Redland
CITY COUNCIL

AGENDA

GENERAL MEETING

Wednesday, 21 February 2018
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 extend 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

5.1 GENERAL MEETING MINUTES 7 FEBRUARY 2018

Motion is required to confirm the Minutes of the General Meeting of Council held on 7 February 2018.

6 MATTERS OUTSTANDING FROM PREVIOUS COUNCIL MEETING MINUTES

6.1 REQUEST FOR REPORT – AREA SURROUNDING BIRKDALE SCHOOL OF ARTS

At the General Meeting of 6 September 2017 (Item 14.1.1 refers) Council resolved as follows:

That the Chief Executive Officer be requested to prepare a report on the future of the area surrounding the Birkdale School of Arts Hall in relation to the Birkdale Community Hub, as identified in the Redlands Social Infrastructure Strategy 2009: Building Strong Communities.

The Strengthening Communities Team is preparing this report, which is due to come back to a Council Meeting by the end of March 2018.

6.2 REQUEST FOR REPORT – FIRE MANAGEMENT PLANS

At the General Meeting of 6 September 2017 (Item 14.2.1 refers) Council resolved as follows:

That the Chief Executive Officer prepares a further report to Council, on the feasibility of publishing a fact sheet for property owners, to assist them in preparing Fire Management Plans for private properties.

This report is listed as Item 11.1.2 in this agenda.

6.3 REQUEST FOR REPORT – PETITION – TOONDAH HARBOUR

At the General Meeting of 22 November 2017 (Item 8.1.1 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.

The report is being drafted and expected to come to a General Meeting in March 2018.

6.4 REQUEST FOR REPORT – A CAR PARK FOR MOUNT COTTON COMMUNITY PARK

At the General Meeting of 24 January 2018 (Item 14.1.1 refers) Council resolved as follows:

1. *That Officers bring a report to the General Meeting of Council scheduled 21 February 2018, outlining the access and car parking requirements for the Mount Cotton Community Park to service the needs of users of the park; and*
2. *That the report includes a car park project scope of works, estimated cost and delivery schedule and identification of funding sources and/or agreements, including agreements that may be legally made with other parties for delivery of the works.*

This report is listed as Item 16.1.1 in this agenda.

6.5 NATURAL ENVIRONMENT POLICY POL-3128

At the General Meeting of 4 October 2017 (Item 14.3.1 refers) Council resolved to:

Resource and review the Natural Environment Policy POL-3128 and develop the strategy to set the direction of the Policy.

This report is listed as Item 11.2.4 in this agenda.

7 PUBLIC PARTICIPATION

In accordance with s.31 of POL-3127 Council Meeting Standing Orders:

In each meeting (other than special meetings), a period of 15 minutes may be made available by resolution to permit members of the public to address the local government on matters of public interest relating to the local government. This period may be extended by resolution.

Priority will be given to members of the public who make written application to the CEO no later than 4.30pm two days before the meeting. A request may also be made to the chairperson, when invited to do so, at the commencement of the public participation period of the meeting.

The time allocated to each speaker shall be a maximum of five minutes. The chairperson, at his/her discretion, has authority to withdraw the approval to address Council before the time period has elapsed.

The chairperson will consider each application on its merits and may consider any relevant matter in his/her decision to allow or disallow a person to address the local government, e.g.

a) Whether the matter is of public interest;

b) The number of people who wish to address the meeting about the same subject

c) The number of times that a person, or anyone else, has addressed the local government previously about the matter;

d) The person's behaviour at that or a previous meeting; and

e) If the person has made a written application to address the meeting.

Any person invited to address the meeting must:

a) State their name and suburb, or organisation they represent and the subject they wish to speak about;

b) Stand (unless unable to do so);

c) Act and speak with decorum;

d) Be respectful and courteous; and

e) Make no comments directed at any individual Council employee, Councillor or member of the public, ensuring that all comments relate to Council as a whole.

8 PETITIONS AND PRESENTATIONS

Councillors may present petitions or make presentations under this section.

9 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.

10 DECLARATION OF MATERIAL PERSONAL INTEREST OR CONFLICT OF INTEREST ON ANY ITEMS OF BUSINESS

Councillors are reminded of their responsibilities in relation to a Councillor's material personal interest and conflict of interest at a meeting (for full details see sections 172 and 173 of the *Local Government Act 2009*). In summary:

If a Councillor has a material personal interest in a matter before the meeting:

The Councillor must—

- *inform the meeting of the Councillor's material personal interest in the matter; and*
- *leave the meeting room (including any area set aside for the public), and stay out of the meeting room while the matter is being discussed and voted on.*

The following information must be recorded in the minutes of the meeting, and on the local government's website—

- *the name of the Councillor who has the material personal interest, or possible material personal interest, in a matter;*
- *the nature of the material personal interest, or possible material personal interest, as described by the Councillor.*

A Councillor has a **material personal interest** in the matter if any of the following persons stands to gain a benefit, or suffer a loss, (either directly or indirectly) depending on the outcome of the consideration of the matter at the meeting—

(a) the Councillor;

(b) a spouse of the Councillor;

(c) a parent, child or sibling of the Councillor;

(d) a partner of the Councillor;

(e) an employer (other than a government entity) of the Councillor;

(f) an entity (other than a government entity) of which the Councillor is a member;

(g) another person prescribed under a regulation.

If a Councillor has a conflict of interest (*a real conflict of interest*), or could reasonably be taken to have a conflict of interest (*a perceived conflict of interest*) in a matter before the meeting:

The Councillor must—

- *deal with the real conflict of interest or perceived conflict of interest in a transparent and accountable way.*
- *Inform the meeting of—*
  - *(a) the Councillor's personal interests in the matter; and*
  - *(b) if the Councillor participates in the meeting in relation to the matter, how the Councillor intends to deal with the real or perceived conflict of interest.*

The following must be recorded in the minutes of the meeting, and on the local government's website—

(a) the name of the Councillor who has the real or perceived conflict of interest;

(b) the nature of the personal interest, as described by the Councillor;

(c) how the Councillor dealt with the real or perceived conflict of interest;

(d) if the Councillor voted on the matter—how the Councillor voted on the matter;

(e) how the majority of persons who were entitled to vote at the meeting voted on the matter.

*A **conflict of interest** is a conflict between—*

(a) a Councillor's personal interests (including personal interests arising from the Councillor's relationships, for example); and

(b) the public interest;

that might lead to a decision that is contrary to the public interest.

11 REPORTS TO COUNCIL

11.1 ORGANISATIONAL SERVICES

11.1.1 JANUARY 2018 MONTHLY FINANCIAL REPORT

Objective Reference:	**A2848437** **Reports and Attachments**
Attachment:	**January 2018 Monthly Financial Report**
Authorising/Responsible Officer:	**Deborah Corbett-Hall** **Chief Financial Officer**
Report Authors:	**Udaya Panambala Arachchilage** **Corporate Financial Reporting Manager** **Quasir Nasir** **Corporate Accountant**

PURPOSE

The purpose of this report is to note the year to date financial results as at 31 January 2018.

BACKGROUND

Council adopts an annual budget and then reports on performance against the budget on a monthly basis. This is not only a legal 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

Canal and Lake Charges Refunds

The process for issuing refunds for the reserve balances quarantined for maintenance and repairs since 2011-12, has been worked through and as at end of January 2018 Council has processed 95% of the refunds.

STRATEGIC IMPLICATIONS

Council continued to report a strong financial position and favourable operating result at the end of January 2018.

Council has either achieved or favourably exceeded the following key financial stability and sustainability ratios as at the end of January 2018:

- Operating surplus ratio
- Net financial liabilities
- 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
- Interest coverage ratio

During the month $11.05M was reclassified from property, plant and equipment to non-current assets held for sale representing a change in use of the assets. This has a slight impact on the current ratio and net financial liabilities ratio.

The following ratios did not meet the target at the end of January 2018:

- Asset sustainability ratio
- Level of dependence on general rate revenue
- Operating performance

The asset sustainability ratio did not meet the target at the end of January 2018 and continues to be a stretch target for Council with renewal spend of $14.41M and depreciation expense of $32.05M 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 life. Capital spend on non-renewal projects increase the asset base and therefore increases depreciation expense, resulting in a lower asset sustainability ratio. The upward revaluation of infrastructure assets increases the asset base correspondingly increasing the depreciation expense that results in a lower ratio.

Council's Capital Works Prioritisation Policy (POL-3131) 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.

The level of dependence on general rate revenue and operating performance ratios fluctuate in line with the rating cycle. The third quarter general rates run for the 2017-18 financial year occurred in January 2018, resulting in dependence on this revenue stream to increase this month. The operating performance ratio is a cash measure and is expected to increase in February 2018 when the third quarter general rates are due for payment.

Legislative Requirements

The January 2018 financial results 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 January 2018 financial results 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 January 2018.

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.

Alignment with Council's Policy and Plans

This report has a relationship with the following items of the 2015-20 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

Council departmental officers, Financial Services Group officers and the Executive Leadership Team are consulted on financial results and outcomes throughout the period.

OPTIONS

1. That Council resolves to note the financial position, results and ratios for January 2018 as presented in the attached Monthly Financial Report.
2. That Council requests additional information.

OFFICER'S RECOMMENDATION

That Council resolves to note the financial position, results and ratios for January 2018 as presented in the attached Monthly Financial Report.

Monthly Financial Report

January 2018

MAKE A
DIFFERENCE
MAKE IT
COUNT

Redland
CITY COUNCIL

CONTENTS

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 January 2018. The year to date and annual revised budget referred to in this report incorporates the changes from the budget capital carryovers adopted by Council on 23 August 2017.

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)	(11,136)	12,491	**14,092**	1,601	13%	✓
Recurrent Revenue	261,639	166,933	**166,635**	(298)	0%	✖
Recurrent Expenditure	272,775	154,442	**152,543**	(1,899)	-1%	✓
Capital Works Expenditure	94,860	37,576	**34,998**	(2,578)	-7%	✓
Closing Cash & Cash Equivalents	140,234	147,360	**134,126**	(13,234)	-9%	✖

Council reported an operating surplus for the month of $14.09M. Recurrent revenue is slightly lower than budget but offset by favourable variance in recurrent expenditure which is primarily due to underspend in consultant and contractor costs. The unfavourable variance in depreciation expense is due to higher opening asset balances for 2017/2018 which include the results from the 2016/2017 asset revaluations, as well as the recognition of developer contributed assets. These end of year adjustments influenced the increase in depreciation expense.

Of the $16.08M for contractors, mowing the city's parks and open spaces was $1.69M year to date.

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

Council's capital works expenditure is below budget by $2.58M due to timing of works for a number of marine infrastructure and timing of capital acquisitions.

During the month $11.05M was reclassified from property, plant and equipment to non-current assets held for sale representing a change in use of the assets.

Council's cash balance is below budget due to higher than anticipated payments to suppliers which includes $7.85M for canal and lake special charges refund and below budget receipt of capital grants, subsidies and contributions. This is partially offset by below budget expenditure for property, plant and equipment and higher than anticipated receipts from customers. Constrained cash reserves represent 70% of the cash balance.

2. KEY PERFORMANCE INDICATORS

Key Performance Indicators

Financial Stability Ratios and Measures of Sustainability	Status Achieved ✓ Not achieved ✖	Annual Revised Budget	YTD January 2018	Target
Operating Surplus Ratio (%)	✓	-4.26%	**8.46%**	Between 0% and 10% (on average over the long-term)
Asset Sustainability Ratio (%)^	✖	70.92%	**44.96%**	Greater than 90% (on average over the long-term)
Net Financial Liabilities (%)*	✓	-23.95%	**-67.36%**	Less than 60% (on average over the long-term)
Level of Dependence on General Rate Revenue (%)	✖	33.93%	**38.88%**	Less than 37.5%
Ability to Pay Our Bills - Current Ratio	✓	2.74	**3.73**	Between 1.1 & 4.1
Ability to Repay Our Debt - Debt Servicing Ratio (%)	✓	2.99%	**4.71%**	Less than or equal to 10%
Cash Balance $M	✓	$140.234M	**$134.126M**	Greater than or equal to $50M
Cash Balances - Cash Capacity in Months	✓	7.87	**6.79**	Greater than 3 months
Longer Term Financial Stability - Debt to Asset Ratio (%)	✓	1.47%	**1.40%**	Less than or equal to 10%
Operating Performance (%)	✖	17.65%	**7.44%**	Greater than or equal to 15%
Interest Coverage Ratio (%)**	✓	-0.59%	**-0.56%**	Less than 5%

* 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)

The annual revised budgeted balances for 2017/2018 include the changes from the budget carryovers adopted by Council on 23 August 2017. The differences between the carryover budget figures and those published are due to the actual opening balances on 1 July 2017, which are now finalised following end of year accounts finalisation.

3. STATEMENT OF COMPREHENSIVE INCOME

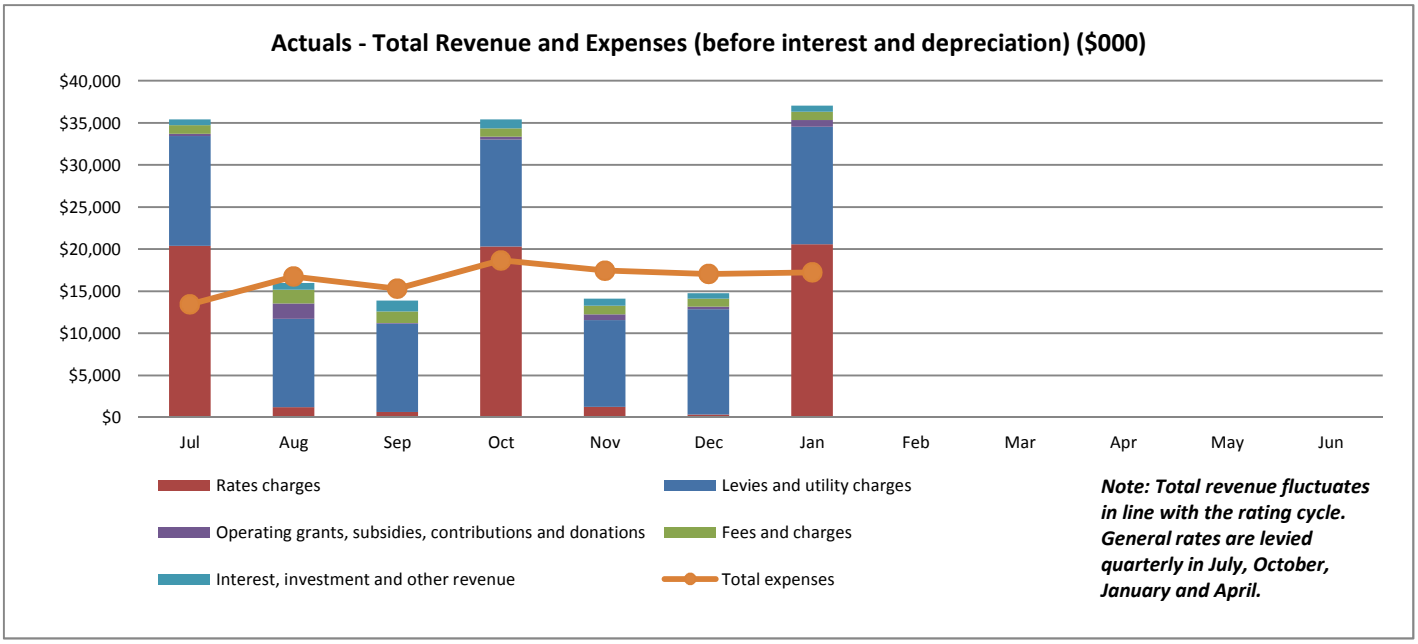
STATEMENT OF COMPREHENSIVE INCOME
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Recurrent revenue					
Rates, levies and charges	227,186	227,186	148,880	**148,284**	(596)
Fees and charges	13,048	13,048	7,918	**7,920**	2
Rental income	839	839	485	**530**	45
Interest received	4,361	4,361	2,515	**2,604**	89
Investment returns	2,200	2,200	500	**500**	-
Sales revenue	3,823	3,823	2,133	**1,848**	(285)
Other income	684	684	457	**617**	160
Grants, subsidies and contributions	9,497	9,497	4,045	**4,332**	287
Total recurrent revenue	261,639	261,639	166,933	**166,635**	(298)
Capital revenue					
Grants, subsidies and contributions	33,013	33,035	14,786	**10,272**	(4,514)
Non-cash contributions	3,213	3,213	1,900	**5**	(1,895)
Total capital revenue	36,226	36,248	16,686	**10,277**	(6,409)
TOTAL INCOME	**297,865**	**297,887**	**183,619**	**176,912**	**(6,707)**
Recurrent expenses					
Employee benefits	85,677	85,677	50,059	**49,550**	(509)
Materials and services	125,787	125,787	68,612	**66,135**	(2,477)
Finance costs	3,112	3,112	1,821	**1,880**	59
Depreciation and amortisation	58,200	58,200	33,950	**34,978**	1,028
Total recurrent expenses	272,775	272,775	154,442	**152,543**	(1,899)
Capital expenses					
(Gain) / loss on disposal of non-current assets	289	36	(371)	**372**	743
Total capital expenses	289	36	(371)	**372**	743
TOTAL EXPENSES	**273,064**	**272,811**	**154,071**	**152,915**	**(1,156)**
NET RESULT	**24,801**	**25,076**	**29,548**	**23,997**	**(5,551)**
Other comprehensive income / (loss)					
Items that will not be reclassified to a net result					
Revaluation of property, plant and equipment	-	-	-	**(67)**	(67)
TOTAL COMPREHENSIVE INCOME	**24,801**	**25,076**	**29,548**	**23,930**	**(5,618)**

4. OPERATING STATEMENT

OPERATING STATEMENT
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Revenue					
Rates charges	91,688	91,688	68,766	**66,920**	(1,846)
Levies and utility charges	138,824	138,824	82,569	**83,778**	1,209
Less: Pensioner remissions and rebates	(3,325)	(3,325)	(2,455)	**(2,414)**	41
Fees and charges	13,048	13,048	7,918	**7,920**	2
Operating grants and subsidies	8,795	8,795	3,666	**4,114**	448
Operating contributions and donations	702	702	379	**218**	(161)
Interest external	4,361	4,361	2,515	**2,604**	89
Investment returns	2,200	2,200	500	**500**	-
Other revenue	5,347	5,347	3,075	**2,995**	(80)
Total revenue	**261,639**	**261,639**	**166,933**	**166,635**	**(298)**
Expenses					
Employee benefits	85,677	85,677	50,059	**49,550**	(509)
Materials and services	126,040	126,040	68,748	**65,660**	(3,088)
Finance costs other	303	303	167	**211**	44
Other expenditure	489	489	296	**867**	571
Net internal costs	(741)	(741)	(432)	**(392)**	40
Total expenses	**211,767**	**211,767**	**118,838**	**115,896**	**(2,942)**
Earnings before interest, tax and depreciation (EBITD)	**49,872**	**49,872**	**48,095**	**50,739**	**2,644**
Interest expense	2,809	2,809	1,654	**1,669**	15
Depreciation and amortisation	58,200	58,200	33,950	**34,978**	1,028
OPERATING SURPLUS / (DEFICIT)	**(11,136)**	**(11,136)**	**12,491**	**14,092**	**1,601**



4. OPERATING STATEMENT - CONTINUED

LEVIES AND UTILITY CHARGES ANALYSIS
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Levies and utility charges					
Refuse collection rate charge	21,663	21,663	12,598	**12,645**	47
Special charges	4,083	4,083	3,062	**3,054**	(8)
SES separate charge	339	339	254	**255**	1
Environment separate charge	7,568	7,568	5,676	**5,712**	36
Separate charge landfill remediation	2,911	2,911	1,698	**1,709**	11
Wastewater charges	43,647	43,647	25,461	**25,322**	(139)
Water access charges	18,296	18,296	10,673	**10,721**	48
Water consumption charges	40,317	40,317	23,147	**24,360**	1,213
Total levies and utility charges	**138,824**	**138,824**	**82,569**	**83,778**	**1,209**

MATERIALS AND SERVICES ANALYSIS
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Materials and services					
Contractors	34,121	34,349	18,227	**16,079**	(2,148)
Consultants	4,465	4,364	1,730	**800**	(930)
Other Council outsourcing costs*	17,355	17,487	9,863	**9,968**	105
Purchase of materials	44,300	44,090	24,493	**25,225**	732
Office administration costs	7,949	8,075	4,589	**4,433**	(156)
Electricity charges	5,751	5,729	3,321	**3,058**	(263)
Plant operations	4,466	4,480	2,429	**2,463**	34
Information technology resources	2,811	2,647	1,374	**1,277**	(97)
General insurance	1,363	1,363	799	**781**	(18)
Community assistance**	1,619	1,622	926	**843**	(83)
Other material and service expenses	1,840	1,834	997	**733**	(264)
Total materials and services	**126,040**	**126,040**	**68,748**	**65,660**	**(3,088)**

** 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 & awards, donations and sponsorships.*

EMPLOYEE BENEFITS AND FULL TIME EQUIVALENTS (FTE)
For the period ending 31 January 2018

	FTE (Council employees and Councillors)*	Total staff wages and salaries (including Councillors) $000	Annual leave and long service leave entitlements $000	Superannuation (including Councillors) $000	Other employee related expenses (including agency costs) $000	Less: capitalised employee expenses $000	**Total operating employee benefits $000**
Month							
July	900	5,324	626	647	333	481	**6,449**
August	899	5,992	702	698	627	520	**7,499**
September	902	5,213	617	653	597	471	**6,609**
October	906	6,080	724	722	525	531	**7,520**
November	914	5,961	698	703	598	383	**7,577**
December	919	5,508	650	674	452	389	**6,895**
January	921	5,496	646	713	560	414	**7,001**
Total employee benefits YTD		**39,574**	**4,663**	**4,810**	**3,692**	**3,189**	**49,550**

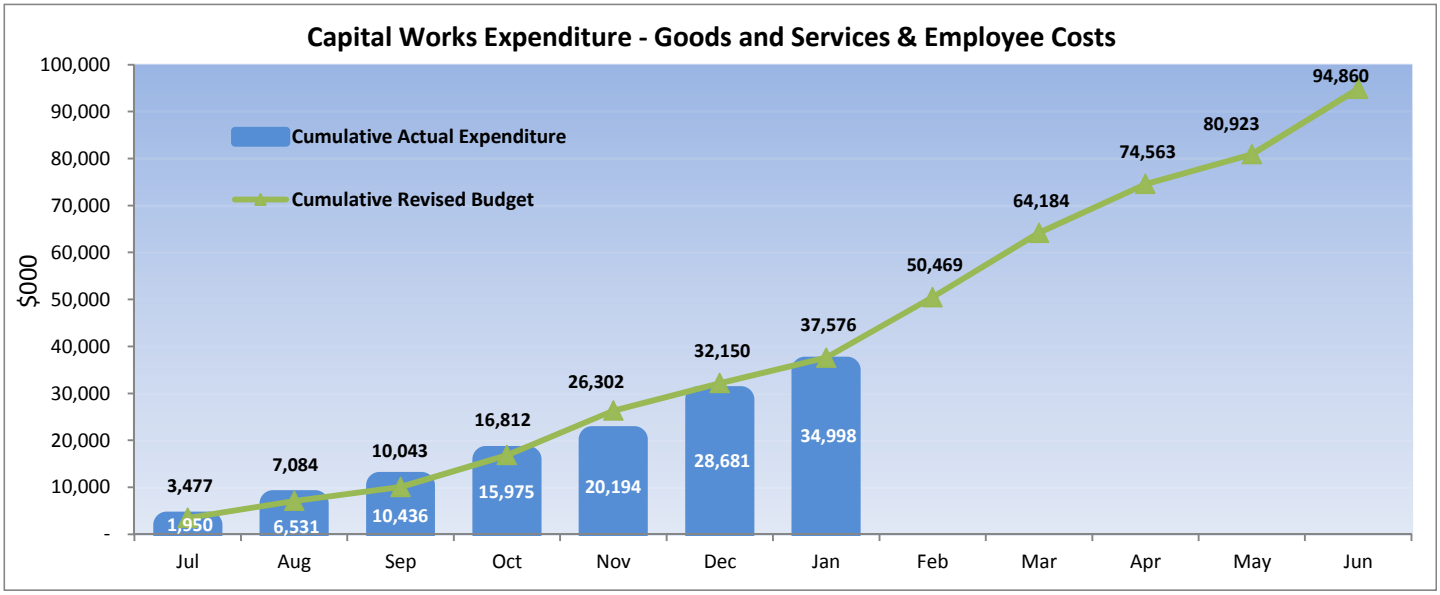
** Refer to page 14 for further information on FTE and headcount.*

