatial Database* provided by the Queensland Department of Natural Resources, Mines and Energy, <https://qldglobe.information.qld.gov.au/> (last access October 2019).

**Redland City Council (2019)** *Previous flow slide event: Volume rocks*. Email correspondence. 7<sup>th</sup> June 2019.

**SCCG (Sydney Coastal Councils Group) (2013)**. *Sydney Beaches Valuation Project*. Final Report available at: [https://www.sydneycostalCouncils.com.au/sites/default/files/Anning\\_SBVP\\_Overview.pdf](https://www.sydneycostalCouncils.com.au/sites/default/files/Anning_SBVP_Overview.pdf)

**Water Technology (2019)** *Amity Point Shoreline Erosion Management Plan*. Final Report. March 2019. Prepared for Redland City Council.

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## APPENDIX A COMMUNITY ENGAGEMENT PLAN





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## APPENDIX B TECHNICAL REVIEW





## Introduction

I have been asked to provide a “comprehensive review of the recommended management options” provided by the Amity Point Shoreline Erosion Management Plan” (the SEMP), (Water Technology, 2019). The purpose of the review is “to understand the context of the recommendations made in the SEMP”, and assess “whether the recommended management options apply an unreasonable obligation, level of responsibility, liability or risk to Council, QYAC, State Government or property owners.”

A key consideration for the purposes of this review is that the SEMP is a relatively short to medium-term management plan with only a 20-year planning horizon. This provides an opportunity for monitoring and review of the effectiveness of the plan before committing to longer-term management strategies.

## Background

There is significant tidal exchange through the channels between North Stradbroke Island and Moreton Island. A significant proportion of this exchange occurs through Rainbow Channel which flows along the western side of North Stradbroke Island. Analysis of historical hydrographic surveys, going back to 1892, has shown that Rainbow Channel has been slowly migrating eastwards toward the northern end of North Stradbroke Island. This has been the principle cause of the erosion issues that have persisted at Amity Point over many decades.

The SEMP has been developed to address the erosion issues at Amity Point. It has been developed for what have been called three “coastal precincts”, extending from the southern end of the Amity Point Camping Ground to the northern tip of North Stradbroke Island, as shown in Figure 1. From south to north, these precincts have been defined as follows:

Southern Reach: the foreshore frontage of the camping ground and boat ramp:

Central Reach: along the rock-armoured foreshore north of the boat ramp: and

Northern Reach: the sandy foreshore of Amity Beach

The SEMP notes that the coastal processes in each of these precincts are not “compartmentalised”, but that the separation into the three coastal reaches “*lends itself to the development of viable erosion management strategies that integrate over the entire Amity Point coastal reach*”.

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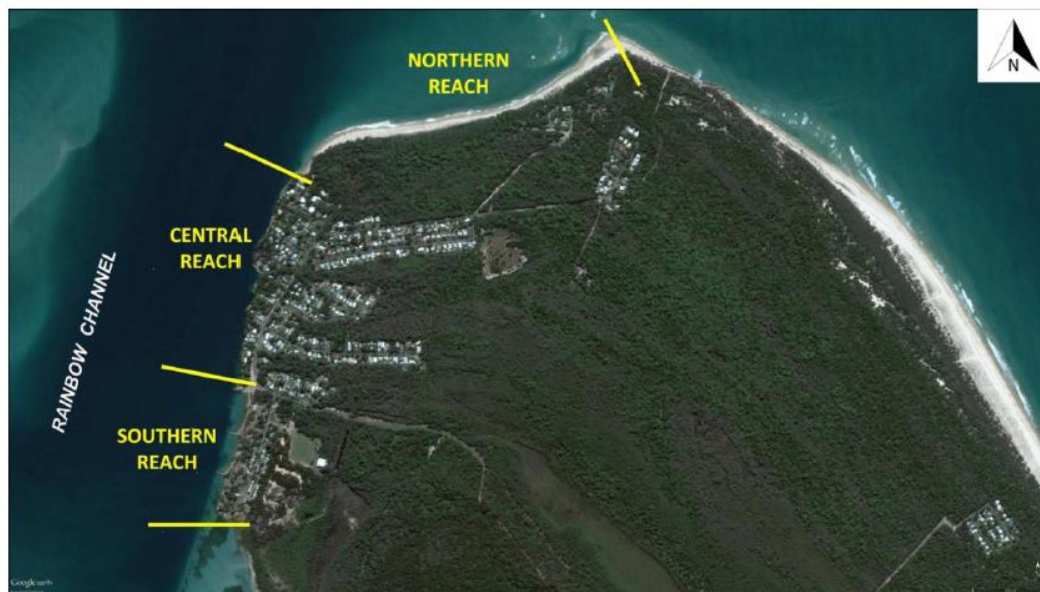