5. CAPITAL FUNDING STATEMENT

CAPITAL FUNDING STATEMENT
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Sources of capital funding					
Capital contributions and donations	29,250	29,250	12,410	**8,831**	(3,579)
Capital grants and subsidies	3,763	3,785	2,376	**1,441**	(935)
Proceeds on disposal of non-current assets	1,180	1,433	575	**462**	(113)
Capital transfers (to) / from reserves	(14,106)	(13,493)	(10,641)	**(5,908)**	4,733
Non-cash contributions	3,213	3,213	1,900	**5**	(1,895)
New loans	867	867	-	**-**	-
Funding from general revenue	66,106	78,028	39,020	**36,346**	(2,674)
Total sources of capital funding	**90,272**	**103,082**	**45,640**	**41,177**	**(4,463)**
Application of capital funds					
Contributed assets	3,213	3,213	1,900	**5**	(1,895)
Capitalised goods and services*	74,965	87,599	34,279	**31,809**	(2,470)
Capitalised employee costs*	7,085	7,261	3,297	**3,189**	(108)
Loan redemption	5,010	5,010	6,164	**6,174**	10
Total application of capital funds	**90,272**	**103,082**	**45,640**	**41,177**	**(4,463)**
Other budgeted items					
Transfers to constrained operating reserves	(13,268)	(13,268)	(7,618)	**(9,698)**	(2,080)
Transfers from constrained operating reserves	11,565	11,565	6,631	**11,578**	4,947
Written down value (WDV) of assets disposed	1,468	1,468	204	**834**	630

** Total capital works expenditure depicted in the graph below is the total of capitalised goods and services and capitalised employee costs.*



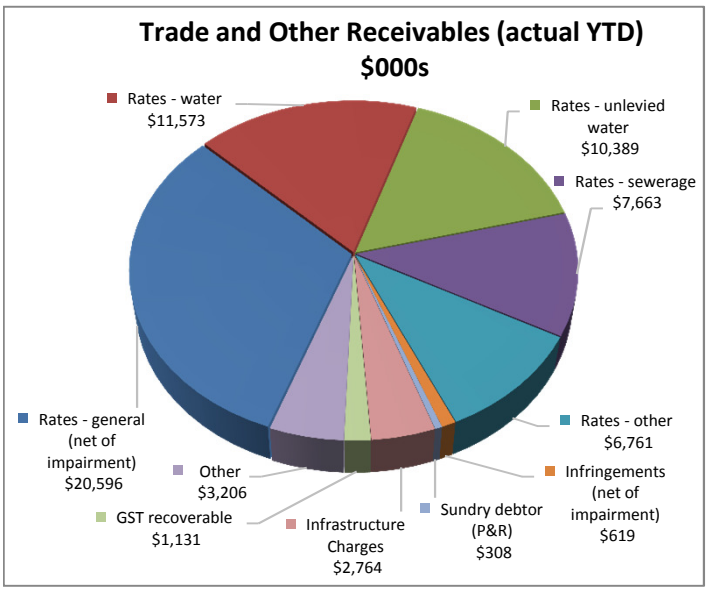
6. STATEMENT OF FINANCIAL POSITION

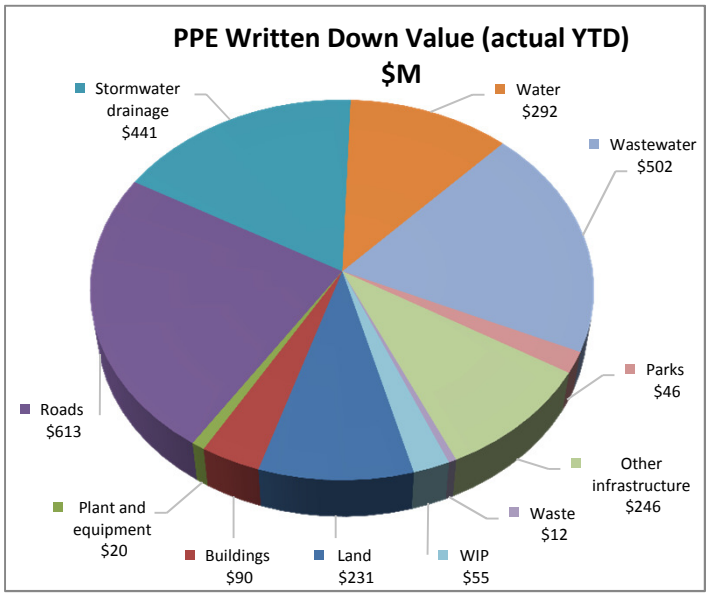
STATEMENT OF FINANCIAL POSITION
As at 31 January 2018

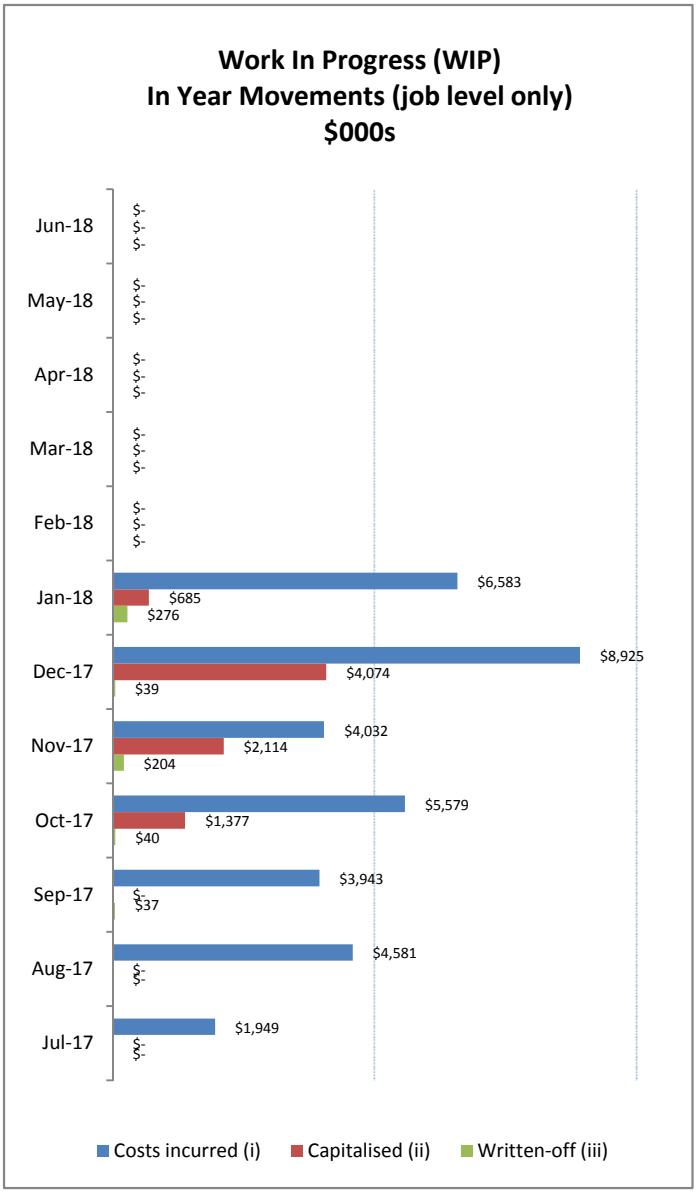
	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual Balance $000**
CURRENT ASSETS				
Cash and cash equivalents	133,650	140,234	147,360	**134,126**
Trade and other receivables	25,805	27,273	58,098	**65,010**
Inventories	678	556	556	**1,275**
Non-current assets held for sale	4,278	262	262	**11,203**
Other current assets	2,122	2,073	2,073	**2,616**
Total current assets	**166,533**	**170,398**	**208,349**	**214,230**
NON-CURRENT ASSETS				
Investment property	1,054	1,091	1,091	**1,091**
Property, plant and equipment	2,483,228	2,598,914	2,565,402	**2,547,760**
Intangible assets	1,215	1,845	2,274	**2,274**
Other financial assets	73	73	73	**73**
Investment in other entities	5,961	14,712	14,712	**14,712**
Total non-current assets	**2,491,531**	**2,616,635**	**2,583,552**	**2,565,910**
TOTAL ASSETS	**2,658,064**	**2,787,033**	**2,791,901**	**2,780,140**
CURRENT LIABILITIES				
Trade and other payables	21,411	39,792	39,522	**21,122**
Borrowings	7,701	7,713	7,713	**7,713**
Provisions	13,126	13,014	12,718	**10,555**
Other current liabilities	1,755	1,747	4,737	**18,112**
Total current liabilities	**43,993**	**62,266**	**64,690**	**57,502**
NON-CURRENT LIABILITIES				
Borrowings	33,461	33,343	31,322	**31,312**
Provisions	12,356	12,115	12,108	**13,165**
Total non-current liabilities	**45,817**	**45,458**	**43,430**	**44,477**
TOTAL LIABILITIES	**89,811**	**107,724**	**108,120**	**101,979**
NET COMMUNITY ASSETS	**2,568,254**	**2,679,309**	**2,683,781**	**2,678,161**
COMMUNITY EQUITY				
Asset revaluation surplus	963,349	1,070,838	1,070,838	**1,070,771**
Retained surplus	1,498,727	1,503,632	1,511,671	**1,513,718**
Constrained cash reserves	106,178	104,839	101,272	**93,672**
TOTAL COMMUNITY EQUITY	**2,568,254**	**2,679,309**	**2,683,781**	**2,678,161**

The annual revised budgeted balances for 2017/2018 include the changes from the budget carryovers adopted by Council on 23 August 2017. The differences between the carryover budget figures and those published are due to the actual opening balances on 1 July 2017, which are now finalised following end of year accounts finalisation.

6. STATEMENT OF FINANCIAL POSITION - CONTINUED







(i) Costs incurred: costs transferred into WIP for the construction or acquisition of fixed assets and at this point are non-depreciating.
(ii) Assets registered: additions to the asset register which includes unwinding of 2016/2017 accruals and new capitalisations.
(iii) Written-off: costs transferred from WIP to operational expenditure. These costs are operational in nature and therefore will not be capitalised.

PROPERTY, PLANT AND EQUIPMENT (PPE) MOVEMENT*
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual Balance $000**
PPE movement				
Opening balance (includes WIP from previous years)	2,456,540	2,559,417	2,559,417	**2,559,417**
Acquisitions and WIP in year movement	85,217	98,026	39,475	**35,055**
Depreciation in year	(57,061)	(57,061)	(33,286)	**(34,419)**
Disposals	(1,468)	(1,468)	(204)	**(670)**
Other adjustments**	-	-	-	**(11,623)**
Closing balance	**2,483,228**	**2,598,914**	**2,565,402**	**2,547,760**

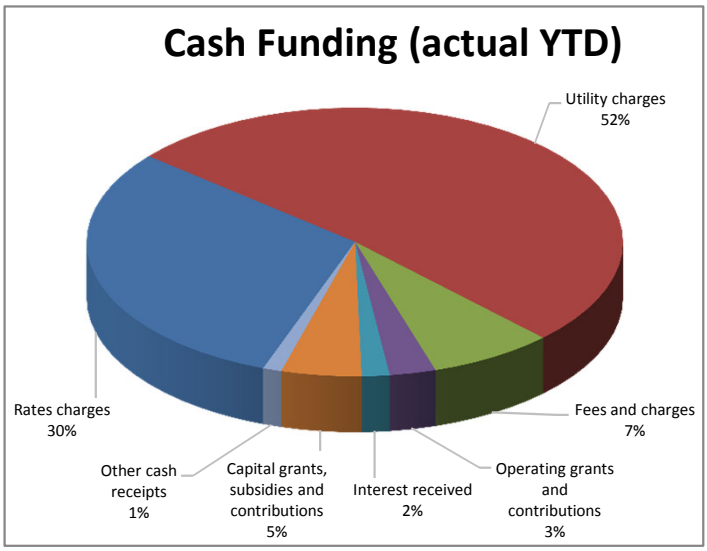
** This table includes movement relating to property, plant and equipment only and is exclusive of intangible assets.*

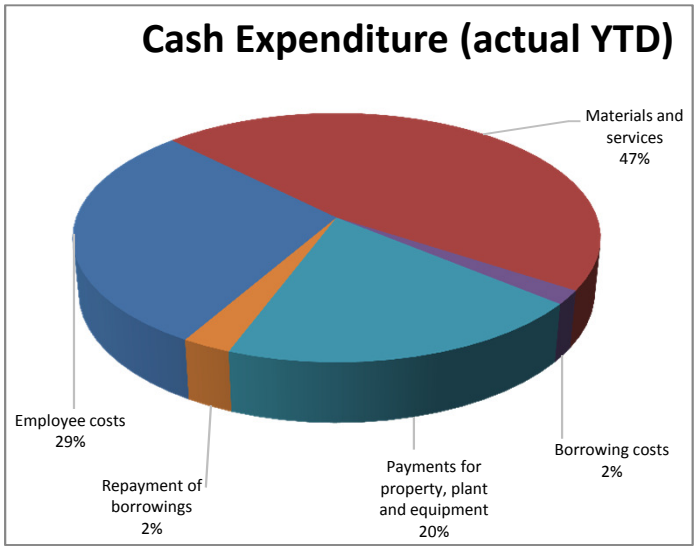
*** Other adjustments include transfers between asset classes, revaluation adjustments, prior period adjustments and depreciation thereon. Includes reclassification of $11.05M from property, plant and equipment to non-current assets held for sale.*

7. STATEMENT OF CASH FLOWS

STATEMENT OF CASH FLOWS
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**
CASH FLOWS FROM OPERATING ACTIVITIES				
Receipts from customers	244,741	244,741	134,229	**141,827**
Payments to suppliers and employees	(210,402)	(210,527)	(118,171)	**(135,001)**
	34,340	**34,215**	**16,058**	**6,826**
Interest received	4,361	4,361	2,516	**2,604**
Rental income	839	839	485	**530**
Non-capital grants and contributions	9,547	9,547	4,045	**4,332**
Borrowing costs	(3,175)	(3,175)	(3,175)	**(3,186)**
Net cash inflow / (outflow) from operating activities	**45,912**	**45,787**	**19,929**	**11,106**
CASH FLOWS FROM INVESTING ACTIVITIES				
Payments for property, plant and equipment	(82,005)	(94,815)	(37,576)	**(35,049)**
Payments for intangible assets	(45)	(45)	-	**51**
Proceeds from sale of property, plant and equipment	1,180	1,433	575	**462**
Capital grants, subsidies and contributions	33,013	33,035	14,786	**7,508**
Other cash flows from investing activities	2,200	2,200	(2,125)	**(1,710)**
Net cash inflow / (outflow) from investing activities	**(45,656)**	**(58,192)**	**(24,340)**	**(28,738)**
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceeds of borrowings	867	867	-	**-**
Repayment of borrowings	(4,644)	(4,644)	(4,644)	**(4,657)**
Net cash inflow / (outflow) from financing activities	**(3,777)**	**(3,777)**	**(4,644)**	**(4,657)**
Net increase / (decrease) in cash held	**(3,521)**	**(16,181)**	**(9,055)**	**(22,289)**
Cash and cash equivalents at the beginning of the year	137,171	156,415	156,415	**156,415**
Cash and cash equivalents at the end of the financial year / period	**133,650**	**140,234**	**147,360**	**134,126**





Total Cash Funding (Actual YTD)	**155,553**
Total Cash Funding (Annual Revised Budget)	297,023
% of Budget Achieved YTD	52%

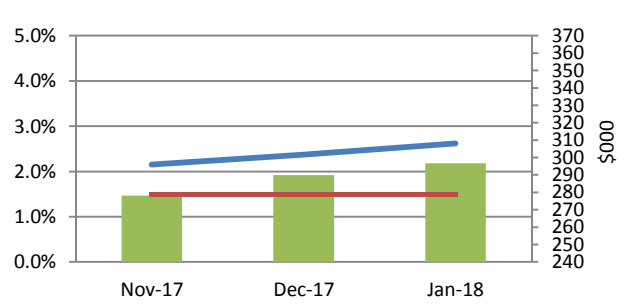
Total Cash Expenditure (Actual YTD)	**177,842**
Total Cash Expenditure (Annual Revised Budget)	313,204
% of Budget Achieved YTD	57%

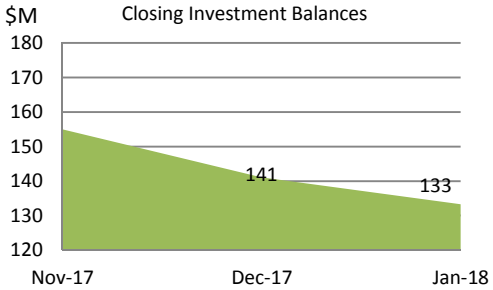
The annual revised budgeted balances for 2017/2018 include the changes from the budget carryovers adopted by Council on 23 August 2017. The differences between the carryover budget figures and those published are due to the actual opening balances on 1 July 2017, which are now finalised following end of year accounts finalisation.

8. INVESTMENT & BORROWINGS REPORT

For the period ending 31 January 2018

INVESTMENT RETURNS - QUEENSLAND TREASURY CORPORATION (QTC)





Total Investment at End of Month was $133.29M

All Council investments are currently held in the Capital Guaranteed Cash Fund, which is a fund operated by the Queensland Treasury Corporation (QTC).

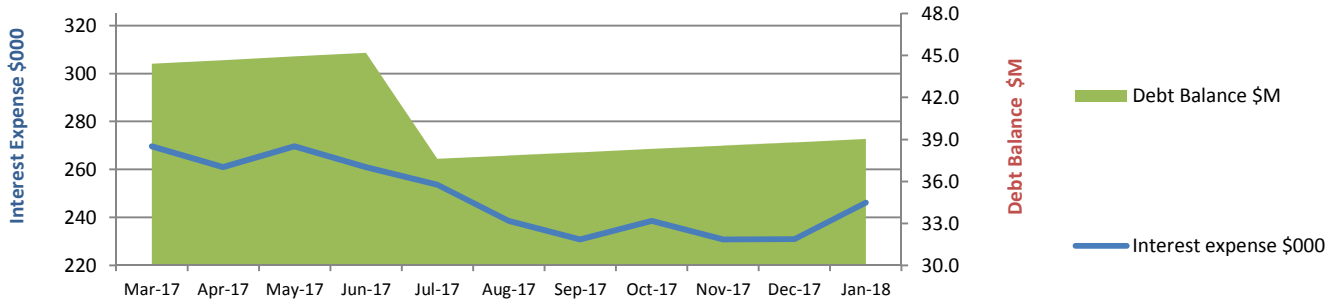
The movement in interest earned is indicative of both the interest rate and the surplus cash balances held, the latter of which is affected by business cash flow requirements on a monthly basis as well as the rating cycle.

Note: the Reserve Bank reduced the cash rate down to 1.5% in the August 2016 sitting - this has not changed in subsequent months.

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 of 2.62% exceeds the Bloomberg AusBond Bank Bill Index (previously the UBS Bank Bill Index) of 1.75% as at the end of January 2018 in accordance with Corporate POL-3013. Term deposit rates are being monitored to identify investment opportunities to ensure Council maximises its interest earnings.

Council adopted its revised Investment Policy (POL-3013) in May 2017 for the 2017/2018 financial year

BORROWINGS AND BORROWING COSTS



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, the principal debt repayment has been made *annually* in advance for 2017/2018 which will result in the loans being repaid approximately one year earlier.

The debt balance shows a decrease as the Annual Debt Service Payment was made during July 2017. Interest will accrue monthly based on the reduced debt balance.

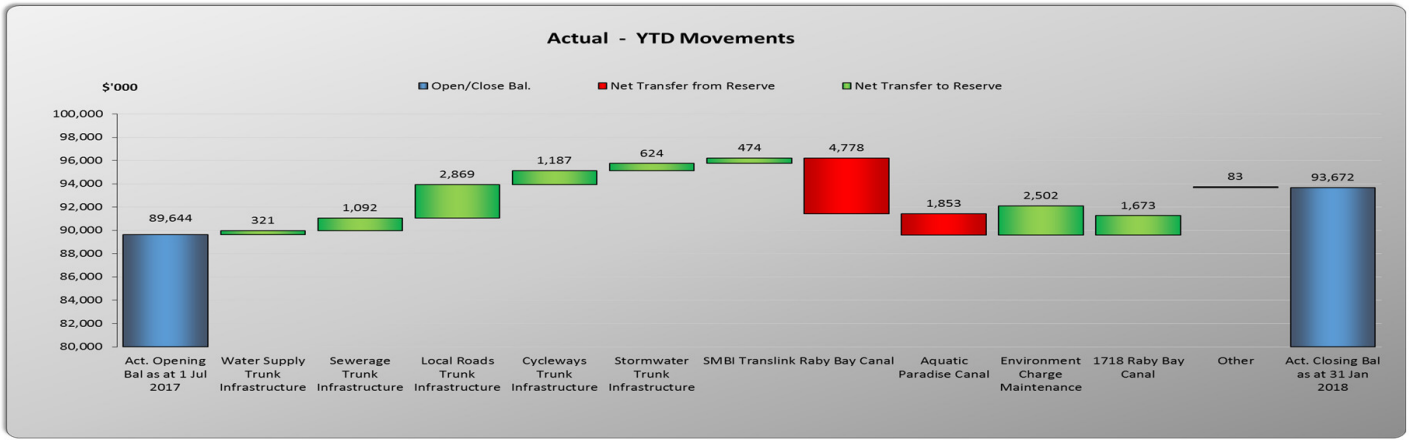
Total Borrowings at End of Month were $39.03M

General pool allocated to capital works is 99.27% and 0.73% is attributable to RedWaste.

Council adopted its revised Debt Policy (POL-1838) in June 2017 for the 2017/2018 financial year

9. CONSTRAINED CASH RESERVES

Reserves as at 31 January 2018	Opening Balance	To Reserve	From Reserve	Closing Balance
	$000	$000	$000	$000
Special Projects Reserve:				
Weinam Creek Reserve	3,075	289	(16)	3,348
Red Art Gallery Commissions & Donations Reserve	4	-	-	4
	3,079	**289**	**(16)**	**3,352**
Constrained Works Reserve:				
Public Parks Trunk Infrastructure Reserve	8,693	1,621	(1,581)	8,733
Land for Community Facilities Trunk Infrastruture Reserve	1,675	255	-	1,930
Water Supply Trunk Infrastructure Reserve	9,478	321	-	9,799
Sewerage Trunk Infrastructure Reserve	6,573	1,516	(424)	7,665
Constrained Works Reserve-Capital Grants & Contributions	1,154	-	(103)	1,051
Local Roads Trunk Infrastructure Reserve	30,570	3,162	(293)	33,439
Cycleways Trunk Infrastructure Reserve	8,343	1,275	(88)	9,530
Stormwater Trunk Infrastructure Reserve	7,553	624	-	8,177
Constrained Works Reserve-Operating Grants & Contributions	2,667	-	(150)	2,517
Tree Planting Reserve	86	26	-	112
	76,792	**8,800**	**(2,639)**	**82,953**
Separate Charge Reserve - Environment:				
Environment Charge Acquisition Reserve	618	-	(77)	541
Environment Charge Maintenance Reserve	1,387	5,712	(3,210)	3,889
	2,005	**5,712**	**(3,287)**	**4,430**
Special Charge Reserve - Other:				
Bay Island Rural Fire Levy Reserve	-	140	(112)	28
SMBI Translink Reserve	(6)	712	(238)	468
	(6)	**852**	**(350)**	**496**
Special Charge Reserve - Canals:				
Raby Bay Canal Reserve	4,778	15	(4,793)	-
Aquatic Paradise Canal Reserve	2,592	12	(1,865)	739
Sovereign Waters Lake Reserve	404	3	12	419
1718 Raby Bay Canal Reserve	-	2,097	(424)	1,673
1718 Aquatic Paradise Canal Reserve	-	653	(1,030)	(377)
1718 Sovereign Waters Lake Reserve	-	39	(52)	(13)
	7,774	**2,819**	**(8,152)**	**2,441**
TOTALS	**89,644**	**18,472**	**(14,444)**	**93,672**
	Closing cash and cash equivalents			**134,126**
	Reserves as percentage of cash balance			**70%**



Total Reserves increased by $1.46M during the month. YTD growth in developer cash contributions totalled $8.80M with drawdowns of $2.39M. Increases are predominantly from developments in Cleveland, Victoria Point, Thornlands, Ormiston, Capalaba and Birkdale. YTD growth in other reserves totalled $9.67M, with drawdowns totalling $12.06M. $2.82M of the increase in reserves is attributed to canals and lakes. The process for issuing refunds for the reserve balances quarantined for maintenance and repairs since 2011-12, has been worked through and as at end of January, Council has processed 95% of the refunds. New 2017/2018 canal and lake reserves reflect the current year program for revenue and expenditure. $2.50M movement in the Environment Charge Maintenance Reserve is associated with the Environment Separate Charge (which is recognised in line with the rating cycle), offset by YTD spending on designated projects.

10. REDLAND WATER STATEMENTS

REDLAND WATER SUMMARY OPERATING STATEMENT
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Total revenue	105,147	105,147	60,843	**61,716**	873
Total expenses	59,688	59,688	33,674	**33,655**	(19)
Earnings before interest, tax and depreciation (EBITD)	45,459	45,459	27,169	**28,061**	892
Interest expense	18,265	18,265	10,654	**10,654**	-
Depreciation	18,457	18,457	10,767	**12,778**	2,011
Operating surplus / (deficit)	**8,737**	**8,737**	**5,748**	**4,629**	**(1,119)**

REDLAND WATER CAPITAL FUNDING STATEMENT
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Capital contributions, donations, grants and subsidies	6,631	6,631	1,864	**2,181**	317
Net transfer (to) / from constrained capital reserves	(3,120)	(3,117)	(3,251)	**(1,413)**	1,838
Non-cash contributions	3,131	3,131	1,826	**-**	(1,826)
Funding from utility revenue	4,675	6,186	5,423	**2,725**	(2,698)
Total sources of capital funding	**11,316**	**12,830**	**5,862**	**3,493**	**(2,369)**
Contributed assets	3,131	3,131	1,826	**-**	(1,826)
Capitalised expenditure	8,185	9,699	4,036	**3,493**	(543)
Total application of capital funds	**11,316**	**12,830**	**5,862**	**3,493**	**(2,369)**

11. REDWASTE STATEMENTS

REDWASTE OPERATING STATEMENT
For the period ending 31 January 2018

	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Total revenue	24,532	24,532	14,271	**14,752**	481
Total expenses	17,480	17,480	10,313	**11,206**	893
Earnings before interest, tax and depreciation (EBITD)	7,052	7,052	3,958	**3,546**	(412)
Interest expense	33	33	19	**20**	1
Depreciation	307	307	179	**98**	(81)
Operating surplus / (deficit)	**6,712**	**6,712**	**3,760**	**3,428**	**(332)**

REDWASTE CAPITAL FUNDING STATEMENT
For the period ending 31 January 2018

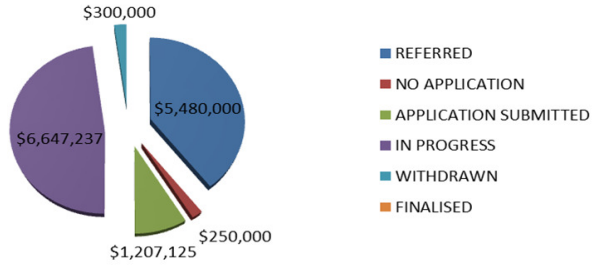
	Annual Original Budget $000	Annual Revised Budget $000	YTD Revised Budget $000	YTD **Actual $000**	YTD Variance $000
Non-cash contributions	-	-	-	**-**	-
Funding from utility revenue	317	333	245	**284**	39
Total sources of capital funding	**317**	**333**	**245**	**284**	**39**
Capitalised expenditure	240	249	148	**187**	39
Loan redemption	77	83	97	**97**	-
Total application of capital funds	**317**	**333**	**245**	**284**	**39**

Note: Due to a change in the reporting structure in February 2018, financial statements for Redland Water and Redwaste will change from 8 February 2018.

12. APPENDIX: ADDITIONAL AND NON-FINANCIAL INFORMATION

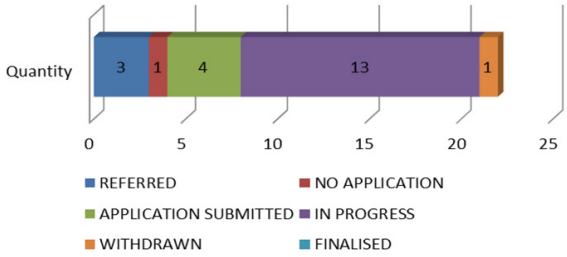
External Funding Summary

Value of External Grant Applications by Status (YTD)



January 2018 Progress

Number of External Grant Applications by Status (YTD)



Successful Funding Submissions YTD 2017/2018

GRANTS REFERRED:
- Applications open for Heavy Vehicle and Productivity Program, currently exploring necessary culvert upgrades on major roads where Council is unable to approve Heavy Vehicle Permits
- Applications open for final round of Lasting Legacies and Spirit of Service Grants, improvements to war memorials currently being explored for potential projects

UPCOMING GRANTS:
- Natural Disaster Resilience Program (NDRP) due to open shortly, projects ready for application include evacuation centre upgrades and flood warning signs
- Transport Infrastructure Development Scheme and Passenger Transport Accessible Infrastructure Fund expressions of interest are due to be called in the coming months in preparation for QTrip shutdown in March 2018

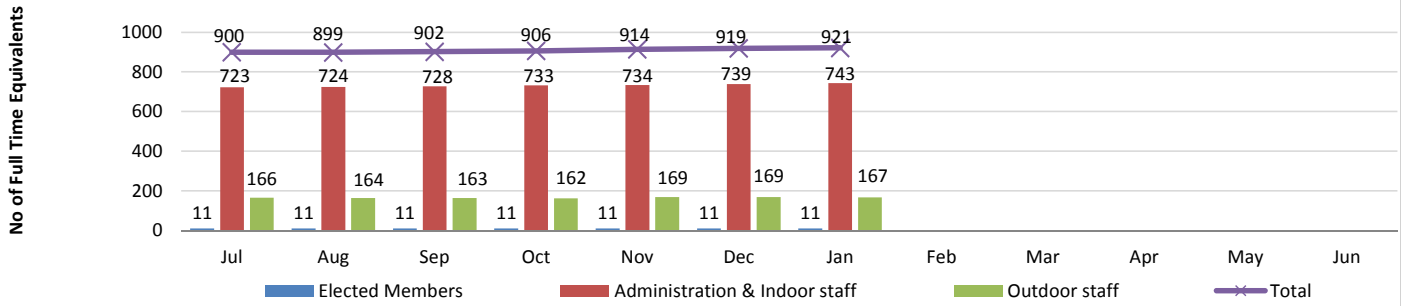
Environment:
- $6,977 for revegetation of the Coolnwynpin Creek Corridor Koala Refuge under the Nature Refuge Landholder Grant to be completed in late 2017/2018

Roads and Active Transport:
- $875,000 for two Road Alliance projects to be completed in 2017/2018
- $456,000 for city wide Bus Shelter Renewals to be completed in 2017/2018

Economic Development:
- $500,000 between 2017-2019 as part of the Advancing Regional Innovation Program (multiple partners including Logan City Council and Griffith University)
- $916,137 between 2017-2019 for Indigiscapes Expansion Stage 2 under the Local Government Grants and Subsidies Program

Workforce Reporting

Full Time Equivalent Employees 2017/2018



Workforce reporting - January 2018: Headcount	Employee Type						
Department Level	Casual	Contract of Service	Perm Full	Perm Part	Temp Full	Temp Part	Total by Department
Office of CEO	8	2	30	5	5	1	51
Organisational Services	11	6	165	15	23	5	225
Community and Customer Service	29	5	234	65	37	12	382
Infrastructure and Operations	8	5	307	9	15	2	346
Total	56	18	736	94	80	20	1004

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 (excluding agency staff) and does not include a workload weighting. It includes casual staff in their non-substantive roles as at the end of the period where relevant. Due to a change in the reporting structure in August 2017, Finance and Legal Services (including Procurement) moved from the Office of CEO to join Organisational Services.

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 include 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 loans / Total Assets
Operating Performance: *This ratio provides an indication of Redland City 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 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.

11.1.2 FIRE MANAGEMENT FOR PRIVATE PROPERTIES

Objective Reference:	**A2700157** **Reports and Attachments (Archives)**
Attachment:	**Factsheet - Fire, Vegetation and Property Management**
Authorising Officer:	**John Oberhardt** **General Manager Organisational Services**
Responsible Officer:	**Glynn Henderson** **Acting Group Manager Corporate Governance**
Report Author:	**Michael Tait** **Service Manager Disaster Planning and Operations**

PURPOSE

The purpose of this report is to endorse the provision of information to assist land owners in addressing fire, vegetation and property maintenance along with options for creating fire management plans for private properties via a newly created fact sheet.

BACKGROUND

At Council's general meeting held 6 September 2017, Council resolved that the Chief Executive Officer prepares a further report on the feasibility of publishing a fact sheet for property owners to assist them in preparing Fire Management Plans for private properties.

ISSUES

Land owners can elect to develop and maintain a fire management plan for their properties. Advice on the preparation of a property specific fire management plan should be obtained from an appropriate organisation that specialises in the field of creating land management plans.

Redland City Council does not create fire management plans for private properties. However, Council along with Queensland Fire and Emergency Services (QFES) and organisations such as SEQ Fire and Biodiversity Consortium currently provide information and workshops to support land owners in fire management on their properties. These activities include:

- Each year, Council hosts an Individual Property Fire Management Workshop at Council's IndigiScapes Centre. This year's workshop will be held Saturday 10 March 2018. The workshop is co-operatively run by Council, QFES and SEQ Fire and Biodiversity Consortium. The morning session, free to all Redland City residents, focuses on property preparation for the fire season and includes: a fire simulation, information about fire management and its implications for the conservation of plants and animals. The afternoon session, available to residents that participate in Council's Habitat Protection Programs, assists the land owner in creating individual property fire management plans.

- SEQ Fire and Biodiversity Consortium provide free fact sheets via their website regarding “Fire management for protected vegetation” and “Recommended fire regimes”. These fact sheets contain information on the science of fire management and its benefit to landowners, along with legislative details on fire management planning. The “Recommended fire regimes” fact sheet outlines considerations for inclusion when developing a personalised fire management checklist.
- SEQ Fire and Biodiversity Consortium has also developed the Property Fire Management Manual Part A, and Fire Management Workbook Part B which will be made available through Council’s website. These resources assist land owners in developing fire management plans relative to their individual properties.
- A local QFES Officer can also be requested by residents to attend their property at no cost to provide a site specific overall fuel hazard assessment and recommendations regarding fire management planning. Residents can request a QFES officer attend their property by contacting: https://www.qfes.qld.gov.au/forms/ContactUs/.
- Council has created the fact sheet: Fire, Vegetation and Property Management (attached) to provide advice regarding overgrown and unsightly properties, fire management and managing vegetation. The fact sheet incorporates the information above regarding options to support fire management on private properties. If endorsed, this fact sheet will be made available through Council’s website.

STRATEGIC IMPLICATIONS

Legislative Requirements

In accordance with the section 4A of the *Queensland Disaster Management Act* 2003; local government is primarily responsible for taking preventative and preparatory measures to reduce the likelihood of an event occurring and ensure the community, resources and services are able to cope with the effects of an event. This extends to building resilience by assisting the community to take action to better prepare themselves and their properties to cope with the effects of an event.

In addition, vegetation management must consider relevant regulatory mechanisms that seek to balance environmental priorities with high quality land management. As such, the *Vegetation Management Act 1999* and Council local laws have jurisdiction to assist in striking the appropriate balance.

Risk Management

The bush fire review has highlighted that fire mitigation is a shared responsibility with the community and all levels of government. Providing information to support the community to manage their own fire, vegetation and property maintenance builds toward achieving the intent of recommendation 1 and 13 of the Fire Management Review which includes raising awareness of local laws and activities that can be lawfully conducted on properties and promoting a call-to-action for residents to improve their level of safety.

Financial

Costs in relation to creating the fact sheet have been absorbed into existing budget.

People

Workloads in relation to creating the fact sheet have been absorbed into existing business as usual functions.

Environmental

Information provided by the fact sheet will outline existing legislation and direct the community to sources of information that will serve to improve high quality land management practices.

Social

There are no social impacts as a result of this report.

Alignment with Council's Policy and Plans

This report aligns with the following key outcome of the 2015-2020 Corporate Plan:

7. Our health, wellbeing and strong community spirit will be supported by a full range of services, programs, organisations and facilities, and our values of caring and respect will extend to people of all ages, cultures, abilities and needs.

CONSULTATION

- General Counsel
- Group Manager Environment and Regulation
- Group Manager City Planning and Assessment
- Group Manager Corporate Services
- Senior Extension Officer Environmental Education Team
- Service Manager Disaster Planning and Operations
- Project Officer Disaster Planning and Operations
- Queensland Fire and Emergency Service

OPTIONS

1. That Council resolves to note the report and endorse the provision of information via the attached fact sheet: Fire, Vegetation and Property Management to assist land owners in fire management on private properties.
2. That Council resolves to note the report and does not endorse the provision of information via the attached fact sheet: Fire, Vegetation and Property Management.

OFFICER'S RECOMMENDATION

That Council resolves to note the report and endorse the provision of information via the attached fact sheet: Fire, Vegetation and Property Management to assist land owners in fire management on private properties.

FACTSHEET - Fire, Vegetation and Property Management

For more information:
visit
disaster.redland.qld.gov.au
call
3829 8999

In event of an emergency call:
000

Redland CITY COUNCIL

Factsheet

Fire, Vegetation and Property Management

This fact sheet is intended to help guide property owners and occupiers with managing their property, including clearing overgrowth and rubbish, reducing fire risks and managing vegetation.

OVERGROWN AND UNSIGHTLY PROPERTIES

Properties that are overgrown with weeds and long grass, or have an accumulation of objects, rubbish or materials may not only be unsightly, they can also pose a serious fire risk and provide a home for vermin, such as rats and mice.

Redland City Council requires residents and landowners to maintain their property by removing weeds, long grass, and unsightly rubbish or objects.

Residents and landowners have an obligation under Council's Local Law 3 - Community and Environmental Management to keep their and neighbouring properties safe by:

- Minimising overgrown vegetation;
- Maintaining access paths and fire breaks;
- Mowing cleared areas regularly;
- Trimming low branches near the house;
- Clearing gutters regularly;
- Not accumulating objects and materials unless properly stored (not unsightly);
- Reducing or removing combustible material like dead leaves and branches.

Unsightly Accumulation

A person must not bring on, allow to accumulate, or place on a property, any objects, materials or vegetation which is unsightly or not in accordance with the amenity of the area.

Examples of objects or materials which may be considered unsightly include;

- Broken down vehicles and car bodies;
- Broken down boats, boat trailers and dilapidated boat parts;
- Scrap machinery or machinery parts;
- Discarded bottles, containers or packaging;
- Dilapidated or unsightly building hoardings;
- Shopping trolleys;
- Overgrown vegetation.

Fires and fire hazards

A fire hazard is anything that is flammable in nature, and due to its position or its quantity, exposes property to significant risk of damage or destruction by fire. This may include:

- a substantial amount of grass clippings that may spontaneously combust
- dry vegetation – particularly small twigs - that could easily ignite and spread fire
- any other flammable material.

Council Actions

Where overgrown vegetation or accumulated objects/ materials occur that are considered overgrown, unsightly or a habitat for vermin, Council officers can direct residents to take steps to remedy the situation and issue fines.

Redland CITY COUNCIL

FACTSHEET - Fire, Vegetation and Property Management

FIRE MANAGEMENT

While residents and landowners must clear overgrown properties and unsightly accumulation of objects and materials, to reduce fire hazards, the same local law also restricts the lighting of fires.

For residents in urban areas or properties less than 6,000 m², the lighting of fires is generally prohibited or restricted unless the fire is well contained within a commercial incinerator, barbeque; enclosed fireplace, stove or heater or similar device constructed to prevent the escape of fire or any burning material.

Burning open piles of rubbish or vegetation is banned under these laws.

These requirements are intended to provide for the safety and amenity of the community given fires can start as a result of a single stray spark or ember regardless of preparations that may be in place.

If residents need to dispose of rubbish, they are encouraged to do so for free at their local transfer station.

Fire management on private property

- Redland City Council does not create fire management plans for private properties. Council encourages property owners to contact organisations such as SEQ Fire and Biodiversity Consortium and Queensland Fire & Emergency Service (QFES) who are able to support the development of fire management plans.
- Private property owners can request a local QFES officer to attend their property at no cost to provide a site specific overall fuel hazard assessment and recommendations regarding fire management planning. Requests for QFES to attend and assess a private property can be logged through the website Ⓦ **qfes.qld.gov.au/forms/ContactUs**.
- Through its members and programs the SEQ Fire and Biodiversity Consortium provides best-practice recommendations for fire management, fire ecology and the conservation of biodiversity in the South East Queensland (SEQ) region.
- This includes free publications and resources available through the website: Ⓦ **fireandbiodiversity.org.au/** for recommended fire management. A Property Fire Management Manual (Part A) and Fire Management Workbook (Part B) are among the documents being made available through the website.
- In support of this resource, Redland City Council hosts an individual Property Fire Management Workshop each year in conjunction with QFES, and SEQ Fire & Biodiversity Consortium. Held at Redlands IndigiScapes Centre – 17 Runnymede Rd, Capalaba, the workshop provides residents with information about property fire management and balancing fire safety with conservation of bushland flora and fauna.

MANAGING VEGETATION

Controlling overgrown weeds and grasses is important but so is knowing how to manage trees and shrubs on your property.

Trees and shrubs are a vital feature of the urban and rural landscapes that residents and visitors love about the Redlands; providing critical native habitat and corridors, protecting waterways and many ecological benefits.

They add to the outdoor spaces we like to relax in and enjoy and value to property by improving amenity

There are several levels of protection that may apply to trees and other native vegetation. The following provides some guidance for how trees are managed in the Redlands.

***If in doubt** about what requirements may apply, it is recommended you contact Council before removing trees and other vegetation.*

Tree and Vegetation Protection

On privately owned land, trees may be protected in various ways including;

- Vegetation or Tree Protection Order (VPO or TPO) under Local Law No.6 (Protection of Vegetation)
- by being included within a Habitat Protection Overlay under the Redlands Planning Scheme
- by a covenant or condition of a development approval
- if the land has the potential to be subdivided under the current zoning
- if a development application has been lodged with Council and a decision is pending.

On properties with vegetation protection, Council approval is generally required to remove vegetation unless it is specifically exempted by the local law policy.

In particular, if the tree poses a reasonable likelihood of being a threat to life or property you may prune the tree to remove the threat.

If your property does not have vegetation protection there are no Council restrictions on the removal of trees or vegetation.

It is recommended you also contact the Queensland Government to ascertain any other vegetation protection laws that may apply in some circumstances.

Removing trees and other vegetation

If you have protected vegetation, you can remove trees and other vegetation from your property without Council approval if located within:

- 10m of an approved dwelling on any property
- 3m of an approved structure, including sheds and pools
- 3m of a property boundary, as reasonably necessary, to construct or maintain a boundary fence or to create a fire break.

See Local Law Policy No.6 (Protection of Vegetation) for full details.

Reasonably necessary is a circumstance where there is no alternative way of achieving the purpose that is prudent and feasible. For example, a fire break requires a likely fire source and would not typically require the removal of mature trees as they do not necessarily increase the spread of fire.

In some cases, these clearing exemptions may not apply if the tree or trees are specifically identified and protected by a TPO, VPO, a condition of development approval or covenant.

Removing dead or dangerous trees when protected

Dead or dangerous trees on small urban lots containing a dwelling, may generally be removed as they are considered high risk with no sustainable management options available.

On rural properties with protected vegetation, Australian Standard (AS4373-2007) provides guidance for how habitat trees can be rendered safe by pruning. To ensure appropriate consideration of how to manage or remove a dead or dangerous tree it is recommended you obtain advice from a registered arborist prior to removal.

A qualified arborist can determine whether the tree should be retained, pruned or removed by considering factors such as:

- the tree's health and structural integrity
- the tree's proximity and height to dwellings and structures
- how frequently people are around the tree
- wind loading
- drainage conditions around the root zone

If you intend to remove a tree, Council must be contacted if the tree is protected and is outside the listed exemptions within Local Law Policy No.6.

Tips for maintaining trees

National Guidelines are available (Australian Standard AS4373-2007) for the routine pruning and maintenance of amenity trees. Generally the following tree management can be undertaken without Council approval:

- removal of deadwood
- removal of hazardous limbs
- crown lifting
- formative pruning
- selective pruning
- crown thinning
- remedial or restorative pruning
- removal of environmental and declared weed species
- removal of regrowth associated with the maintenance of existing, pasture, cultivated fields, firebreaks, lawn or garden areas, and boundary fence lines
- pruning to avoid or prevent damage to above-ground services.

Other activities that may result in damage to protected trees may need Council approval.

- For more information visit Council's website Ⓦ **redland.qld.gov.au**

You can search Council's website pages for information on;

- native_wildlife_trees_and_plants,
- managing_trees_on_private_property
- local_law_6_protection_of_vegetation,
- Local Law 3 – Community and Environmental Management.

Redland CITY COUNCIL

11.1.3 FEDERAL COURT NATIVE TITLE CLAIMS – QUANDAMOOKA COAST QUD 126/2017; AND DANGGAN BALUM (FIVE RIVERS) PEOPLE QUD 331/2017

Objective Reference: **A2843887**
Reports and Attachments (Archives)

Attachments:

1. **20171108 QC2017 007 Notification letter to Redland City Council**
2. **Federal Court Form 5 and guides**
3. **QC2017_007 Extract from Registered RNTC**
4. **QC2017 007 List of interests of Redland City Council**

Authorising/Responsible Officer: **Andrew Ross**
General Counsel

Report Author: **Andrew Ross**
General Counsel

PURPOSE

This report provides an update on the Quandamooka Coast Claim for noting and a recommendation to join court proceedings for a new Native Title Claim made by the Danggan Balum (Five Rivers) People covering approximately 33 square kilometres in southern Redlands.