FIGURE B-1 COASTAL REACHES FOR THE AMITY POINT STUDY AREA (WATER TECHNOLOGY, 2019)

### Previous Work

A Shoreline Erosion Study of the area had previously been carried out by BMT WBM (2013). This study investigated the local coastal processes and considered a range of social, environmental, cultural and economic values; and identified a range of erosion management options. The preferred erosion mitigation strategies for each of the precincts considered above were:

- Southern Reach: beach nourishment was the recommended management strategy for this precinct. This would “provide added protection to the assets and minimise the need for other structural protection measures in the future” and would “retain natural processes and provide an improvement to the beach amenity”.
- Central Reach: planned retreat was the recommended strategy for this precinct as it was considered to have the “highest likelihood of success, lower cost and will leave the foreshore in a natural state”.
- Northern Reach: The “do nothing” option supported by monitoring of the “location of the shoreline” was the recommended strategy for this precinct.

The SEMP notes that the planned retreat for the Central Reach (i.e., along the frontage of Amity Township) met with considerable opposition from the local community.

### The SEMP

The purpose of the present SEMP is to set out “an agreed framework and management strategy for responding to existing erosion problems and possible future erosion threats” at Amity Point. It has been developed through consideration of “the physical coastal processes” occurring in the area “in conjunction with the environmental, cultural, social and economic values of the shoreline”.

I have reviewed the SEMP in detail and agree with the overall methodology used in its development.

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## Coastal Processes

The mechanisms driving the coastal processes in the area are well described in the "Physical Processes" section of report. In summary, the main factors are:

- Wave action, particularly along the more exposed eastern and northern coastline of North Stradbroke Island;
- Tidal exchange currents between North Stradbroke Island and Moreton Island; and
- The eastwards migration of Rainbow Channel.

There is a westward supply of sand to the Northern Reach from around Amity Point in the east. Historically, this westward supply of sand would have continued southwards along the Central and Southern Reaches.

The eastward migration of Rainbow Channel has, however, resulted in the eastern edge of the channel impinging directly on the coastline of the Central Reach. This has resulted in the once sandy foreshore of this reach becoming eroded. This in turn has resulted in a reduced supply of sand to the Southern Reach, causing subsequent erosion in this area as well.

Erosion of the shoreline along the Central Reach has been accompanied by what has been termed "retrogressive flow slides". These are sudden events where large sections of the coast have subsided into the channel.

## Management of Retrogressive Flow Slides

In my opinion, the ability (or potential inability) to manage erosion caused by retrogressive flow slides is the key to the SEMP.

The current management practice is to dump rock to protect exposed coastline at the site of each flow slide, as and when they occur. Over time this has resulted in a continuous rock wall protecting the entire length of the coastline of the Central Reach. The SEMP contends that this rock wall acts as a flow slide barrier that either prevents the initiation of further flow slides occurring or inhibits the level of their destructiveness.

## Flow Slide Barrier Concept Design

The SEMP then draws on "international research" to develop a "Concept Design" for a flow slide barrier. The concept design includes descriptions of the key requirements of a flow slide barrier in relation to rock size; barrier thickness; barrier slope or gradient; provision of toe protection; and provision of reserve "top-up" rocks to mitigate any damage that may be initiated by a flow slide. This section of the report could be enhanced by providing references to the actual research used in developing the Concept Design.