BACKGROUND

Quandamooka Coast Claim

On 4 October 2017 Council resolved to join as a party to the Quandamooka Coast Native Title Claim ('Claim') filed in the Federal Court.

On 6 February 2018 the Federal Court reviewed the Claim and noted 14 respondents had joined the proceedings with interests in the claim area including the Commonwealth of Australia, State of Queensland, Energex, Telstra, Brisbane City Council and private entities and persons.

On 3 August 2018 the Court will review the progress of the matter.

By 31 October 2018 the claimants propose to provide native title and cultural heritage connection material to the State of Queensland and interested parties, for review.

The recommendation is that Council note the progress of the Claim.

Danggan Balum (Five Rivers) People

On 8 November 2017 the National Native Title Tribunal wrote to Council regarding the Danggan Balum (Five Rivers) People ('Five Rivers Claim').

The Five Rivers claim covers an area of 3,094 square kilometres with approximately 33 square kilometres in southern Redlands mainland.

The Five Rivers Claim is made over those areas where native title has not been extinguished, so that traditional laws and customs may continue.

Native Title has been extinguished by private freehold land and lawful public works, such as roads, water and waste facilities, depots, libraries, community facilities and the like. Key areas of Native Title interest will be over unallocated State land such as the Moreton Bay, foreshore, tributaries and reserves. If Native title is established over those areas the court will determine how those rights and interest can be exercised with broader public, private and commercial interests.

The Claim is assessed under the Commonwealth Native Title Act 1993 by three key stages, which are dependent on stage one assessment of archaeological evidence (referred to as 'Connection Material') which could take several months or often longer:

Stage 1: Assessment of Connection and Archaeological evidence
Stage 2: Assessment of Nature and Extent of Native Title Interests
Stage 3: Court Orders and or Indigenous Land Use Agreement.

ISSUES

Timeframe: It is difficult to precisely predict the timeframes of both claims however it will at least take several months and usually over 12 months depending on the nature of third party interests, extent of archaeological evidence and court timetabling.

Roles and Responsibilities: The State is considered the principal respondent and has the expertise and resources and takes a lead role in the Court proceedings in particular the connection material and expert archaeological evidence. If the assessment accepts connection material wholly or partly then the parties will likely progress to stages two and three into the nature and extent of Native title interests.

Council and Community Interest: The Council and community have broader interests to identify government infrastructure and services, land tenure and public use and access exists with native title interests.

Information and Clarification: Native Title information is available on the Council website and will be updated to reflect the progress of both claims.

The recommendation is that Council resolve to join as a party to the Danggan Balum (Five Rivers) People court claim.

STRATEGIC IMPLICATIONS

Financial

The claim is considered within the existing budget, subject to issues as they may arise during the assessment of the claim.

CONSULTATION

The senior management group and key staff have been consulted on the claim and a working group will be formed if the claim progresses. In particular key internal stakeholders that form part of the existing Indigenous Land Use Agreement framework will be regularly consulted as part of that framework.

OPTIONS

Option One

That Council resolves to:

1. Note the report update on the Quandamooka Coast Claim; and
2. Join as a party to the Danggan Balum (Five Rivers) People court claim.

Option Two

That Council resolves not to note the report update on the Quandamooka Coast Claim; and to not join as a party to the Danggan Balum (Five Rivers) People court claim.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Note the report update on the Quandamooka Coast Claim; and**
2. **Join as a party to the Danggan Balum (Five Rivers) People court claim.**

National Native Title Tribunal

Reference: QC2017/007

8 November 2017

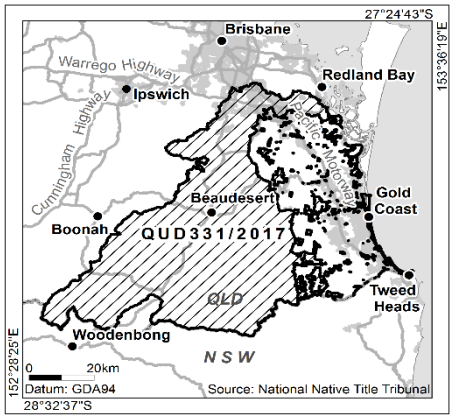
Andrew Chesterman
Chief Executive Officer
Redland City Council
PO Box 21
CLEVELAND QLD 4163

By email: rcc@redland.qld.gov.au

Dear Mr Chesterman

Claimant Application—Danggan Balun (Five Rivers) People
Federal Court Application No—QUD331/2017

This letter is to advise you that the above native title determination application was made to the Federal Court of Australia (Federal Court) in relation to the area described below.



Application name: Danggan Balun (Five Rivers) People
Federal Court File No: QUD331/2017
Date filed: 27 June 2017
Registration test status: The Native Title Registrar has ***accepted*** this application for registration.
Description: The claim covers an area of about 3094 sq km which at the southern boundary extends approx. 100km inland from Tweed Heads, following the QLD, NSW border. The northern extent is located approx. 20km south of the Brisbane CBD.
Relevant LGA: Brisbane City Council, Gold Coast City Council, Logan City Council, Redland City Council & Scenic Rim Regional Council.

A brief summary of the application is enclosed for your information.

The application was filed on 27 June 2017 and on 14 September 2017 the Native Title Registrar (Registrar) accepted the claim in the application for registration on the Register of Native Title Claims.

Section 66(3)(a) of the *Native Title Act* 1993 (Cth) (the Act) requires the Registrar to give notice of the details of applications made under s 61 of the Act to certain persons and bodies.

Level 14, Cairns Corporate Tower, 15 Lake Street, Cairns QLD 4870 l GPO Box 9973, Cairns QLD 4870 l **www.nntt.gov.au**
Email Enquiries@nntt.gov.au | Telephone +61 7 4046 9000 l Freecall 1800 640 501 l Facsimile +61 7 4046 9050

A search of State Government records shows the council has interests within the application area. A list of the council's interests is enclosed for your reference.

The notification day for this application is 29 November 2017.

If the council wishes to become a party to this application, you must apply to the Federal Court **on or before 28 February 2018**, and request to become a party. Please use the enclosed form *(Federal Court Form 5)* to do so. Also enclosed is the Federal Court's Guide to completing the form.

The Form 5 may be lodged in person at the Federal Court Registry, by post, by facsimile, by eLodgment or by email. Please refer to the contact information at the bottom of the enclosed guide and the eLodgment handout which is also enclosed.

With respect to deciding whether to become a party to this application, please note as follows:

- If any person/body who does not apply to become a party to the application on or before 28 February 2018 subsequently wishes to become a party to the application, that person/body would have to seek the leave of the Federal Court under 84(5) of the Act.

- All parties in proceedings before the Federal Court are required to act consistently with the Federal Court's goals of resolving disputes according to law and as quickly, inexpensively and efficiently as possible. All parties have a responsibility to participate in the proceedings when required, to comply with Federal Court orders affecting them and to maintain their knowledge of how a proceeding is progressing.

Persons who might hold native title rights and interests please note: As there can be only one determination of native title for an area, if a person does not become a party in relation to the application, there may be no other opportunity for the Federal Court, in making its determination, to take into account that person's native title rights and interests in relation to the area concerned.

If you have any queries about the contents of this letter or the enclosures accompanying it, please contact Claire Smith, the Practice Leader, on 08 9425 1104 to discuss.

Regards

M Otto.

Maree Otto
Acting Practice Leader

Tel: 07 4046 9017
Email: Maree.Otto@nntt.gov.au

Enclosed List of the council's interests
Register extract (and attachments)
Form 5 and Guide
eLodgment handout

FEDERAL COURT OF AUSTRALIA

_____ REGISTRY

(Insert State where filing)

GENERAL DIVISION

Form 5

Native Title Act 1993

Notice of Intention to Become a Party to an Application

To: **The District Registrar**
Federal Court of Australia

1. Name of Native Title Determination Application:

Insert the name of the Native Title Determination Application as shown on the notification advertisement in the newspaper or in the letter received from the National Native Title Tribunal.

2. Federal Court File Number:

Insert the Federal Court file number. This is shown on the notification advertisement or in the letter from the National Native Title Tribunal.

3. Name of person, company or organisation wishing to become a party:

Insert the name of the person/s, company or other organisation wishing to become a party. If a person, write the name in full; initials are not sufficient.

4. Address of person, company or organisation wishing to become a party:

Insert the address of the person(s), company or organisation wishing to become a party.

5. Details of interest claimed:

Describe the nature of your interest/s and the manner in which it/they may be affected by a Native Title Determination.

Documentary evidence should be supplied. For example, if you hold a lease or licence in respect of the claim area please attach to this Form a copy or photocopy of that lease or licence. Identify the type of interest and its location in the claim area.

I [or We] give notice under paragraph 84(3)(b) of the Act that I [*or* we] want to be a party in relation to the application under section 61 of the Act. The basis on which I [*or* we] want to become a party is *:

* More information can be provided and labelled "Attachment A"

6. Name of legal representative (if any):

Insert the name of your legal representative (if you are legally represented).

7. Name of contact person (if not legally represented):

If you are not legally represented, insert the name of a person on whom documents can be served and to whom correspondence can be sent.

8. Address for service of legal representative or contact person:

Insert the full address of your legal representative (if any) or the contact person you have nominated in 7 above. Please note that this address must be a street address, not a post office box number.

Address/DX:

Telephone:

Facsimile:

Mobile:

E-mail:

9. Signature/Execution:

Insert the signature of:

(a) The legal representative (if any),
or
(b) Each person lodging the notice (eg members of a family group),
or
(c) Two directors of a company or a director and the company secretary (or one director, if a sole proprietor company). Note that a common seal may also be affixed.
or
(d) An authorised officer of an organisation (eg CEO of a local authority).

10. Print Name(s) :

Insert the full name of each signatory in 9 above. Please use capital letters.

11. Date:

Federal Court of Australia

Guide to Native Title Form 5

Notice of Intention to become a party to an application

Please read this guide and the form carefully. As the person or organisation giving notice of intention to become a party to a native title determination application, you are responsible for making sure all your paperwork is in order before any court hearing. Although the Court's Registry staff can help you complete the form and give you information about procedure, they can not give you legal advice and they are not responsible for the accuracy of your documents.

How do you apply?

The Form 5 should be completed and lodged in the Federal Court within the period specified in the notification letter or advertisement from the National Native Title Tribunal. The Form 5 must be received by the Court no later than 4.30pm on the last day of that notification period.

Where do you lodge the Form 5?

The Form 5 may be lodged in person at the Federal Court Registry, by post, by facsimile, by eLodgment or by email. Please refer to the contact information at the bottom of this guide.

Information and instructions on registering and using eLodgment are contained in the enclosed information sheet. Further information about eLodgment can be found in the "Online Services" section of the Court's website: http://www.fedcourt.gov.au/online-services .

(Note: When eLodging a Form 5, the 'document type' will be 'correspondence' which can be found in the drop-down menu under the 'Case Administration' heading. The 'Role type of the party seeking to be joined will be 'Prospective Respondent'.)

How do you fill in the Form 5?

The Form 5 is to be completed by printing clearly in pen or by typing.

A separate Form 5 should be completed by each person or the organisation (i.e. interest holder) wanting to become a party. However, persons or members of a family may use the one form where they are asserting that each person or family member holds the same or a similar interest that may be affected by a Native Title Determination Application and have the same service address. Each person or family member must sign the form.

The form 5 **must** be accompanied by evidence of the interest you are seeking to rely upon to support your application, for example by attaching a copy of the lease, licence, permit, etc.

Please refer to the notes in the margin on the attached Form 5 to assist in filling out the form.

Should you require assistance about whether you have an interest that may be affected by a Native Title Determination Application you should obtain your own advice.

What happens next?

The Federal Court considers and decides all applications to become a party. You will be notified whether you are required to attend Court or provide any further written reasons or documents to support your application. The Court will notify all persons/organisations of the outcome of their application in due course.

What happens if I am made a party?

All parties in proceedings before the Federal Court are required to act consistently with the Court's goal of resolving disputes according to law and as quickly, inexpensively and efficiently as possible. All parties have a responsibility to participate in the proceedings when required, to comply with Court orders affecting them and to maintain their knowledge of where a proceeding is up to. You must inform the Court in writing of any change in your address for service or contact details within 14 days of the change.

Federal Court Addresses:

Australian Capital Territory Registry
Nigel Bowen Commonwealth Law Courts Building
Childers Street
CANBERRA CITY ACT 2601
Tel. (02) 6267 0666
Fax. (02) 6267 0625
Em. NativeTitleNSW@fedcourt.gov.au

New South Wales Registry
Level 17, Law Courts Building
Queens Square
SYDNEY NSW 2000
Tel. (02) 9230 8567
Fax: (02) 9230 8535 (general)
Fax. (02) 9230 8295 (fax filing)
Em. NativeTitleNSW@fedcourt.gov.au

Northern Territory Registry
Level 3, Supreme Court Building
State Square
DARWIN NT 0800
GPO Box 1806
DARWIN NT 0801
Tel. (08) 8941 2333
Fax. (08) 8981 4941
Em. NativeTitleNT@fedcourt.gov.au

Queensland Registry
Level 6, Harry Gibbs Commonwealth Law Courts Building
119 North Quay
BRISBANE QLD 4000
Tel. (07) 3248 1100
Fax. (07) 3248 1266
Em. NativeTitleQLD@fedcourt.gov.au

South Australia Registry
Level 5, Roma Mitchell Commonwealth Law Courts Building
3 Angas Street
ADELAIDE SA 5000

Tel. (08) 8219 1000
Fax. (08) 8219 1001
Em. NativeTitleSA@fedcourt.gov.au

West Australia Registry
Peter Durack Commonwealth Law Courts Building
1 Victoria Avenue
PERTH WA 6000
Tel. (08) 9268 7100
Fax. (08) 9221 3261 (general)
Fax: (08) 9268 7208 (fax filing)
Em. NativeTitleWA@fedcourt.gov.au

Victoria Registry
Owen Dixon Commonwealth Law Courts Building
305 William Street
MELBOURNE VIC 3000
Tel. (03) 8600 3333
Fax. (03) 8600 3351
Em. NativeTitleVIC@fedcourt.gov.au

Tasmania Registry
Edward Braddon Commonwealth Law Courts Building
39-41 Davey Street
HOBART TAS 7000
Tel. (03) 6232 1615
Fax. (03) 6232 1601
Em. NativeTitleVIC@fedcourt.gov.au

eLodgment
Federal Law

eLodgment is the electronic filing facility for the Federal Court of Australia and for the general federal law jurisdiction of the Federal Circuit Court of Australia.

Who can use eLodgment?

Any user of the Court whether they be a legal practitioner, an agency, corporate body or individual.

What computer equipment do I need so I can use eLodgment?

A computer with an internet connection, a web browser and an individual email account for contact purposes.

What information will I need to enter when I register?

- ABN/ACN (if applicable)
- Registered address (if applicable)
- Postal address
- Contact details (including individual name and email address)

What documents can be lodged via eLodgment?

Most initiating and supporting documents can be eLodged. See the Court's website www.fedcourt.gov.au/online-services/elodgment/faq-started for more information.

What type of documents can be eLodged?

eLodgment accepts most document formats:

- MS Word, Word Perfect
- PDF
- Rich Text Format
- MS Excel
- Image files such as .jpg, .gif and .tif.

Benefits of using eLodgment

- **Documents can be lodged any time, any day of the week.** Documents received up to 4:30pm will be processed on the same business day but documents received after 4:30pm will be deemed as filed on the next business day.
- **Save money** by eliminating paper, photocopying, postage, courier or agency costs.
- **Monitor** the progress of your electronically lodged documents.
- **Email notification** once the documents have been processed. The email contains a link to the documents. You can then access the documents for your records.
- **Customisable templates** can be created and reused, saving on data entry.

The Court uses SSL V3 certificates by VeriSign, to encrypt information being transmitted through the Internet to the Court's eServices facilities. This encryption prevents the information being viewed or tampered with during transit.

eLodgment is a web based application. It works best with Internet Explorer version 8 or 9 with compatibility view turned on.

Information about preparing your documents for eLodgment can be found on the Court's website see www.fedcourt.gov.au/online-services/elodgment

eLodgment
Federal Law

Getting started

Step 1

Go to eLodgment at www.elodgment.fedcourt.gov.au

Step 2

Register to use eLodgment. It is free and takes **one working day** to process.

Step 3

Determine how you will pay for applicable court fees or apply for a fee exemption. The Court accepts Visa, Mastercard, AMEX or law firms or organisations can open a credit account facility.

Lodge a document

Open www.elodgment.fedcourt.gov.au and log in. Have your document(s) ready to upload.

Step 1

Select the Jurisdiction and Type of Action.

Step 2

Upload the document and any supporting document(s). Be sure to use informative file names and, if required, type a clear description of the document you are lodging.

Step 3

Enter the contact details of the person responsible for the matter.

Step 4

Pay any necessary fees or provide information about a fee exemption.

Step 5

Finalise and submit the eLodgment.

What happens next?

During registry business hours, your eLodged document(s) generally will be processed within an 1 hour after being received by the registry. Some documents may require more time to process. Once processed, the document will be available via the 'Lodgment History' area of eLodgment where you can print, download or email them.

Law firms or organisations can apply to the Registrar to establish an account facility for fees. An account facility usually takes 10 working days to be approved. Once approved you will be invoiced monthly for lodgments.
For more information and an application form, see www.fedcourt.gov.au/online-services/elodgment/information

For more information, call the Native Title Section on (07) 3248 1217, visit the Court's website www.fedcourt.gov.au or email the Native Title Section on NativeTitleQLD@fedcourt.gov.au

October 2013

National Native Title Tribunal

Extract from the Register of Native Title Claims

Application Information

Application Reference:	**Federal Court number:** QUD331/2017 **NNTT number:** QC2017/007
Application name:	Cindy Dargin & Ors on behalf of the Danggan Balun (Five Rivers) People v State of Queensland
Registration History:	Registered from 14/09/2017

Register Extract (pursuant to s. 186 of the *Native Title Act 1993*)

Application filed with:	Federal Court of Australia
Date application filed:	27/06/2017
Date claim entered on Register:	14/09/2017
Applicants:	Cindy Dargin, Ken Markwell, Tony Gordon, Shaun Davies, Anthony Dillon, Chris Levinge, Rory O'Connor, Melanie Gordon, Dina Paulson
Address for service:	Andrea Olsen Queensland South Native Title Services Limited Level 10, 307 Queen Street BRISBANE QLD 4000 **Phone:** (07) 3224 1200 **Fax**: (07) 3229 9880

Additional Information:

Not Applicable

DESCRIPTION OF THE AREA COVERED BY THE CLAIM:

Information identifying the boundaries of:

a) the area covered by the application; and

b) any areas within those boundaries that are not covered by the application.

In relation to (a) above, a description of the area of land and waters covered by the application is provided at **"Attachment B"**.

In relation to (b) above, areas within the boundary identified in Attachment B that are not covered by the application are outlined below.

1. The area covered by the application excludes any land or waters that is or has been covered by:

a) a scheduled interest;

b) a freehold estate;

c) a commercial lease that is neither an agricultural lease nor a pastoral lease;

d) an exclusive agricultural lease or an exclusive pastoral lease;

e) a residential lease;

f) a community purpose lease;

g) a lease dissected form [sic] a mining lease and referred to in section 23B(2)(c)(vii) of the Native Title Act 1993 (Cth);

h) any lease (other than a mining lease) that confers a right of exclusive possession over particular land or waters.

2. Subject to paragraphs 4 and 5, the area covered by the application excludes any land or waters covered by the valid construction or establishment of a public work commenced on or before 23 December 1996.

3. Subject to paragraphs 4 and 5, exclusive possession is not claimed over area, which are subject to valid previous non-exclusive acts done by the Commonwealth or State of Queensland.

4. Subject to paragraph 6, where the act specified in paragraphs 1, 2 and 3 falls within the provisions of:

a) Section 23B(9) – Exclusion of acts benefiting Aboriginal Peoples or Torres Strait Islanders;

b) Section 23B(9A) – Establishment of a national park or state park;

c) Section 23B(9B) – Acts where legislation provides for non-extinguishment;

d) Section 23(9C) – Exclusion of Crown to Crown grants; and

e) Section 23(10) – Exclusion by regulation.

the land and waters covered by the act are not excluded from the application.

5. Where an act specified in paragraphs 1, 2 and 3 affects or affected land or waters referred to in:

- Section 47– Pastoral leases etc covered by claimant application;
- Section 47A – Reserves etc covered by claimant application;
- Section 47B – Vacant Crown land covered by claimant application,

the area covered by the act is not excluded from the application.

6. The area covered by the application excludes land or waters where the native title rights and interests claimed have been otherwise extinguished.

Where there is any discrepancy between the map provided at “Attachment C” and the written description contained here and in “Attachment B”, the latter prevails.

For the avoidance of doubt, the above sections relate to sections contained in the *Native Title Act 1993* (Cth).

PERSONS CLAIMING TO HOLD NATIVE TITLE:

Those persons who are descendants of the following Apical Ancestors and who identify and are recognised under the traditional laws and customs of the native title claim group as Danggan Balun (Five Rivers):

- Sarah *Warri/Warru* Clarke;
- George *Daramlee* Drumley;
- Jack Slab/Slabb Snr (husband of Lizzie *Waggil* Slabb & father of Charlotte, Frank, John/Jack Jnr, Olive & Victor);
- Kitty Blow (wife of Joseph Blow & mother of Frank Blow & Hughie Blow);
- Jackey Jackey aka *Bilin Bilin* aka *Bilin* aka John “Johnny” Logan (father of Emily Logan & Johnny Logan);
- Kipper Tommy Andrews (father of Lizzie Malay (nee Tommie);
- Julia Sandy (wife of Arthur Ford);
- Billy *Terribah/Didiba* Andrews (father of Elizabeth “Lizzie” Boyd (nee Andrews);
- Mary Ann Mitchell (mother of Mary Ann Drumley (nee Sandy), Ida Bell (nee Sandy), Norman Sandy Snr & Lindsay "Billy" Sandy);
- Unnamed mother of Matilda “Mittie” Fogarty (nee Sandy) and Lizzie (mother of William “Billy” Brown);
- Alice Edwards (nee Coolwell) (mother of Jack Jnr, Florence, Minnie, Eva, Eileen, Maud, Catherine, Evelyn & Julia);
- *Coolum* (husband of Nancy Culham (nee Coolwell) & father of Joseph “Joe”, Maude, Lucy & Lena);
- Unnamed mother of Nancy Culham (nee Coolwell) (wife of *Coolum* & mother of Joseph “Joe”, Maude, Lucy & Lena);
- *Yarry* (father of Frederick “Fred” Yarrie/Yarry);
- Joseph Coolwell (husband of Polly Allen/Dalton & father of Alfred, Eva, Edward, Rose, Campbell, Michael & Andrew);
- Polly Allen/Dalton (wife of Joseph Coolwell & mother of Eva, Edward, Rose, Campbell, Michael & Andrew);
- Elizabeth Wheeler/Tomes;
- Jim Edwards Snr (husband of Topsy (of Ipswich) & father of Jimmy Edwards Jnr).
- William Williams (Snr.)

REGISTERED NATIVE TITLE RIGHTS AND INTERESTS:

The following Native Title Rights & Interests were entered on the Register on 14/09/2017

1. Where exclusive native title can be recognised (such as areas where there has been no prior extinguishment of native title or where s.238 and/or ss.47, 47A and 47B apply), the native title claimants as defined in this application, claim the right to possession, occupation, use and enjoyment of the lands and waters of the application area to the exclusion of all others subject to the valid laws of the Commonwealth and the State of Queensland.

2. Where exclusive native title cannot be recognised, the native title claimants as defined in this application, claim the following non-exclusive rights and interests including the right to conduct activities necessary to give effect to them:

a) the right to access the application area;

b) the right to use and enjoy the application area;

c) the right to move about the application area;

d) the right to camp on the application area;

e) the right to erect shelters and other structures on the application area;

f) the right to enter and remain on the application area;

g) the right to hold meetings on the application area;

h) the right to hunt on the application area;

i) the right to fish in the application area;

j) the right to have access to and use the natural water resources of the application area;

k) the right to gather and use the natural resources of the application area (including food, medicinal plants, timber, tubers, charcoal, wax, stone, ochre and resin as well as materials for fabricating tools, hunting, implements, making artwork and musical instruments);

l) the right to share and exchange resources derived from the land and waters within the application area;

m) the right to participate in cultural and spiritual activities on the application area;

n) the right to maintain and protect places of importance under traditional laws, customs and practices in the application area;

o) the right to conduct ceremonies and rituals on the application area;

p) the right to transmit traditional knowledge to members of the native title claim group including knowledge of particular sites on the application area.

REGISTER ATTACHMENTS:

1. External Boundary Description, Attachment B of the application, 3 pages - A4, 27/06/2017
2. Map of the claim area, Attachment C of the application, 1 page - A4, 27/06/2017

Note: The Register of Native Title Claims may, in accordance with s. 188 of the Native Title Act 1993, contain confidential information that will not appear on the Extract.

ATTACHMENT B

Danggan Balun (Five Rivers)

External Boundary Description

The application area includes all of the land and waters within the external boundary described as:
Commencing at the intersection of the High Water Mark of the mainland and the northern boundary of the Lower Logan River Catchment, being the southernmost point of Native Title Determination Application QUD126/2017 Quandamooka Coast Claim and extending generally south-westerly along the High Water Mark of the mainland crossing Logan River, Pimpama River and Coomera River to Latitude 27.930840° South; then easterly to the western boundary of Lot 1 on CP908847 at Latitude 27.930995° South; then generally easterly along northern boundaries of that lot to its easternmost point; then easterly, generally southerly and generally north easterly passing through the Broadwater and the Gold Coast Seaway to a point in the Coral Sea about 200 metres north-easterly of the southern Breakwater at 153.434692° East, Latitude 27.933655°south passing through the following coordinate points:

Longitude East	Latitude South
153.420807	27.931632
153.422553	27.933563
153.423947	27.934566
153.425542	27.935197
153.426718	27.935324
153.427597	27.935322
153.427820	27.935321
153.428842	27.935053

Then generally southerly along a line 200 metres seaward of the High Water Mark to its intersection with the Queensland / New South Wales State Border; then generally south-westerly and generally westerly along that state border to its intersection with the eastern boundary of Palen Creek Catchment; then generally north-easterly, generally north-westerly and generally south-westerly along boundaries of that catchment to its intersection with the former Native Title Determination Application QUD66/2008 Githabul People #2.
Then generally westerly and generally south-westerly along boundaries of that former application to again the Queensland / New South Wales State Border, further described as:

Generally westerly along northern and western boundaries of the southern severance of Lot 737 on NPW739 and northern and western boundaries of Lot 240 on WD3604 to the Queensland/ New South Wales border.

Then generally westerly along that state border to its intersection with the eastern boundary of the Native Title determination Application QUD213/2017 Yuggera Ugarapul.

Then generally north-easterly along boundaries of that application to its intersection with the southern external boundary of Native Title Determination Application Yugara/YUgarapul People and Turrbal People Native Title Determination, further described as:

> Generally north-easterly, generally north-westerly and again generally north-easterly along eastern boundaries of Upper Teviot Brook Catchment, eastern and northern boundaries of Lower Teviot Book Catchment to its intersection with the western boundary of the Logan River Sub Basin Catchment (Lower Logan River Catchment); then generally north-easterly along boundaries of that catchment to Longitude 153.052006° East, Latitude 27.611598° South.

Then generally south-easterly, generally north-easterly and again generally south-easterly along southern external boundaries of Native Title Determination Yugara/YUgarapul People and Turrbal People, being northern boundaries of the Lower Logan River Catchment and onwards along boundaries of that catchment and southern boundaries of Native Title Determination Application QUD126/2017 Quandamooka Coast Claim, again northern boundaries of the Lower Logan River Catchment back to the commencement point.

To avoid any doubt the application area includes the following which are considered landward of the High Water Mark:

- Woogoompah Island
- Sovereign Islands
- Coomera Island

The application area does not include any land and waters within the external boundaries subject to:

- Native Title Determination NSD6019/1998 The Githabul People as determined by the Federal Court 29 November 2007.
- Native Title Determination QUD346/2006 - Gold Coast Native Title Group as determined by the Federal Court 13 December 2013.
- Native Title Determination QUD6196/1998, QUD586/2011 - Yugara/YUgarapul People and Turrbal People as determined by the Federal Court 16 March 2015.
- Native Title Determination Application QUD126/2017 - Quandamooka Coast Claim as filed in the Federal Court 08 March 2017.
- Native Title Determination Application QUD???/2017 - Yuggera Ugarapul as filed in the Federal Court 07 April 2017.
- Former Native Title Determination Application QUD66/2008 - Githabul People #2 as discontinued 10 August 2010.

Note:

Data Reference and source

- Application boundary complied by Queensland South Native Title Services (April 2017).
- Cadastral data sourced from Department of Natural Resources and Mines, Qld (February 2017).
- High Water Mark as defined in *the Land Act 1994* (Qld).
- High Water Mark interpreted where possible from cadastral data sourced from Department of Natural Resources

and Mines, Qld.

- Catchment boundaries derived from The South East Queensland Environmental Values Sub-catchments v2.0 dataset sourced from Department of Natural Resources and Mines, Qld (August 2010).

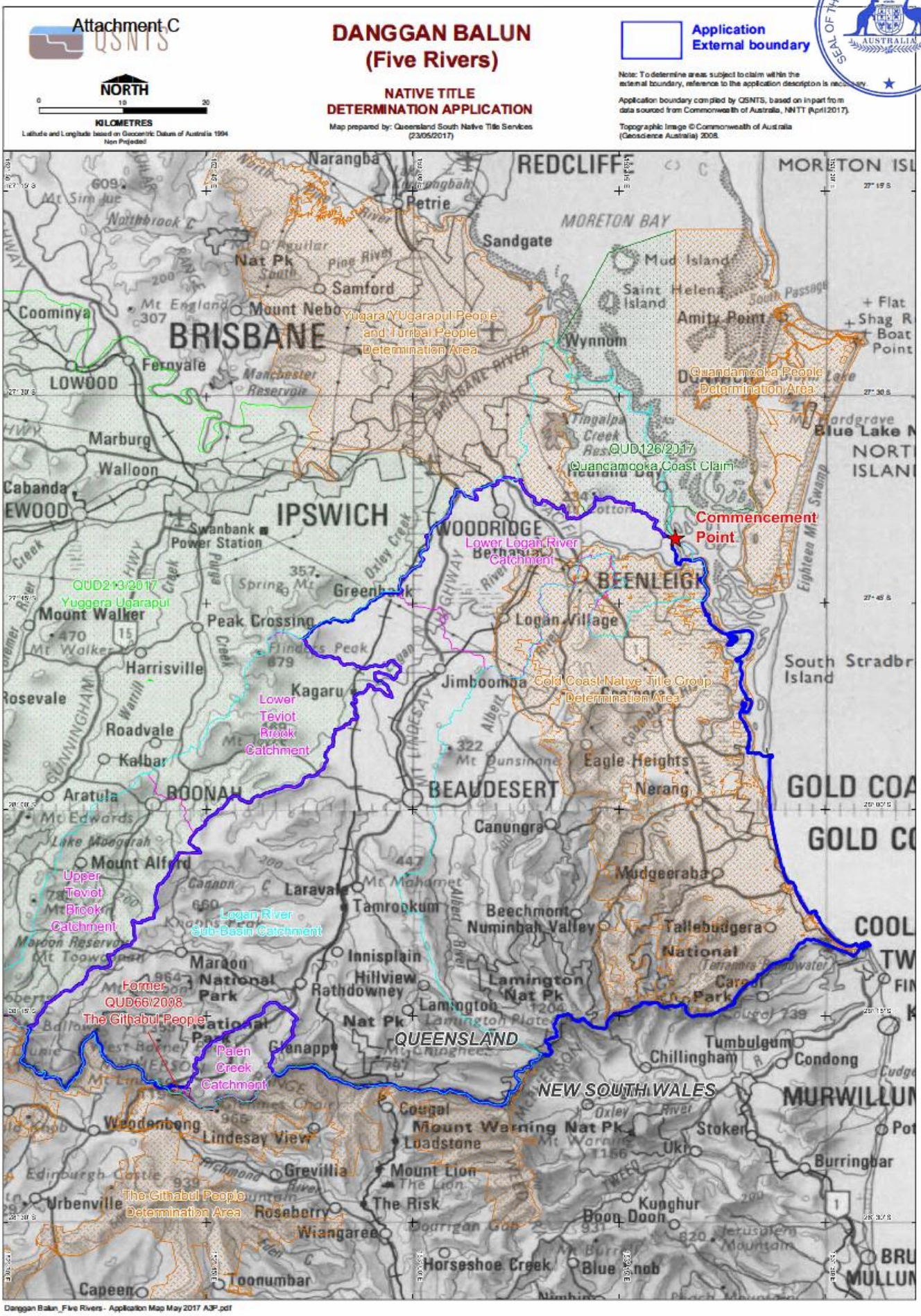
Reference datum

Geographical coordinates are referenced to the Geocentric Datum of Australia 1994 (GDA94), in decimal degrees and are based on the spatial reference data acquired from the various custodians at the time.

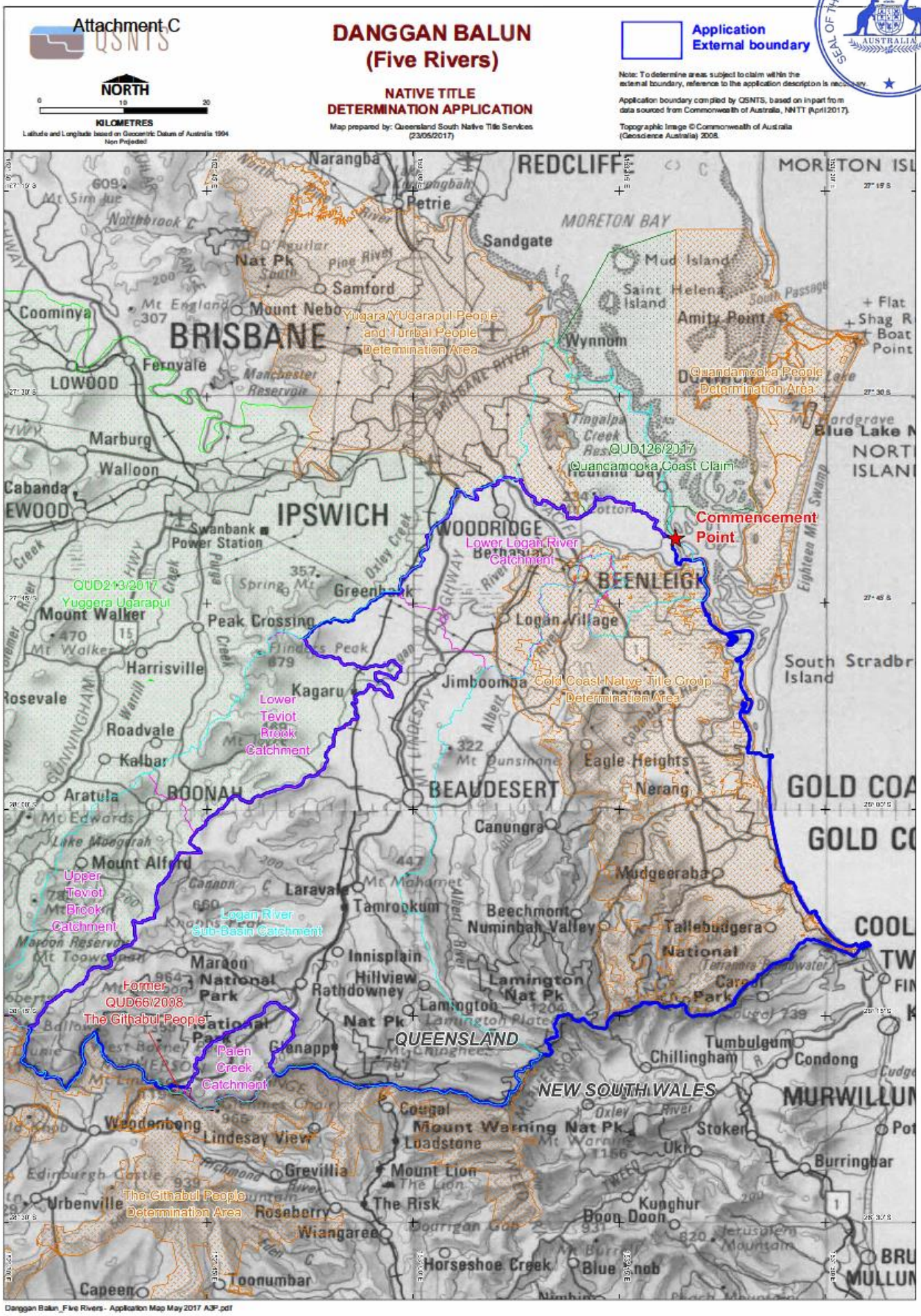
Use of Coordinates

Where coordinates are used within the description to represent cadastral or topographical boundaries or the intersection with such, they are intended as a guide only. As an outcome to the custodians of cadastral and topographic data continuously recalculating the geographic position of their data based on improved survey and data maintenance procedures, it is not possible to accurately define such a position other than by detailed ground survey.

Prepared by Queensland South Native Title Services (23 May 2017).



Danggan Balun_Five Rivers - Application Map May 2017 A3P.pdf


Attachment C
QSNTS
NORTH
KILOMETRES
Latitude and Longitude based on Geocentric Datum of Australia 1994
Non Projected
DANGGAN BALUN
(Five Rivers)
NATIVE TITLE
DETERMINATION APPLICATION
Map prepared by: Queensland South Native Title Services
(23/05/2017)
Application
External boundary
Note: To determine areas subject to claim within the external boundary, reference to the application description is necessary.
Application boundary compiled by QSNTS, based on in part from data sourced from Commonwealth of Australia, NNTT (April 2017).
Topographic Image © Commonwealth of Australia (Geoscience Australia) 2008.
SEAL OF THE FEDERAL COURT OF AUSTRALIA
Yugara/Yugarapul People and Turrbal People Determination Area
Quandamooka People Determination Area
QUD126/2017
Quandamooka Coast Claim
Commencement Point
Lower Logan River Catchment
Cold Coast Native Title Group Determination Area
QUD213/2017
Yuggera Ugarapul
Lower Teviot Brook Catchment
Upper Teviot Brook Catchment
Logan River Sub-Basin Catchment
Former QUD66/2008
The Githabul People
Paten Creek Catchment
The Githabul People Determination Area
QUEENSLAND
NEW SOUTH WALES
BRISBANE
IPSWICH
REDCLIFFE
MORETON BAY
Danggan Balun_Five Rivers - Application Map May 2017 A3P.pdf

QC2017/007 DANGGAN BALUN (FIVE RIVERS) PEOPLE
REDLAND CITY COUNCIL - TENURE INFORMATION

Lot_Plan	Tenure	Purpose	Trustee	Name	Commencement Date	Land Parcel Area (Sq Km)	Area of Overlap	% of Parcel Overlapping QC2017/007
987SP269414	RESERVE	PARK	REDLAND CITY COUNCIL	None	15/12/2014	0.006	0.000	6.26
988SP269365	RESERVE	PARK	REDLAND CITY COUNCIL	None	3/9/2014	0.001	0.001	62.14
905SP136096	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SANCTUARY DRIVE BUSHLAND REFUG	11/9/1998	0.049	0.049	98.79
1SP118737	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	None	2/6/2000	0.000	0.000	99.96
101SP189090	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	19/8/2009	0.000	0.000	100.00
102SP189090	RESERVE	PARK	REDLAND CITY COUNCIL	None	10/9/2009	0.002	0.002	100.00
260SL11166	RESERVE	CEMETERY	REDLAND CITY COUNCIL	None	22/2/1890	0.020	0.020	100.00
32SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/7/2011	0.001	0.001	100.00
33SP214172	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/10/2009	0.005	0.005	100.00
380SP238922	RESERVE	PARK	REDLAND CITY COUNCIL	None	28/2/2012	0.012	0.012	100.00
381SP238923	RESERVE	PARK	REDLAND CITY COUNCIL	None	4/9/2012	0.004	0.004	100.00
382SP238924	RESERVE	PARK	REDLAND CITY COUNCIL	None	4/7/2013	0.000	0.000	100.00
500SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/7/2011	0.001	0.001	100.00
602SP186282	RESERVE	PARK	REDLAND CITY COUNCIL	None	22/6/2007	0.004	0.004	100.00
608SP205881	RESERVE	PARK	REDLAND CITY COUNCIL	None	8/8/2008	0.019	0.019	100.00
609SP205881	RESERVE	PARK	REDLAND CITY COUNCIL	None	17/6/2008	0.002	0.002	100.00
611SP270557	RESERVE	PARK	REDLAND CITY COUNCIL	None	21/11/2014	0.000	0.000	100.00
612SP270557	RESERVE	PARK	REDLAND CITY COUNCIL	None	12/11/2014	0.001	0.001	100.00
613SP270655	RESERVE	PARKS	REDLAND CITY COUNCIL	None	10/4/2015	0.002	0.002	100.00
614SP270655	RESERVE	PARKS	REDLAND CITY COUNCIL	None	10/4/2015	0.000	0.000	100.00
67SP214172	RESERVE	PARK	REDLAND CITY COUNCIL	None	16/10/2009	0.003	0.003	100.00
69SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/7/2011	0.004	0.004	100.00
825SP221272	RESERVE	PARK	REDLAND CITY COUNCIL	None	5/5/2016	0.618	0.618	100.00
900SP238924	RESERVE	PARK	REDLAND CITY COUNCIL	None	23/7/2013	0.028	0.028	100.00
900SP242265	RESERVE	PARK	REDLAND CITY COUNCIL	None	13/5/2011	0.006	0.006	100.00
901SP148903	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SEEANA DRIVE PARK	26/9/1997	0.003	0.003	100.00
901SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	28/7/2011	0.004	0.004	100.00
902RP905851	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SEEANA DRIVE PARK	26/9/1997	0.004	0.004	100.00
902SP234018	RESERVE	PARK	REDLAND CITY COUNCIL	None	25/2/2011	0.005	0.005	100.00
902SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/7/2011	0.004	0.004	100.00
903SP143553	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SEEANA DRIVE PARK	26/9/1997	0.002	0.002	100.00
903SP229852	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/5/2010	0.001	0.001	100.00
903SP234018	RESERVE	PARK	REDLAND CITY COUNCIL	None	5/4/2011	0.007	0.007	100.00
904SP143553	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	PIMELEA CRESCENT PARK	26/9/1997	0.005	0.005	100.00
904SP221273	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/5/2015	0.005	0.005	100.00
904SP221344	RESERVE	PARK	REDLAND CITY COUNCIL	None	12/11/2010	0.023	0.023	100.00
904SP234018	RESERVE	PARK	REDLAND CITY COUNCIL	None	5/4/2011	0.000	0.000	100.00
904SP238921	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/10/2011	0.002	0.002	100.00

QC2017/007 DANGGAN BALUN (FIVE RIVERS) PEOPLE
REDLAND CITY COUNCIL - TENURE INFORMATION

Lot_Plan	Tenure	Purpose	Trustee	Name	Commencement Date	Land Parcel Area (Sq Km)	Area of Overlap	% of Parcel Overlapping QC2017/007
905SP163099	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	None	4/6/2004	0.010	0.010	100.00
905SP234018	RESERVE	PARK	REDLAND CITY COUNCIL	None	18/2/2011	0.000	0.000	100.00
906SP120556	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SANCTUARY DRIVE BUSHLAND REFUG	29/10/1999	0.018	0.018	100.00
906SP136096	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SANCTUARY DRIVE BUSHLAND REFUG	2/3/2001	0.035	0.035	100.00
906SP270644	RESERVE	PARK	REDLAND CITY COUNCIL	None	1/12/2015	0.010	0.010	100.00
907SP145318	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SANCTUARY DRIVE BUSHLAND REFUG	14/12/2001	0.006	0.006	100.00
907SP268709	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	None	29/10/1999	0.003	0.003	100.00
908SP145318	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	SANCTUARY DRIVE BUSHLAND REFUG	14/12/2001	0.033	0.033	100.00
908SP238921	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/11/2011	0.004	0.004	100.00
908SP268709	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	None	29/10/1999	0.019	0.019	100.00
909SP189088	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/7/2008	0.022	0.022	100.00
914SP189042	RESERVE	PARK	REDLAND CITY COUNCIL	None	4/4/2008	0.185	0.185	100.00
915SP221149	RESERVE	PARK AND RECREATION	REDLAND CITY COUNCIL	None	13/4/2012	0.167	0.167	100.00
916SP189088	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/7/2008	0.010	0.010	100.00
917SP189088	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	2/7/2008	0.000	0.000	100.00
918SP189088	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	2/7/2008	0.000	0.000	100.00
919SP189088	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	2/7/2008	0.000	0.000	100.00
920SP189088	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	2/7/2008	0.000	0.000	100.00
921SP189088	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	2/7/2008	0.000	0.000	100.00
922SP204993	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	4/7/2008	0.000	0.000	100.00
923SP204993	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	4/7/2008	0.000	0.000	100.00
924SP204993	RESERVE	PARK	REDLAND CITY COUNCIL	None	4/7/2008	0.002	0.002	100.00
925SP204993	RESERVE	PARK	REDLAND CITY COUNCIL	None	4/7/2008	0.006	0.006	100.00
926SP204993	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	4/7/2008	0.000	0.000	100.00
927SP221417	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/5/2010	0.057	0.057	100.00
950SP270722	RESERVE	PARK	REDLAND CITY COUNCIL	None	1/9/2015	0.000	0.000	100.00
951SP270722	RESERVE	PARK	REDLAND CITY COUNCIL	None	31/8/2015	0.000	0.000	100.00
953SP275410	RESERVE	PARK	REDLAND CITY COUNCIL	None	26/11/2015	0.000	0.000	100.00
989SP266514	RESERVE	PARK	REDLAND CITY COUNCIL	None	31/3/2014	0.003	0.003	100.00
990SP266514	RESERVE	PARK	REDLAND CITY COUNCIL	None	31/3/2014	0.009	0.009	100.00
995SP235692	RESERVE	PARK	REDLAND CITY COUNCIL	None	9/6/2011	0.034	0.034	100.00
996SP235692	RESERVE	PARK	REDLAND CITY COUNCIL	None	9/6/2011	0.004	0.004	100.00
997SP223398	RESERVE	PARK	REDLAND CITY COUNCIL	None	24/6/2010	0.022	0.022	100.00
997SP229852	RESERVE	PARK	REDLAND CITY COUNCIL	None	27/5/2010	0.001	0.001	100.00
997SP245975	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/5/2012	0.013	0.013	100.00
998SP214172	RESERVE	BUFFER ZONE	REDLAND CITY COUNCIL	None	26/10/2009	0.000	0.000	100.00
998SP223398	RESERVE	PARK	REDLAND CITY COUNCIL	None	24/6/2010	0.004	0.004	100.00
998SP234059	RESERVE	PARK	REDLAND CITY COUNCIL	None	29/7/2011	0.001	0.001	100.00
998SP245975	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/5/2012	0.002	0.002	100.00
999SP221344	RESERVE	PARK	REDLAND CITY COUNCIL	None	29/10/2010	0.002	0.002	100.00
999SP223392	RESERVE	PARK	REDLAND CITY COUNCIL	None	8/10/2009	0.001	0.001	100.00
999SP257699	RESERVE	PARK	REDLAND CITY COUNCIL	None	30/8/2013	0.004	0.004	100.00
999SP274603	RESERVE	PARK	REDLAND CITY COUNCIL	None	2/12/2015	0.015	0.015	100.00
536NPW717	RESERVE	NATIONAL PARK	None	BAYVIEW CONSERVATION PARK	No date			
219SP115966	RESERVE	NATIONAL PARK	None	CARBROOK WETLANDS CONSERVATION	No date			

11.2 COMMUNITY & CUSTOMER SERVICES

11.2.1 DECISIONS MADE UNDER DELEGATED AUTHORITY FOR CATEGORY 1, 2, & 3 DEVELOPMENTS

Objective Reference: **A2846231**
Reports and Attachments (Archives)

Attachment: **Decisions Made Under Delegated Authority 28.01.2018 to 03.02.2018**

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

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

Report Author: **Hayley Saharin**
Acting Senior Business Support Officer

PURPOSE

The purpose of this report is for Council to note that the decisions listed below were made under delegated authority for Category 1, 2 and 3 development applications. This information is provided for public interest.