## The Existing Rock Wall

The SEMP includes a detailed description of a structural audit of the existing rock wall along the Central Reach. From the results of the audit, it is noted that the existing structure is consistent with the Concept Design of a flow slide barrier and, as such, it is appropriate to consider the existing wall as being a flow slide barrier. Other findings include:

- There are many locations in deep water in front of the existing barrier where flow slides could be initiated;
- The foreshore opposite Old School House Park is the only location along the Central Reach where a flow slide might undermine and damage existing barrier; and
- The potential for damage to the barrier at Old School House Park could be mitigated by proactively placing additional rock to act as a top-up reserve consistent with the Concept Design.

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## Coastal Risks

The SEMP analyses the erosion risks along each of the coastal reaches. These have been summarised briefly below.

### B-1-1 Southern Reach

With the reduced supply of sand from the north, rock groynes have historically been built along this section of coast in an attempt to control erosion. Of the approximately ten groyne that existed in the 1970s, there are currently three remaining groynes. With the prevailing southwards littoral drift, there is build-up of sand immediately to the north of each groyne, and erosion to the south. A steady loss of sand from the beaches in this reach has resulted in at least one beach nourishment operation being carried out in recent years.

Shoreline modelling has shown that an extreme storm event could result in shoreline recession in the order of 20m along the sandy beach sections of coastline. Modelling has also shown, that in areas where the coastline is protected by seawalls, the seawalls could be at risk of undermining.

Analysis of aerial photography has shown that the nearshore region of this section of coastline can be at risk of retrogressive flow slides. With the low supply of sand from the north, depressions resulting from flow slides may remain evident for many years. The threat of flow slides is expected to increase in the future as Rainbow Channel continues to migrate eastwards.

### Central Reach

The main threat to the Central Reach coastline is from retrogressive flow slides caused by the eastward migration of Rainbow Channel. The rock wall that has been progressively constructed in response to historical flow slides has now become an effective barrier to further flow slides in the area. The foreshore opposite the Old School House Park is the only area where the barrier is currently at risk of undermining by a flow slide.

### Northern Reach

There is a westward supply of sand to this section of coastline from around the northern tip of North Stradbroke Island (i.e., the eastern end of the reach). The coastal processes in the area are, however, complicated by the periodic development and removal of a sand spit and associated offshore bars at the eastern end of the reach. As such, there is a need for a greater understanding of these local coastal processes.

The western end of this reach is also susceptible to the effects of retrogressive flow slides. This susceptibility could be expected to increase with further eastward migration of Rainbow Channel in the future. It is noted, however, that any depressions in the foreshore and nearshore bathymetry are infilled relatively quickly by the westward supply of sand along this section of coastline.

## Recommended Erosion Management Strategies

The SEMP reviews the Guiding Principles for shoreline erosion management and describes the main non-structural and structural options available for managing erosion at Amity Point. An assessment is then carried out to determine the most appropriate management option for each of the coastal reaches under consideration.

### Southern Reach

*"The recommended erosion mitigation strategy along the Southern Reach is to undertake beach nourishment within each of the three existing beach compartments; and to construct cut-off seawalls behind each beach where an appropriate structure does not already exist"*

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This strategy includes beach monitoring (through annual beach surveys) and maintenance of the nourished beaches on an as needs basis. It also includes annual bathymetric surveys to monitor the rate at which Rainbow Channel is migrating eastward and thereby potentially increasing the risk of flow slides adversely affecting the foreshore.

A minor point missing from the strategy is that there is no contingency for the possible need to reinstate part or all of a groyne should it become affected by subsidence due to a flow slide.

The recommended strategy is consistent with the recommendations of the previous Shoreline Erosion Study carried out by BMT WBM (2013).

### Central Reach

*"The recommended erosion mitigation strategy for the Central Reach is to support and enhance the effectiveness of the current erosion management practice of repairing damage to the existing flow slide barrier whenever necessary following flow slide events - by placing additional rock armouring."*

This strategy includes an annual structural audit of the flow slide barrier using information from an annual bathymetric survey of Rainbow Channel.