BACKGROUND

At the General Meeting of 27 July, 2011, Council resolved that development assessments be classified into the following four Categories:

Category 1 – Minor Complying Code Assessments and Compliance Assessments and associated administrative matters, including correspondence associated with the routine management of all development applications;

Category 2 – Complying Code Assessments and Compliance Assessments and Minor Impact Assessments;

Category 3 – Moderately Complex Code and Impact Assessments; and

Category 4 – Major and Significant Assessments

The applications detailed in this report have been assessed under:-

- Category 1 criteria - defined as complying Code and Compliance Assessable applications, including building works Assessable against the planning scheme, and other applications of a minor nature, including all accelerated applications.
- Category 2 criteria - defined as complying Code Assessable and Compliance Assessable applications, including operational works, and Impact Assessable applications without submissions of objection. Also includes a number of process related delegations, including issuing planning certificates, approval of works on and off maintenance and the release of bonds, and all other delegations not otherwise listed.

- Category 3 criteria that are defined as applications of a moderately complex nature, generally mainstream Impact Assessable applications and Code Assessable applications of a higher level of complexity. Impact applications may involve submissions objecting to the proposal readily addressable by reasonable and relevant conditions. Both may have minor level aspects outside a stated policy position that are subject to discretionary provisions of the Planning Scheme. Applications seeking approval of a plan of survey are included in this category. Applications can be referred to General Meeting for a decision.

OFFICER'S RECOMMENDATION

That Council resolves to note this report.

Decisions Made Under Delegated Authority 21.01.2018 to 27.01.2018

CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR17/0300	Design and Siting - Dwelling	Andrew John Martin ZERK Catherine Leah ZERK	7 Sand Street Ormiston QLD 4160	Referral Agency Response - Planning	25/01/2018	NA	Approved	1
RAL17/0039	Standard Format - 1 into 2	JDC Designs & Planning	16 Carinya Street Cleveland QLD 4163	Code Assessment	25/01/2018	NA	Development Permit	2
RAL17/0041	Standard Format - 1 into 2 Lots	Construction Plus	22 Erobin Street Cleveland QLD 4163	Code Assessment	23/01/2018	NA	Development Permit	2
MCU17/0102	Dual Occupancy	East Coast Surveys Pty Ltd	41 Magnolia Parade Victoria Point QLD 4165	Code Assessment	25/01/2018	NA	Development Permit	4
MCU17/0164	Dwelling House	Amir Ralf ABBAS Edith ABBAS	2 Autumn Court Russell Island QLD 4184	Code Assessment	24/01/2018	NA	Development Permit	5
MCU18/0002	Dwelling House	Antonio Giacomo GIAMMICHELE	86 Treasure Island Avenue Karragarra Island QLD 4184	Code Assessment	24/01/2018	NA	Development Permit	5
DBW17/0037	Domestic Additions	East Coast Surveys Pty Ltd	35 Papaya Street Mount Cotton QLD 4165	Code Assessment	25/01/2018	NA	Development Permit	6
MCU17/0119	Extension to Currency Period of MC011645 (Dwelling House)	Mr Michel C Kvaskoff	11 Dawson Road Alexandra Hills QLD 4161	Minor Change to Approval	23/01/2018	NA	Approved	7
DBW17/0047	Domestic Additions - Patio	Fluid Approvals	354 Mount Cotton Road Capalaba QLD 4157	Code Assessment	22/01/2018	NA	Development Permit	9
DBW17/0042	Domestic Outbuilding (Carport)	Warwick Robert SHEPHARD	16 Mamala Street Birkdale QLD 4159	Code Assessment	24/01/2018	NA	Development Permit	10

Decisions Made Under Delegated Authority 21.01.2018 to 27.01.2018

CATEGORY2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
MCU17/0131	Veterinary Surgery	Miss Vicki N Hogan	7 Waterloo Street Wellington Point QLD 4160	Code Assessment	25/01/2018	NA	Development Permit	1
OPW17/0044	Operational Works - Prescribed Tidal Works - Pontoon System	Kelly Therese HAUPT	30 Cayman Crescent Ormiston QLD 4160	Code Assessment	24/01/2018	NA	Development Permit	1
OPW17/0029	Operational Works- ROL 1 into 5	Scarlett Constructions	24 Alma Street Thorneside QLD 4158	Code Assessment	25/01/2018	NA	Development Permit	10

Decisions Made Under Delegated Authority 28.01.2018 to 03.02.2018

CATEGORY1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
CAR18/0019	Design and Siting- Dwelling	Approveit Building Certification Pty Ltd	27A Bainbridge Street Ormiston QLD 4160	Referral Agency Response - Planning	31/01/2018	NA	Approved	1
MCU17/0169	Dwelling House	Metricon Homes Qld	96 Main Road Wellington Point QLD 4160	Code Assessment	30/01/2018	NA	Development Permit	1
DBW18/0001	Deck	ABC Certification Pty Ltd	13 Beaufort Court Cleveland QLD 4163	Code Assessment	02/02/2018	NA	Development Permit	2
MCU17/0128	Dwelling House	Antech Constructions Pty Ltd	19 Sentinel Court Cleveland QLD 4163	Code Assessment	02/02/2018	NA	Development Permit	2
RAL17/0035	Reconfiguring a lot - Rearranging Boundaries - 2 into 2	JDC Designs & Planning	66-68 Beelong Street Macleay Island QLD 4184	Code Assessment	30/01/2018	NA	Development Permit	5
CAR17/0256	Design and Siting- Carport & BOS	Cyber Drafting & Design Gold Coast	129 Orchid Drive Mount Cotton QLD 4165	Referral Agency Response - Planning	30/01/2018	NA	Approved	6
CAR18/0011	Design & Siting - Dwelling House	Building Code Approval Group Pty Ltd	25 Dawson Road Alexandra Hills QLD 4161	Referral Agency Response - Planning	01/02/2018	NA	Approved	8
DBW17/0043	Domestic Outbuilding	All Approvals Pty Ltd	1 Tipuana Drive Capalaba QLD 4157	Code Assessment	29/01/2018	NA	Development Permit	9
CAR18/0008	Design and Siting - Retaining Wall and Fence	Bartley Burns Certifiers & Planners	28 Creek Road Birkdale QLD 4159	Referral Agency Response - Planning	31/01/2018	NA	Approved	10
CAR18/0010	Design and Siting - Retaining Wall and Fence	Bartley Burns Certifiers & Planners	28A Creek Road Birkdale QLD 4159	Referral Agency Response - Planning	31/01/2018	NA	Approved	10

Decisions Made Under Delegated Authority 28.01.2018 to 03.02.2018

CATEGORY2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
OPW002250	Operational Works - MCU013955 - Multiple dwelling x 4	Antech Constructions Pty Ltd	73 Haggup Street Cleveland QLD 4163	Compliance Assessment	30/01/2018	NA	Compliance Certificate Approved	2
MCU17/0163	Change to Development Approval - MC010236 Dual Occupany	The Certifier Pty Ltd	6 Waller Court Point Lookout QLD 4183	Minor Change to Approval	29/01/2018	NA	Approved	2
MCU17/0110	Animal Keeping (horse riding arena and stables)	Statewide Survey Group Pty Ltd	58 Double Jump Road Victoria Point QLD 4165	Code Assessment	01/02/2018	NA	Development Permit	4
MCU17/0074	Inclusion of Refreshment Establishment as part of approved Service Station	Commercial Asset Management Services Pty Ltd	110 Redland Bay Road Capalaba QLD 4157	Impact Assessment	29/01/2018	NA	Development Permit	9

CATEGORY3

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
MCU013930	Preliminary Approval under Section 242 of the Sustainable Planning Act in accordance with the Kinross Road East Development Plan, and Standard Format - Stage 1 – 1 into 68 Lots, 3 Balance Lots, Park and Road	Andiworth Pty Ltd	53-65 Kinross Road Thornlands QLD 4164	Impact Assessment	12/01/2018	1/02/18	Development Permit	7

11.2.2 DEVELOPMENT AND PLANNING RELATED APPEALS LIST CURRENT AS AT 13 FEBRUARY 2018

Objective Reference:	**A2860636** **Reports and Attachments (Archives)**
Authorising Officer	**Louise Rusan** **General Manager Community & Customer Services**
Responsible Officer:	**David Jeanes** **Group Manager City Planning & Assessment**
Author:	**Emma Martin** **Senior Appeals Planner**

PURPOSE

The purpose of this report is for Council to note the current development and planning related appeals and other related matters/proceedings.

BACKGROUND

Information on appeals may be found as follows:

1. Planning and Environment Court

a) Information on current appeals and declarations with the Planning and Environment Court involving Redland City Council can be found at the District Court web site using the "Search civil files (eCourts) Party Search" service: http://www.courts.qld.gov.au/esearching/party.asp

b) Judgments of the Planning and Environment Court can be viewed via the Supreme Court of Queensland Library web site 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: http://www.courts.qld.gov.au/courts/court-of-appeal/the-appeal-process

3. Department of Infrastructure, Local Government and Planning (DILGP)

The DILGP provides a Database of Appeals (http://www.dlg.qld.gov.au/resources/tools/planning-and-environment-court-appeals-database.html) that may be searched for past appeals and declarations heard by the Planning and Environment Court.

The database contains:

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

b) Information about the appeal or declaration, including the appeal 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 & ENVIRONMENT COURT APPEALS

1.	**File Number:**	Appeal 3641 of 2015 (MCU012812)
Applicant:		**King of Gifts Pty Ltd and HTC Consulting Pty Ltd**
Application Details:		Material Change of Use for Combined Service Station (including car wash) and Drive Through Restaurant 604-612 Redland Bay, Road, Alexandra Hills
Appeal Details:		Applicant appeal against refusal.
Current Status:		Appeal filed in Court on 16 September 2015. Trial held 1-3 August 2017. Judgment handed down on 6 November 2017. Appeal allowed subject to finalising conditions. Draft conditions provided to the appellant in December 2017. The next Court review is 28 February 2018.

2.	**File Number:**	Appeal 1476 of 2017 (MC008414)
Applicant:		**Cleveland Power Pty Ltd**
Application Details:		Request to extend the relevant period – Biomass Power Plant at 70-96 Hillview Road, Mount Cotton (Lot 2 on RP30611)
Appeal Details:		Appeal against Council refusal
Current Status:		Appeal filed 27 April 2017. Experts have been appointed. A hearing date to be set for March 2018. The appellant has filed a separate application to the Court seeking to change the application. The next Court review is 28 March 2018.

3.	**File Number:**	Appeal 4515 of 2017 (ROL006084)
Applicant:		**Australian Innovation Centre Pty Ltd**
Application Details:		Reconfiguring a Lot (1 into 22 lots and park) at 289-301 Redland Bay Road, Thornlands (Lot 5 on RP14839)
Appeal Details:		Deemed refusal appeal
Current Status:		Appeal filed 23 November 2017. On 31 January 2018 Council solicitors notified the parties that it opposed the proposed development. A mediation is due before 9 March 2018 with a review of the matter scheduled for 16 March 2018.

4.	**File Number:**	Appeal 218 of 2018 (ROL005949)
Applicant:		**The Young Men's Christian Association of Brisbane**
Application Details:		Reconfiguring a Lot (2 into 2 lot boundary realignment) and Material Change of Use for Multiple Dwellings (48 units) at 124 and 126-128 Link Road, Victoria Point (Lot 10 on SP268336 and Lot 2 on SP157564)
Appeal Details:		Appeal against Council refusal
Current Status:		Appeal filed 22 January 2018.

5.	**File Number:**	Appeal 339 of 18 (MCU013949)
Applicant:		**Hosgood Company 3 Pty Ltd & DPK Injection Pty Ltd**
Application Details:		Material Change of Use for a Dual Occupancy at 2 Starkey Street, Wellington Point (Lot 11 on SP284567)
Appeal Details:		Appeal against Council refusal
Current Status:		Appeal filed 30 January 2018.

6.	**File Number:**	Appeal 461 of 2018 (MCU013977)
Applicant:		**Robyn Edwards and Ronald Edwards**
Application Details:		Material Change of Use for an Undefined Use (Rooming Accommodation) at 41 Ziegenfusz Road, Thornlands (Lot 291 on RP801793)
Appeal Details:		Appeal against Council refusal
Current Status:		Appeal filed 8 February 2018.

APPEALS TO THE QUEENSLAND COURT OF APPEAL

7.	**File Number:**	CA11075/17 (MCU013296)
Applicant:		**Nerinda Pty Ltd**
Application Details:		Preliminary Approval for Material Change of Use for Mixed Use Development and Development Permit for Reconfiguring a Lot (1 into 2 lots) 128-144 Boundary Road, Thornlands (Lot 3 on SP117065)
Appeal Details:		Co-respondent appeal against decision of the P&E Court
Current Status:		Application for leave to appeal filed 23 October 2017. All parties have filed Outlines, which are subject to review by the parties. Hearing has been set down for May 2018.

OTHER PLANNING & ENVIRONMENT COURT MATTERS

8.	**File Number:**	Application 4763 of 2017 (MC008414)
Applicant:		**Cleveland Power Pty Ltd**
Application Details:		Application to change a development approval – Biomass Power Plant at 70-96 Hillview Road, Mount Cotton (Lot 2 on RP30611)
Current Status:		Application filed 8 December 2017. The next Court review is scheduled for 21 February 2018. Both parties must outline their position on the application by 8 March 2018. A hearing is scheduled to consider the application on 12 March 2018.

DEVELOPMENT TRIBUNAL APPEALS AND OTHER MATTERS

9.	**File Number:**	CAR17/058
Applicant:		**Sean and Jane Carroll**
Application Details:		Development application to construct a carport at 22 Sommersea Court, Cleveland (Lot 666 on CP853643)
Appeal Details:		Appeal against Council's Referral Agency response that the application should be refused
Current Status:		Notice of appeal received on 27 November 2017.Tribunal hearing was held on 13 February 2018.

OFFICER'S RECOMMENDATION

That Council resolves to note this report.

11.2.3 EPRAPAH CREEK CORRIDOR SHARED PATHWAY

Objective Reference: **A2800844**
Reports and Attachments (Archives)

Attachments:

1. Eprapah Creek Pathway Alignment Option 1
2. Eprapah Creek Pathway Alignment All Options
3. Eprapah Creek Pathway Preferred Alignment
4. Eprapah Creek Pathway Project Roadmap7

Authorising Officer: **Louise Rusan**
General Manager Community and Customer Services

Responsible Officer: **David Jeanes**
Group Manager City Planning and Assessment

Report Author: **Giles Tyler**
Principal Advisor Infrastructure Planning and Charging

PURPOSE

This report seeks Council's formal endorsement for a preferred alignment of the proposed Eprapah Creek Corridor pathway and for the developer of the Affinity Estate Thornlands to meet its obligations under an existing Infrastructure Agreement to deliver the asset on the Council's behalf.

BACKGROUND

The pathway, including a footpath, bridge and boardwalk, is identified in the SE Thornlands Structure Plan as necessary infrastructure and has been carried over to the draft City Plan as infrastructure required for the functionality and liveability of the growth area. Its purpose is designed to improve access for all nearby residents and expand on the City's integrated cycle and pedestrian network to maximize connectivity to public open spaces, including the Eprapah Creek corridor, along with other major center attractors and commuting opportunities. The Structure Plan was adopted in 2010 following extensive public consultation and State review, as was the broad consultation on the draft City Plan.

As part of development application ROL005869 (3 into 32 lots) the developer and Council entered into an Infrastructure Agreement requiring the developer to construct the pathway, on behalf of Council, generally along an alignment reflected in ***Attachment 1: Eprapah Creek Pathway Alignment Option 1***. The exact location of the footpath and bridge was not approved as part of the ROL and potentially remains subject to a further operational works application.

This Infrastructure Agreement was drafted and agreed with the previous owners of the land, ARIA Ventures. When the land was sold to VillaWorld they were aware of this obligation under the Infrastructure Agreement.

VillaWorld called a meeting with Councillors and officers and outlined their concern regarding, primarily, the potential environmental impacts caused by providing this infrastructure. This was later followed up by an email drafted from VillaWorld outlining these concerns.

In a Councillor briefing on 18 May 2016 relating to a wider assessment of connectivity through the Eprapah Creek corridor, Councillors noted the obligations of the developer to deliver this infrastructure and the ongoing work by officers to determine the most appropriate alignment to reduce the environmental impact as much as practicable.

Since that time officers from the Planning, Engineering and Environmental assessment teams revisited the site with the developer's engineers (28 May 2016). During this site visit officers considered there may be alternative alignments that could reduce the environmental impact, but needed to discuss this further with officers within Council's Parks & Conservation team, City Spaces team and Project Delivery group. The developer's engineers were advised of this and it was suggested they postpone any further survey work on the initial alignment.

The assessment officers visited the site again (June 2016) with representatives from the above teams and provided an explanation of the findings to VillaWorld along with alternative options for the alignment and means of delivery.

As requested by RCC officers during a further site inspection in October 2016 the developer's engineers provided an opinion of the probable cost for Option 2 (as shown in ***Attachment 2 Eprapah Creek Pathway Alignment All Options***).

A subsequent Councillor briefing was held in February 2017, where officers presented three potential routes and an alternative connection to the shopping centre in the south east of the corridor. Councillors noted a preference for the Option 2 alignment with the alternative eastern connection (the preferred option as shown in ***Attachment 3 Eprapah Creek Pathway Preferred Alignment*)**. This was communicated to the developer with a view to restarting the planning and survey work.

Following a further meeting between the parties in May 2017, the developer subsequently requested that Council consider two alternatives to progress the project; noting that the developer has stated a strong preference for Option A:

Option A

VillaWorld pays Redland City Council $1,276,380.00 representing the full and final obligations under the Infrastructure Agreement and waiving any compensation for the circa $100,000 planning costs already incurred by VillaWorld above that amount. The option is not contingent upon Council specifically providing the pathway but ideally, the funds would contribute towards infrastructure in the catchment of the development.

Option B

Redland City Council undertakes all design work and obtains all approvals for the preferred alignment, with VillaWorld constructing the pathway where any costs incurred over and above the $1,276,380.00 will be reimbursed by Council.

ISSUES

Bridge Options

Three options were investigated with Option 1 being the initial alignment proposed by the previous land owner and attached to the Infrastructure Agreement **(see *Attachment 1: Eprapah Creek Pathway Alignment Option 1)***. Option 2 explored a route to reduce ecological impact and overall cost to the community **(see *Attachment 2: Eprapah Creek Pathway Alignment All Options)***. The Preferred Alignment with an eastern deviation sought to achieve the same goals of Option 2 with greater access to the natural environment and avoidance of potential Crime Prevention Through Environmental Design (CPTED) issues associated with the existing off-road path in the south of the corridor **(see *Attachment 3: Eprapah Creek Pathway Preferred Alignment)***.

Infrastructure Agreement Obligations of the Parties

The obligations of the parties under the Infrastructure Agreement are summarised below. Specifically, the terms relating to the offer put forward by VillaWorld to waive construction in lieu of the financial consideration under the Agreement are addressed, as are the liabilities of the parties to pay costs for professional fees and works variations:

- The Agreement as it is currently written does not allow for VillaWorld to make a financial contribution in lieu of completing the works;
- The amount VillaWorld is required to pay for the design and construction of the works is capped at $1,276,380 (excluding GST);
- VillaWorld is liable to pay costs incidental to the completion of the works in excess of the $1,276,380 cap such as preparing and applying for operational works permits, development application fees and preparing, and submitting for approval designs and specifications for the works; and
- Variation to the works will have to be negotiated and mutually consented to by the parties.

Estimated Costs

Advice from the Project Delivery Group was sought regarding the current costs of delivering the project. The Preferred Alignment is estimated to be around $1,627,000 in 2017 dollars. This is an increase of $350,000 over the Agreement estimate and largely represents an increased bridge span, higher bridge flood-immunity, longer boardwalk length, additional pathway and potentially further cost with the northern footpath structure/ramp.

In effect, Council is obliged to fund the variation of design and layout but is not obliged to pay for the potentially significant costs of preparing and applying for permits, including any required studies and reports. Pursuant to the terms of the Agreement, Council is only obliged to assist the developer with providing owners consent to an application, lodging an application in its name and support with environmental approvals and any offset land/planting.

Were the Infrastructure Agreement not in place, Council would be bound to fully fund the project. The Agreement provides for a contribution from the developer of over $600,000 towards the pathway works with the balance of the cost offset against its infrastructure charges. With total infrastructure charges over this stage (ROL005869) of the Infinity Estate development in excess of $800,000, any additional offset above

the current agreed amount of $167,070 for the increased cost of the Preferred Alignment can be accommodated at no overall cost to Council.

While there is no real difference to Council between financial contributions under the Agreement and the VillaWorld payout offer, it does oblige VillaWorld to cover any further planning costs (if this is considered reasonable) and guarantees the project will be delivered under the terms of the Agreement.

Attachment 4 Eprapah Creek Pathway Project Roadmap provides an indication of potential permit requirements and project responsibilities as currently applying under the terms of the Agreement. Permits could include those relating to fisheries, vegetation management and water resources.

STRATEGIC IMPLICATIONS

Legislative Requirements

The pathway is identified in the SE Thornlands Structure Plan as necessary infrastructure and has been carried over to the draft City Plan.

An Infrastructure Agreement executed under the provisions of the Planning Act is binding upon all existing and future land owners upon implementation of the associated development permit.

Risk Management

There are no risks associated with the proposed recommendations.

Financial

There are no additional financial implications upon Council from the proposed recommendations other than any variation to the design and layout of the pathway required by Council. The Infrastructure Agreement contracts the developer to the sums stated in its terms but this can be varied to account for any increase in cost arising from any changes Council is seeking. No additional budget will be required as the cost of the variation would simply form a larger offset to the developer against their total infrastructure charges owing.

People

It is not anticipated that there will be significant impact on staff resources arising from the recommendations.

Environmental

Council’s preferred alignment minimises ecological impacts during the construction phase of the project.

Social

The preferred alignment option provides for improved CPTED outcomes.

Alignment with Council's Policy and Plans

The pathway is identified in the SE Thornlands Structure Plan as necessary infrastructure and has been carried over to the draft City Plan.

CONSULTATION

Consultation has occurred with the following:

- Councillors
- Asset Owner
- Parks & Conservation Team
- City Spaces Team
- Project Delivery Group
- Planning Assessment team
- Engineering and Environmental Assessment Team
- Legal Services Group

OPTIONS

Option One

That Council resolves to proceed with the Preferred Alignment with the developer to design and construct the asset in accordance with the terms of the Infrastructure Agreement for development application ROL005869.