The recommended strategy is, however, at odds with the "planned retreat" approach that was the recommended in the previous Shoreline Erosion Study carried out by BMT WBM (2013). The main source of the discrepancy is that the earlier work of BMT WBM (2013) considered that a structural solution would require *"the design and construction of a full rock revetment at an estimated cost of \$15M"* and that there would be *"the expectation that this will need to be extended in the future as Rainbow Channel continues to realign"*.

The great strength of the current SEMP is that it recognises the value of the existing rock wall for providing a barrier to further subsidence caused by flow slides. This provides a relatively low-cost option for maintaining the existing coastline, at least for the medium-term.

### Northern Reach

*"The recommended erosion mitigation strategy along the Northern Reach is to maintain the existing strategy of non-intervention, but to monitor future shoreline behaviour."*

This strategy includes detailed twice-yearly beach surveys for the first three years. This is to be followed by a Coastal Processes Assessment to determine future monitoring requirements and the need (or otherwise) for the development of an erosion mitigation strategy.

The recommended strategy is consistent with the *"do nothing at this time and monitor"* recommendation of the previous Shoreline Erosion Study carried out by BMT WBM (2013).

### Conclusions

My main conclusions are as follows:

- For a 20-year planning horizon, the recommendations provided in the SEMP are appropriate and manageable and should not place unreasonable obligations on any involved stakeholders.
- A potential issue for the implementation of the strategy for the Southern Reach is the need for a suitable source of sand for beach nourishment and for a suitable source of rock for seawall construction.
- A great strength of the current SEMP is that it recognises the value of the existing rock wall as a "flow slide barrier" for providing a low-cost option for reducing the risk of further subsidence caused by flow slides along the Central Reach.

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- The implementation of the recommended strategy for the Central Reach will, however, be dependent upon:
  - The development of an appropriate funding arrangement for future maintenance works;
  - The development of formal agreement between foreshore property owners to provide access that may become necessary for future repair work to the flow slide barrier; and
  - The availability of suitable rock for emergency repair works and the ability to carry out these works as soon as possible after a flow slide event.
- The inclusion of the Coastal Processes Assessment after the first three years of the implementation of the Northern Reach strategy will provide an opportunity to review the situation, based on the more detailed data provided by the monitoring program.

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## 16 NOTICES OF INTENTION TO REPEAL OR AMEND A RESOLUTION

In accordance with s.262 *Local Government Regulation 2012*.

## 17 NOTICES OF MOTION

### 17.1 NOTICE OF MOTION – CR BOGLARY - INVESTIGATION INTO THE PURCHASE OF CONSERVATION LAND

In accordance with s.6.16 Council Meeting Standing Orders, Cr Boglary intends to move a motion as follows:

#### **Motion**

That Council resolves that a confidential report be tabled at a future General Meeting of Council, investigating the purchase of conservation land.

The background around this matter is considered to be confidential under Section 254J(3)(g) of the *Local Government Regulation 2012*, and the Council is satisfied that discussion of this matter in an open meeting would, on balance, be contrary to the public interest as it deals with negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government.

## 18 URGENT BUSINESS WITHOUT NOTICE

In accordance with s.6.17 of Council Meeting Standing Orders, a Councillor may bring forward an item of urgent business if the meeting resolves that the matter is urgent.

<b>Urgent Business Checklist</b>	<b>YES</b>	<b>NO</b>
To achieve an outcome, does this matter have to be dealt with at a general meeting of Council?		
Does this matter require a decision that only Council make?		
Can the matter wait to be placed on the agenda for the next Council Meeting?		
Is it in the public interest to raise this matter at this meeting?		
Can the matter be dealt with administratively?		
If the matter relates to a request for information, has the request been made to the CEO or a General Manager Previously?		



## **19 CONFIDENTIAL ITEMS**

### **COUNCIL MOTION**

That Council considers the confidential report(s) listed below in a meeting closed to the public in accordance with Section 254J of the *Local Government Regulation 2012*:

#### **19.1 Precinct Planning**

This matter is considered to be confidential under Section 254J(3)(g) of the *Local Government Regulation 2012*, and the Council is satisfied that discussion of this matter in an open meeting would, on balance, be contrary to the public interest as it deals with negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government.

## **20 MEETING CLOSURE**