Option Two

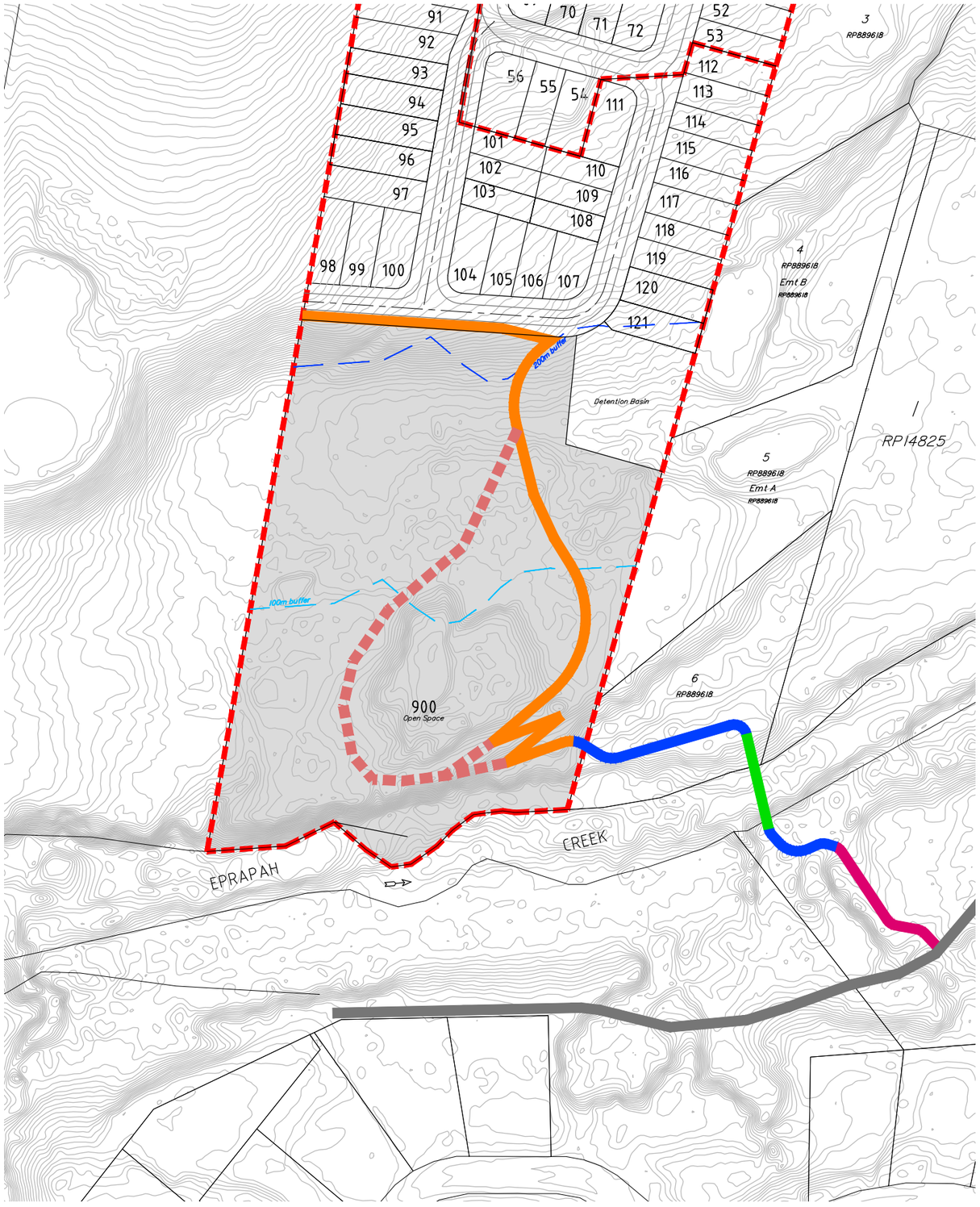
That Council resolves to proceed with the pathway project with further changes to the alignment determined by Council, with the developer to design and construct the asset in accordance with the terms of the Infrastructure Agreement for development application ROL005869.

Option Three

That Council resolves to proceed with the pathway project with Council undertaking the work itself and seek to terminate the Infrastructure Agreement by way of the developer paying Redland City Council $1,276,380.00 representing the full and final obligations under the Infrastructure Agreement and waiving any compensation for the circa $100,000 planning costs already incurred by VillaWorld above that amount.

OFFICER'S RECOMMENDATION

That Council resolves to proceed with the Preferred Alignment with the developer to design and construct the asset in accordance with the terms of the Infrastructure Agreement for development application ROL005869.



LEGEND

- PROPOSED 2.5m WIDE SHARED FOOTPATH (P100) - 400m
- PROPOSED 3.0m WIDE STEEL BRIDGE - 40m
- PROPOSED 2.5m WIDE BOARDWALK - 100m
- PROPOSED 2.5m WIDE SHARED FOOTPATH - 50m
- ADDITIONAL CONSTRUCTION ACCESS - 246m
- EXISTING FOOTPATH TO REMAIN
- STAGE BOUNDARY
- LIDAR SURVEY EXISTING NATURAL SURFACE CONTOURS

FOOTPATH LENGTHS ARE APPROXIMATE AND ARE SHOWN FOR DISCUSSION PURPOSES ONLY

Issue	Description	By	Ckd	Date
A	ORIGINAL ISSUE	S.G.	G.C.	22/09/15

100mm on Original

Scale: 0 10 20 40 60 80 100m — 1 : 1000

Surveyor

Architect

Filename: K100-AA007417-BND-00-FOOTPATH.DWG

Client: ARIA property international

Status: PRELIMINARY — NOT TO BE USED FOR CONSTRUCTION

Approved

R.P.E.Q No : ----

Scales	1 : 1000	Current Issue Signatures	
Original Size	A1	Author S. GORMAN	
Height Datum	AHD	Designer -	
Grid	GDA94	Reviewer G. COLES	

Project: BOUNDARY ROAD, THORNLANDS

Title: PATH ASSESSMENT LAYOUT PLAN

HYDER CONSULTING Pty Ltd
ABN 76 104 485 289
Level 7, 199 Grey Street
Locked Bag 2017
South Brisbane, QLD 4101
Australia

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Drawing No.	Project No.	Issue
K100	AA007417	A

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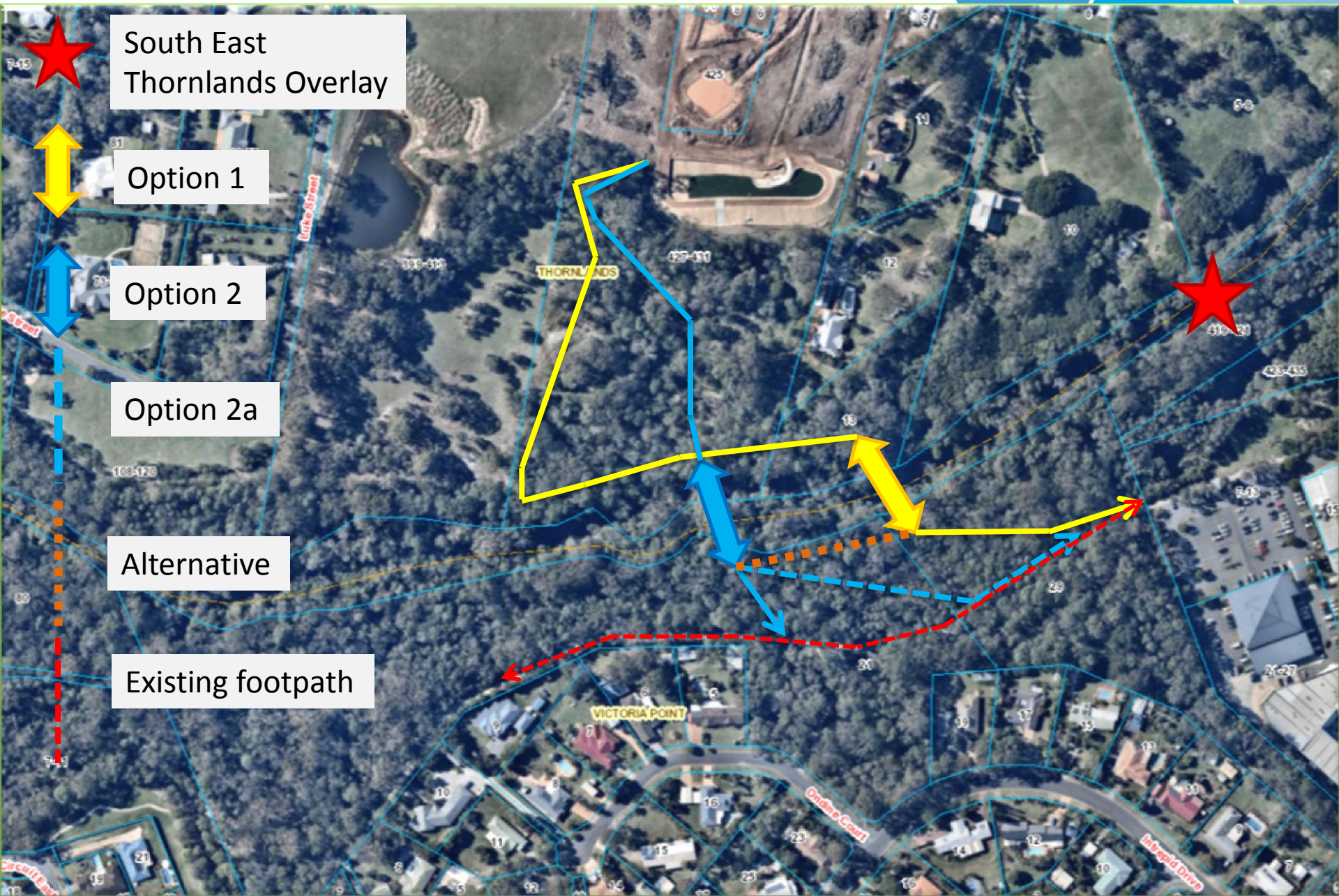
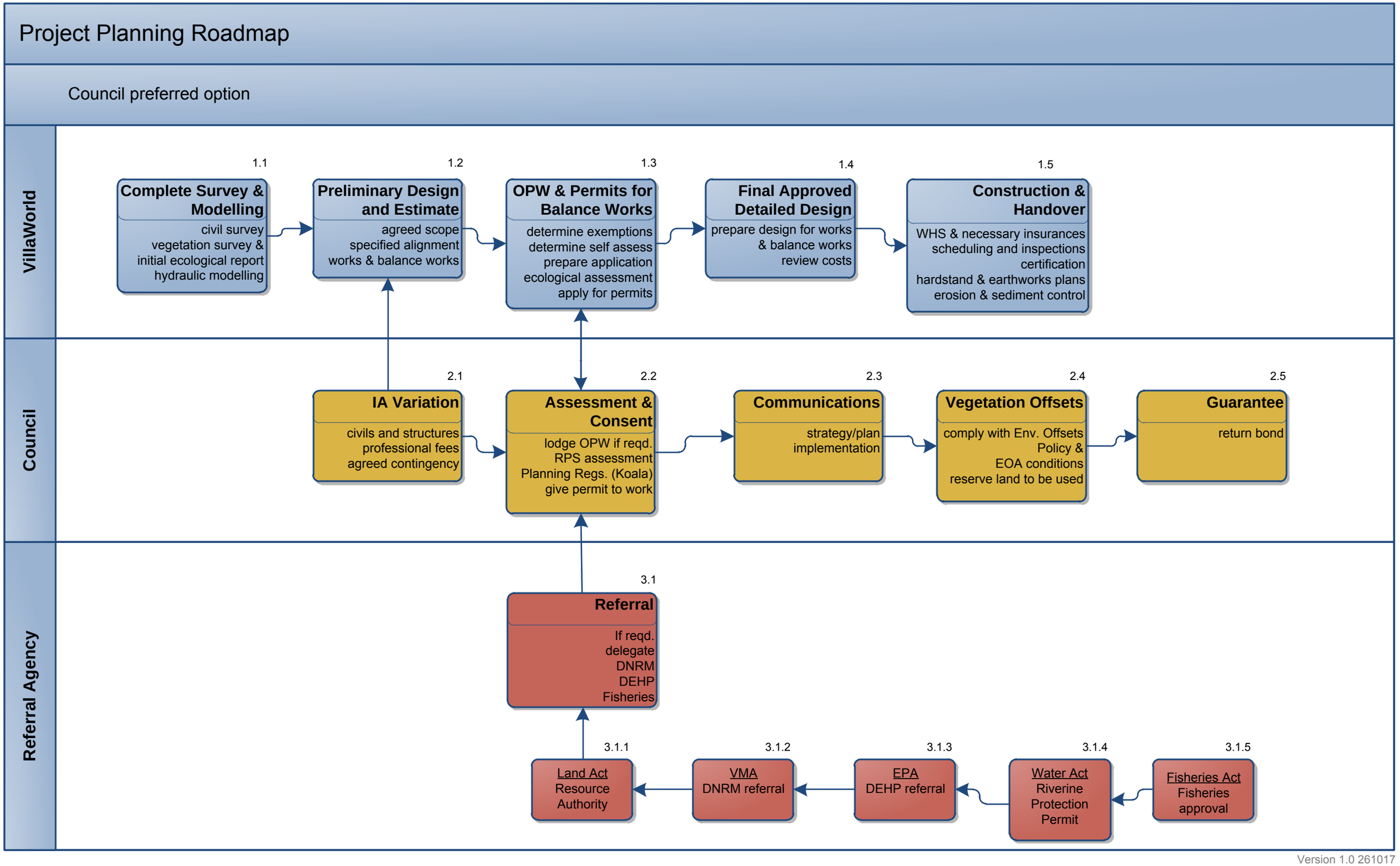
Bridge Options



Eprapah Creek Crossing

PROJECT: Eprapah Creek Crossing and Shared Path



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11.2.4 NATURAL ENVIRONMENTAL POLICY REVIEW

Objective Reference:	**A2708396** **Reports and Attachments (Archives)**
Authorising Officer:	**Louise Rusan** **General Manager Community & Customer Services**
Responsible Officer:	**Graham Simpson** **Group Manager Environment & Regulation**
Report Author:	**Candy Daunt** **Senior Advisor, Environment**

PURPOSE

This report seeks to provide Council a progress report on the status of the Natural Environment Policy POL 3128 and associated Strategies and Plans.

BACKGROUND

On 3 June 2015, Council adopted the Natural Environment Policy POL-3128 and Green Living Policy POL-3130. The two environment policies were created as a consolidation of the previous nine separate environment policies in order to improve clarity; overcome inconsistencies and overlaps between the previous policies which were drafted over the previous 10 years and to provide consistency with the Corporate Plan.

On 4 October 2017, a Notice of Motion brought by Cr Wendy Boglary (Item 14.3.1) resolved that Council resource and review the Natural Environment Policy POL-3128 and develop the strategy to set the direction of the Policy.

ISSUES

Upon adoption of the Natural Environment Policy – POL-3128, it was allocated a review date of 30 June 2018 in accordance with Council's Policy Development Manual.

As such, a formal review of the Policy will occur prior to that date to ensure it remains contemporary and inclusive of those issues relevant to achieving Council's Corporate Plan outcomes for a Healthy Natural Environment.

The Council resolution adopting the Natural Environment Policy POL-3128 included that Council:

Prepare updated strategies and plans to progress the Green Living and Natural Environment policies, giving priority to:

a. Koalas
b. Corridors and Networks
c. Urban Trees
d. Offsets; and
e. Enhancing the Visitor Experience by unlocking the value of protected areas for health and wellbeing, while conserving biodiversity

Based on this resolution, Council's Environment and Education Unit set an agenda to move through the listed strategies and plans in a logical and sequential way. That is, most of the strategies and plans listed rely on the completion of pre-requisite studies and collaboration being completed, prior to completion and adoption by Council.

In order of priority, the koala strategy work was deemed of most importance given the data and reports associated with its ongoing vulnerability as a species.

The development of the corridors and networks (via Wildlife Connections Plan 2018) is a substantial piece of strategic and operational planning, with its completion vitally important in moving forward the proposed urban trees and offset strategies. More specifically, the mapping as part of the corridors and networks planning plays a significant part in establishing the scope and priorities of these subsequent strategies.

The enhancing the visitor experience strategy is a stand-alone piece of work completed in 2015.

The following is an update in regards Council's achievements in developing relevant strategies and plans.

Status of Strategy and Plan Development

a. Koalas – Koala Conservation Strategy 2016 and Koala Conservation Action Plan 2016-2021 (KCAP)

- The Koala Conservation Strategy 2016 and KCAP were adopted by Council on 14 December 2016. Following the development of the appropriate business case the first year actions of the KCAP has been funded in Council's 2017/2018 budget.
- A separate report regarding progress of the KCAP is scheduled for the General Meeting of 21 February 2018.

b. Corridors and Networks – Draft Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023

- The draft Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 has been prepared and is a significant piece of strategic and operational planning for the natural environment areas within the City.
- A separate report regarding the adoption of the Plan and Action Plan is scheduled for the General Meeting of 21 February 2018.

c. Urban Trees – Proposed Significant Vegetation Strategy and Action Plan 2018

- Council officers have commenced the development of a Significant Vegetation Strategy and Action Plan and have undertaken preliminary discussions with internal and external stakeholders in relation to tree management issues.
- Formalised strategy development meetings are scheduled during early 2018 to finalise the scope and work program.
- Preliminary background work including research on best practice principles to manage urban trees was completed through the University of Queensland Student Industry Placement Program.

d. Offsets – Proposed Environmental Offsets Guideline

- Council is proposing to develop in the first-half of 2018 an Environmental Offsets Guideline and Procedures and has undertaken research into what the guideline may achieve in compensating for unavoidable vegetation loss.
- The draft Wildlife Connections Plan 2018 has provided the mapping data to assist in identifying the most appropriate environmental offset locations for optimum environmental benefit.
- Offsets are contributed primarily through legislative triggers and the guideline will seek to guide the location, size and financial viability of offsets within Redland City.

e. Enhancing the Visitor Experience – Program

- The Enhance the Visitor Experience Program was adopted by Council on 9 December 2015.
- The program aims to deliver projects and services that open up the value of parks and natural areas for people's enjoyment, health and well-being while at the same time protecting the Redland's environmental biodiversity.

Other Environmental Strategies and Plans

In addition to the list of priority strategies and plans to be delivered under the Natural Environment policy, Council has been undertaking a range of significant environmental planning work that has included:

- Draft City Plan - development of relevant environmental data, mapping, codes and planning scheme policies
- Revised Pest Management Plan (Biosecurity Plan)
  - Coochiemudlo Island Integrated Weed Management Plan
- One million native plants program

STRATEGIC IMPLICATIONS

Legislative Requirements

Local Government has a legislative responsibility to make decisions that improve outcomes for the community. This includes governance arrangements such as clear policy statements creating transparent and effective processes for making these decisions in the public interest. The scheduled review of the Natural Environment Policy and development of associated Strategies and Plans allows Council to meet its legislative requirements.

Risk Management

The review of the Natural Environment Policy allows Council to address strategic level risks.

Financial

No additional budget or resources are required for the policy review. Any identified additional budgets or resources are detailed in the individual strategies and plans for Council's consideration through the budget process.

People

There are no implications on human resources policies.

Implementation and consultation of associated adopted strategies and plans include involvement from internal and external stakeholders.

Environmental

The development of strategies and plans and the regular review of policy will ensure Council's environmental policies provide direction for developing priorities related to delivering services and facilities for managing the valuable natural assets of Redland City.

Social

There are no implications on the social policy position.

Alignment with Council's Policy and Plans

The adopted strategies, plans and current policy allow Council to reflect the intent of the City Plan, Corporate Plan Healthy Natural Environment themes and Local Laws. The Natural Environment Policy and associated strategies and plans provide a direct line of sight with the Corporate Plan and its implementation.

Council's Corporate Plan 2015-2020 establishes a commitment to promoting:

"*A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through awareness, commitment and action in caring for the environment.*

1. *Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored.*
2. *Threatened species are maintained and protected, including the vulnerable koala species*."

Council is preparing a new planning scheme. The draft City Plan was released for public notification in late in 2015 and in February 2017 Council resolved to forward the draft planning scheme to the Planning Minister for approval to adopt. The draft City Plan will commence following the Minister's approval and Council adoption.

The draft City Plan incorporates updated mapping of regional ecosystems, koala habitat and waterways, and integrated matters of National, State and Local biodiversity significance.

CONSULTATION

The following Groups have been involved in the development of the associated Strategies and Plans:

- City Spaces Group
- City Planning and Assessment Group
- City Infrastructure Group
- Corporate Services Group
- Economic Sustainability and Major Projects Group
- Environment and Regulation Group
- Organisation Services Group

OPTIONS

Option One

That Council resolves to:

1. Note the report on the Natural Environment Policy progress report; and
2. Support the continued development and implementation of associated natural environment strategies and plans and the review of the Natural Environment Policy.

Option Two

That Council requests further information.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Note the report on the Natural Environment Policy progress report; and**
2. **Support the continued development and implementation of associated natural environment strategies and plans and the review of the Natural Environment Policy.**

11.2.5 WILDLIFE CONNECTIONS PLAN 2018-2028

Objective Reference: **A2710293**
Reports and Attachments (Archives)

Attachments:

1. Wildlife Connections Plan 2018-2028
2. Wildlife Connections Action Plan 2018-2023
3. Wildlife Connections Plan – Corridor Descriptions & Locations – 2018 – 2028
4. Wildlife Connections Plan – FAQs

Authorising Officer: **Louise Rusan**
General Manager Community and Customer Services

Responsible Officer: **Graham Simpson**
Group Manager, Environment and Regulation

Report Author: **Dale Watson**
Natural Environment Officer

PURPOSE

This report seeks Council adoption of the Redland City Council Wildlife Connections Plan 2018, including the associated Action Plan and Corridor Description and Locations.

The Wildlife Connections Plan 2018 aims to geographically identify and provide priority actions for the management, protection and enhancement of a network of core wildlife habitat patches and connecting wildlife corridors in Redland City.

The Wildlife Connections Plan 2018 is a document supporting the delivery of Council's Natural Environment Policy POL-3128.

BACKGROUND

On 3 June 2015, Council adopted the Natural Environment Policy POL-3128 which sets out to protect, enhance and restore the health and viability of the City's natural values both on public and private lands and waterways for the benefit, use and lifestyle of current and future generations of our community.

The Wildlife Connections Plan 2018 is a significant component of delivering on Council's Natural Environment Policy. To ensure the healthy function of our natural environment, Council is focussed on ensuring habitat is properly mapped, connected, enhanced and protected using a mixture of scientifically rigorous methods and expert knowledge and skills.

Strategic corridor planning is undertaken at federal, state, regional and local levels. However it is at the local level that the implementation of corridor management usually occurs.

The Redlands contains a diverse array of wildlife habitats, including dry and wet eucalypt forests, littoral and riparian rainforest, various wetland and heathland habitats, mangrove and saltmarsh. These habitats all accommodate wide-ranging populations of native plants and animals.

Within Redlands there are many existing wildlife habitat networks and corridors with various values. These corridors and networks are essential for viable flora and fauna populations as they enable migration, colonisation and breeding within an often fragmented landscape.

Fragmentation of wildlife habitat in the Redlands may be caused by clearing of native vegetation for agriculture, industrial and urban development. Fragmentation results in smaller disconnected patches of wildlife habitat that reduces the ability of safe wildlife movement.

Networks and corridors of wildlife habitat may consist of a combination of environmental (bushland habitat) areas, street tree plantings, recreational parks and reserves, residential backyards, non-urban private lands, foreshore areas, waterways and riparian areas.

Effects from transport networks (road and rail), urban areas and other developments can have a detrimental impact on flora and fauna populations. The Wildlife Connections Plan 2018 is Council's commitment to ensuring wildlife habitat corridors and networks are identified to enable appropriate actions to protect and enhance the conservation of our valued wildlife and their natural habitats.

The Wildlife Connections Plan 2018 is a non-statutory document and does not impact on current vegetation management practices given it does not add any additional vegetation protection on private property. Vegetation clearing on private property will continue to be subject to current local law or other legislative provisions.

The Wildlife Connections Plan 2018 has a strategic and operational focus to enable both short-term and long-term planning and management of high priority wildlife networks and corridors. It has been developed in partnership with Council's draft City Plan in respect to relevant data inputs and considerations.

ISSUES

What the Wildlife Connections Plan 2018 seeks to achieve?

Need for Connectivity

Wildlife habitat networks and corridors have multiple benefits important for:

- Providing core habitat for some species
- Providing movement habitat for wide-ranging, nomadic migratory species, and dispersing individuals
- Maintaining or enhancing genetic interchange and variation between otherwise isolated animal or plant populations to support long term population viability
- Facilitating the continuity of ecological processes through healthy and resilient animal and plant populations
- Allowing individuals and populations to access new food sources, find shelter, escape threats, satisfy behavioural requirements and encourage the continuation of viable populations.

The Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 is seeking to achieve the following:


Provide habitat
for native species
Provide safe fauna passage
for species including, nomadic and migratory species, and dispersing individuals
Facilitate the continuity of ecological processes
through healthy and resilient animal and plant populations
WHAT WE WANT TO ACHIEVE
Maintain or enhance genetic interchange
between otherwise isolated animal or plant populations
HOW WE ARE GOING TO DO IT
Enhance and connect corridors
by acquiring priority land
Geographically identify core wildlife habitat
and terrestrial wildlife corridors
Manage and protect the wildlife habitat
we currently have
Manage impacts
of urban and/or peri-urban and/or rural areas
Provide input
into planning scheme
Manage impacts
from storm tide and sea level rise.

Development of the Wildlife Connections Plan 2018

To develop the Wildlife Connections Plan 2018 an extensive literature review of ecology and principles of wildlife habitat networks was undertaken. The results of the literature review form the guiding principles for a functional wildlife habitat corridor realised within the plan.

These guiding principles establish the key metric and functionality criteria in which to map wildlife habitat networks and corridors.

Biodiversity Assessment and Management (BAAM), Ecological Consultants were commissioned by Council to geographically identify a well-defined wildlife habitat network of core habitat patches and connecting corridors in Redland City.

The resulting '*Wildlife Habitat Networks and Corridor Mapping – Redland City 2014*' used the spatial modelling tool 'CircuitScape' to generate a heat map of key wildlife corridor values that occur between core vegetation areas throughout Redland City.

The modelling was based upon the most up-to-date available vegetation data and used an ecologically justifiable approach. The model outputs were critiqued using corridor dependent species database records, which indicated the corridors corresponded closely with these wildlife records.

The modelled outputs were used to develop the priority corridors outlined in the plan. A series of workshops and working groups utilised expert local knowledge (from various units of Council) of habitat, wildlife, land use and connectivity in combination with the CircuitScape modelling outputs to develop the wildlife habitat, networks and corridors.

Five categories of wildlife corridors were defined:

1. Established
2. Riparian Regional
3. Coastal Foreshore
4. Enhancement
5. Stepping Stone

Priority Outcomes were then determined to:

- Improve Corridor Habitat
    - Rehabilitation of gaps and pinch points
- Prevent Wildlife Deaths
    - Safe fauna passage across road (or rail) barriers
- Reduce Impacts on Corridors
    - Management of urban and/or peri-urban and/or rural areas impacts; and
    - Management of storm tide and sea level rise
- Protect Corridor Habitat
    - Input for planning and development; and
    - Protection from vegetation clearing

Peer Review

A peer review of the Wildlife Connections Plan 2018 was undertaken by Saunders Havill Group. The review utilised the independent environmental management and planning expertise of Saunders Havill Group to assess the plan's scientific soundness and strategic planning value. The review resulted in several recommendations which have now been incorporated into the Plan.

Areas not identified within the Wildlife Habitats, Networks and Corridors

It is important to recognise that the plan presents the highest priority networks and corridors. Many of the areas not identified in the Plan still play a crucial role in providing habitat and movement opportunities for wildlife. It is not the objective of this plan to identify all areas that may contain corridor values.

Wildlife Connections Action Plan 2018

In order to advance the Wildlife Connections Plan 2018, the Wildlife Connections Action Plan 2018-2023 has been developed documenting the priority actions to progress outcomes.

The Action Plan aims to guide management actions to protect, manage and enhance a network of core wildlife habitat patches and corridors across the City and identifies immediate on-ground measures that are achievable by Council. Each action addresses issues identified through the analysis of the current understanding of corridor ecology and viable mitigating measures to improve connectivity.

The Action Plan lists Council Units with responsibility for each action; implementation methods; implementation partners; performance measures; timeframe; and an indication of cost of implementation. Each outcome provides an indicator to assess the successful implementation of each action.

Specific priority actions have been developed for each corridor location to address the threats, barriers, gaps and pinch points. A high priority is assigned to protecting and rehabilitating the highest value corridors, as this will result in optimum cost efficiency and often provides the greatest ecological benefit.

STRATEGIC IMPLICATIONS

Legislative Requirements

The Wildlife Connections Plan 2018 is a non-statutory document and does not impact on current vegetation management practices as it does not add any additional vegetation protection on private property. The role of the Plan is to provide a strategic and operational focus to short and long-term planning and management of high priority wildlife networks and corridors.

Successful strategic planning for wildlife habitat networks and corridors must involve participation from local, regional, state and national levels.

The table below outlines the relevant national, state and regional plans and strategies involving wildlife habitat networks and corridors planning.

Scale	Program
National	National Wildlife Corridors Plan (Department of Sustainability, Environment, Water, Population and Communities, 2012)
State	Corridor identification through the Biodiversity Planning Assessments (Queensland Department of Environment and Heritage Protection, 2015)
Regional	Shaping SEQ - South East Queensland Regional Plan (Department of Infrastructure, Local Government and Planning, 2016)
	A Biodiversity Planning Assessment for the Southeast Queensland Bioregion – Version 4.1 (Department of Environment and Heritage Protection, 2016)

Risk Management

The risk by not adopting the Wildlife Connections Plan 2018 is not delivering against Council's Operational Plan 2017-18 and not achieving the commitments set out in the longer term Corporate and Community Plans for the Healthy Natural Environment outcome.

This includes not delivering on the commitment to develop a corridors and networks plan as part of the adoption of the Natural Environment Policy POL-3128 on 3 June 2015.

Financial

One of the key drivers of the Wildlife Connections Plan 2018 is to focus existing resources to the identified priority corridors. The majority of actions within the Action Plan are therefore expected to be covered within existing budgets and Council officer roles.

It is proposed the first year investigation and planning work will occur within existing officer roles, including the project officers managing the One Million Native Plants and Koala Conservation programs.

It is also identified that some resources allocated for existing programs such as One Million Native Plants, Koala Conservation Program and Bushcare Community Planting (gaps and pinch points) will be used to implement actions of the Wildlife Connections Action Plan 2018 due to the strong connection/overlap with these projects and the Plan.

Future on-ground action implementation may be funded through a combination of 'business as usual', general revenue, the environment separate charge, reserve funds and resources obtained through external funding sources.

Additional costs could occur for the following actions if unable to be funded through current budget sources:

- Retrofitting road culverts and barriers for fauna passage
- Fauna barrier fencing
- Fauna overpasses and underpasses
- Assessment of noise and light disturbance from dwellings, traffic and road infrastructure.

Detailed costing for these actions has not yet been undertaken, as there is an initial investigation, assessment and reporting component required for each element and this will be identified in future capital works program planning.

Any additional budget will be sought through future budget considerations, including the development of relevant business cases through the Project Management Office.

People

Priority outcomes and actions listed in the Action Plan are managed by the individual area in Council responsible for the activity. Although delivery of the Plan is dependent on staff resources there are no direct impacts on people resulting from this report.

Environmental

The Wildlife Connections Plan 2018 aims to facilitate connectivity and improve the environmental values of Redland City though a number of key strategic priorities, namely to:

- Represent the major potential areas for habitation and movement of wildlife across the City
- Provide targeted, achievable and prioritised actions to protect and enhance wildlife habitat networks and corridors to allow wildlife movement and dispersal
- Include both terrestrial (land) and riparian (waterway) corridors and to consider freshwater, estuarine and coastal foreshore environments
- Provide multiple corridors as alternative links between core habitat patches to account for potential disturbance events (such as fire, storms, flooding, disease and impacts from development) and varying levels of community uptake and implementation of the plan.

Social

Although the primary objective of this plan is the identification, protection and enhancement of core wildlife habitat and corridors, consideration is given to how the wildlife corridors interact with the residents of Redland City. Within the description of each corridor information is provided on the community use values, focusing primarily on the recreational uses within the corridor.

Corridor enhancement and rehabilitation actions for residential and reserve areas can also have significant social benefits such as improved open space, more shade, increased connection with nature and greater recreational value and usage of parks and reserves.

The identification of the wildlife habitat networks and corridors also aims to engender local community recognition and acceptance of these areas. This can ultimately lead to greater attachment, ownership and stewardship of local wildlife habitats.

Alignment with Council's Policy and Plans

Redlands Council Corporate Plan 2015-2020 establishes a commitment to promoting:

"*A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through awareness, commitment and action in caring for the environment.*

1. *Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored.*
2. *Threatened species are maintained and protected, including the vulnerable koala species*."

Council understands that key to the delivery of this outcome is the maintenance of sufficient wildlife habitat across the City to support the ecological functions of the flora and fauna that live within or migrate through the Redlands.

On 3 June 2015, Council adopted the Natural Environment Policy POL-3128, consolidating former environmental policies. Council resolved to prepare updated strategies and plans to progress the Natural Environment Policy, identifying a number of priorities; including corridors. This plan will relate to the following sections of the Natural Environment Policy:

"*1. Protect, enhance, restore the natural values of the City that include:*

a. Koalas and other native animal and plant populations and habitats;

b. core habitat areas as sanctuaries for wildlife;

c. safe wildlife movement corridors across the landscape;

d. maintaining no net loss of native vegetation as defined in the Vegetation Management Act 1999;

e. biological diversity and ecosystem services;

f. waterways, foreshores, wetlands, coasts, aquatic ecosystems and Moreton Bay;

2. Enhance and restore Council's protected areas and strengthen the connection between core habitats through public open space plantings, pest management and appropriate street tree planting programs in accordance with SEQ Natural Resource Management targets.

3. A conservation acquisition program that prioritises acquisition of land for rehabilitation, offsets, corridors and long term protection to achieve cost effective environmental outcomes that contribute to facilitating biodiversity conservation (eg koala survival) and has community benefits.

4. Manage protected areas to provide the best possible buffering of the City's natural and cultural heritage values from the impacts of a changing climate."

In addition, Council is preparing a new planning scheme. The draft City Plan was released for public notification in late in 2015 and in February 2017 Council resolved to forward the draft planning scheme to the Planning Minister for approval to adopt. The draft City Plan will commence following the Minister's approval and Council adoption.

The draft City Plan incorporated updated mapping of regional ecosystems, koala habitat and waterways, and integrated matters of national, state and local biodiversity significance.

The draft City Plan includes in its strategic framework a strategic outcome for the natural environment specifically addressing corridors that states:

"*Viable and resilient wildlife corridors link habitat areas and facilitate the movement and migration of native fauna throughout the Redlands and beyond. Corridors connect terrestrial and aquatic environments (including waterways, wetlands and along the foreshore) and significant habitat. Ecological corridors are primarily protected by the environmental significance and waterway corridors and wetlands overlays as well as the conservation, environmental management and recreation and open space zones. However, other land may also perform corridor functions that are to be protected*."

This is then implemented primarily through the Environmental Significance overlay and the Waterway Corridors and Wetlands overlay, which together with the Environmental Management, Conservation, and Recreation and Open Space zones identify the City's areas of environmental value, and include specific provisions within the relevant codes that require development to provide for viable and resilient wildlife corridors.

To meet the outcome of protecting corridor habitat identified in the Wildlife Connection Plan 2018, an action to review the Redland City Plan is recommended to determine any necessary consequential amendments.

CONSULTATION

The following Groups and Units have been involved in the development of the Wildlife Connections Plan 2018:

- Environment and Regulation Group
  - Environment and Education Unit (responsibility for action implementation)
  - Compliance Services Unit (responsibility for action implementation)
- City Spaces Group
  - Parks and Conservation Services Unit (responsibility for action implementation)
  - City Spaces Strategy Unit
- City Planning & Assessment Group
  - Strategic Planning Unit (responsibility for action implementation)
  - Engineering and Environment Unit
- Economic Sustainability and Major Projects Group (responsibility for action implementation)
- City Infrastructure Group
  - City Infrastructure Planning Unit (responsibility for action implementation)
  - Traffic and Transport Planning Unit (responsibility for action implementation)
  - Roads, Drainage and Marine Unit (responsibility for action implementation)
- Information Management Group
  - Analytical Services Unit
- Organisational Services
  - Disaster Planning & Operations Unit

OPTIONS

Option 1

That Council resolves to:

1. Adopt the Wildlife Connections Plan 2018, Wildlife Connections Action Plan 2018-2023 and Wildlife Connections Plan - Descriptions and Locations 2018;
2. Commence implementation of business as usual activities within the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023;

3. Review the implementation of the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 after 12 months taking into account any relevant recommendations from partners and feedback from the community; and
4. Consider funding for actions associated with the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 as part of normal budget considerations and presentation of relevant business cases.

Option 2

That Council resolves to not adopt the Wildlife Connections Plan 2018, Wildlife Connections Action Plan 2018-2023 and Wildlife Connections Plan - Descriptions and Locations 2018.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Adopt the Wildlife Connections Plan 2018, Wildlife Connections Action Plan 2018-2023 and Wildlife Connections Plan - Descriptions and Locations 2018;**
2. **Commence implementation of business as usual activities within the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023;**
3. **Review the implementation of the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 after 12 months taking into account any relevant recommendations from partners and feedback from the community; and**
4. **Consider funding for actions associated with the Wildlife Connections Plan 2018 and Wildlife Connections Action Plan 2018-2023 as part of normal budget considerations and presentation of relevant business cases.**

REDLAND CITY COUNCIL

Wildlife Connections Plan

2018 - 2028

Redland CITY COUNCIL


Provide habitat
for native species
Provide safe fauna passage
for species including, nomadic and migratory species, and dispersing individuals
Facilitate the continuity of ecological processes
through healthy and resilient animal and plant populations
Maintain or enhance genetic interchange
between otherwise isolated animal or plant populations
WHAT WE WANT TO ACHIEVE
HOW WE ARE GOING TO DO IT
Enhance and connect corridors
by acquiring priority land
Geographically identify core wildlife habitat
and terrestrial wildlife corridors
Manage and protect the wildlife habitat
we currently have
Manage impacts
of urban and/or peri-urban and/or rural areas
Provide input
into planning scheme
Manage impacts
from storm tide and sea level rise.

Contents

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Executive Summary

Fragmentation of wildlife habitat in the Redlands has resulted in smaller disconnected patches of wildlife habitat that has reduced wildlife movement and has led to a reduction in biodiversity. Wildlife habitat, networks and corridors are the areas of connected native vegetation that enable the maintenance of ecological processes, the movement of wildlife and support the continuation of viable populations. The Wildlife Connections Plan 2018-2028, aims to geographically identify, at a city wide scale, and provide priority actions for the management, protection and enhancement of a network of core wildlife habitat and connecting corridors in Redland City.

Development of this plan utilised spatial modelling (CircuitScape) to identify areas of key terrestrial wildlife corridor values that occur between core vegetation areas throughout Redland City. The modelling was based on the most up-to-date research, technology and available ecological and anthropogenic data. The modelling outputs and expert local knowledge were used to develop the high priority wildlife habitat networks and corridors detailed within this plan. The priority corridors have been assigned target widths and buffers, based on wildlife corridor ecology literature and principles.

The identified priority wildlife habitat corridors are assigned names and values, connectivity, threats and priority management actions have been recorded to increase the understanding of each corridor. The corridors link the critical areas of Core Habitat, based on interior areas of remnant vegetation.

Five categories of wildlife habitat corridors have been defined:

- Established Corridors - high ecological value and strong wildlife movement;
- Regional Riparian Corridors - high ecological value and identified as a state significance riparian corridors;
- Coastal Foreshore Corridors - coastal fringe corridor of mainland and islands;
- Enhancement Corridors - sufficient ecological values and linkages with scope for enhancement; and
- Stepping Stone Corridors - isolated patches of functional connected habitat.

Priority objectives and outcomes are listed for each individual corridor to:

- Improve Corridor Habitat
    - Rehabilitation of gaps and pinch points.
- Prevent Wildlife Deaths
    - Safe fauna passage across road (or rail) barriers.
- Reduce Impacts on Corridors
    - Management of urban and/or peri-urban and/or rural area impacts; and
    - Management of storm tide and sea level rise impacts
- Protect Corridor Habitat
    - Review City Plan to determine any necessary consequential amendments.

Strategic corridor locations identifying key values and associated priority outcomes are found in the associated document, Corridor Descriptions and Locations (Appendix 4-7). The implementation of the priority outcomes will be achieved through a variety of methods and will be the responsibility of several areas within Council.

It is important to recognise that the identified mapped core habitat and corridors represent only the high value habitat and corridors. Many of the areas not identified within this plan will still play a vital role in providing habitat and safe movement opportunities for many wildlife species.

Introduction

The Redland City Council local government area is made up of both mainland and island communities. It includes developed urban areas in the north of the City, rural and bushland habitat areas in the south as well as North Stradbroke Island, Coochiemudlo Island and the Southern Moreton Bay Islands (Macleay, Lamb, Karragarra and Russell Islands). The Redlands contains a diverse array of wildlife habitats, including dry and wet eucalypt forests, littoral and riparian rainforest, various wetland and heathland habitats, mangrove and saltmarsh. These habitats all accommodate wide-ranging populations of plants, animals and fungi. To ensure the healthy function of our natural environment, Council is focussed on ensuring habitat is properly mapped, connected, enhanced and protected using a mixture of scientifically rigorous methods and expert knowledge and skills.

Fragmentation of wildlife habitat in the Redlands is caused by the clearing of native vegetation for agricultural, industrial and urban development. Fragmentation results in smaller disconnected patches of wildlife habitat that reduces the ability of wildlife movement, and ultimately leads to a reduction in biodiversity. (Brearley 2011 & Ndubisi et al. 1995)

The Redland City Council area contains many existing wildlife habitat networks and corridors with various values. These corridors and networks are essential for viable flora and fauna populations as they enable migration, colonisation and breeding within a fragmented landscape.

Networks and corridors of wildlife habitat may consist of a combination of environmental (bushland habitat) areas, street tree plantings, recreational parks and reserves, residential backyards, non-urban private lands, foreshore areas, waterways and riparian areas. Effects from transport networks (road and rail), urban areas and other developments can have a detrimental impact on flora and fauna populations.

For the purposes of this plan, wildlife habitat networks and corridors are the areas of land or water (physical connections) that link and provide plant and animal habitats, therefore reducing the impacts of the fragmented landscape. The term network refers to the broad connectivity between patches of core wildlife habitat and the corridors that link them.

All native flora and fauna are protected by a suite of legislative and non-legislative tools in South East Queensland, including planning and non-planning instruments. In recent years, government responses at both the State and Federal level have strengthened and enhanced corridor connections. With development and population growth in Redland City continuing, Council is committed to ensuring wildlife habitat corridors and networks are protected and enhanced for the conservation of our valued wildlife and their natural habitats.

The challenge for this non-statutory plan is to re-evaluate, document and consolidate Council's approach to corridor conservation and management, by identifying and focusing effort on outcomes that are viable, and identify new and innovative actions.

Objectives of the Plan

The Wildlife Connections Plan 2018-2028 aims to, at a city wide scale, geographically identify and provide priority actions for the management, enhancement and protection of core wildlife habitat patches and to facilitate improved connection of wildlife corridors in Redland City.

It is important to recognise that as this plan is at the city wide scale, only the highest priority corridors are presented. Areas not identified as core habitat or corridors will continue to play a vital role in providing habitat and movement opportunities for wildlife.

This plan aims to include terrestrial (land), riparian (waterway) and coastal foreshore corridors to provide ecologically appropriate wildlife habitat networks and corridors for a range flora and fauna.

This non-statutory plan will form a guide to strengthen corridors by recognising opportunities for the management and enhancement of existing Council reserves and managed land. This plan will also be used to inform Council's extension and community education programs, conservation land acquisitions program and assist in identifying potential offset sites. A review of City Plan will also be undertaken to determine any necessary consequential amendments.

The wildlife habitat corridors are identified by local geographic location, aimed to engender local community recognition, acceptance and ownership.

The plan aims to facilitate a number of key outcomes to achieve these objectives through a targeted and prioritised action plan. The action plan addresses the key risks to the function, protection and management of corridors and networks.

Action Plan Objectives

- **Improving Corridor Habitat**

  Outcome 1: Rehabilitation of gaps and pinch points.

- **Preventing Wildlife Deaths**

  Outcome 2: Safe fauna passage across road (or rail) barriers.

- **Reduce Impacts on Corridors**

  Outcome 3: Management of urban and/or peri-urban and/or rural area impacts; and

  Outcome 4: Management of storm tide and sea level rise impacts.

- **Protecting Corridor Habitat**

  Outcome 5: Review City Plan to determine any necessary consequential amendments.

Legislation, Policy and Plans relevant to Strategic Corridors

National, State and Regional Corridor Strategic Planning

Successful strategic planning for wildlife habitat networks and corridors must involve participation from local, regional, state and national levels. Table 1 below outlines the relevant national, state and regional plans and strategies involving wildlife habitat networks and corridors planning. Appendix 1 provides a summary and review of these Federal, State and Regional documents.

Table 1: Summary of Corridor Planning

Scale	Program
National	National Wildlife Corridors Plan (Department of Sustainability, Environment, Water, Population and Communities, 2012)
State	Corridor identification through the Biodiversity Planning Assessments (Queensland Department of Environment and Heritage Protection, 2015)
Regional	Shaping SEQ - Draft South East Queensland Regional Plan (Department of Infrastructure, Local Government and Planning, 2016)
	Biodiversity Planning Assessment for the Southeast Queensland Bioregion – Version 4.1 (Department of Environment and Heritage Protection, 2016)

Redland City Council Corporate Plan 2015-2020

The Redland City Council Corporate Plan 2015-2020 establishes a commitment to promoting:

> "*A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through awareness, commitment and action in caring for the environment.*
>
> 1. *Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored.*
> 2. *Threatened species are maintained and protected, including the vulnerable koala species*."

Council understands that key to the delivery of this outcome is the maintenance of sufficient wildlife habitat across the City to support the ecological functions of the flora and fauna that live within or migrate through the Redlands.

Redland City Council - Natural Environment Policy

In June 2015, Council adopted the *POL-3128 Natural Environment Policy*, consolidating former environmental policies. Council resolved to prepare updated strategies and plans to progress the Natural Environment Policy, identifying a number of priorities; including corridors. This plan will relate to the following sections of the Natural Environment Policy:

"1. *Protect, enhance, restore the natural values of the City that include:*

a. Koalas and other native animal and plant populations and habitats;

b. core habitat areas as sanctuaries for wildlife;

c. safe wildlife movement corridors across the landscape;

d. maintaining no net loss of native vegetation as defined in the Vegetation Management Act 1999;

e. biological diversity and ecosystem services;

f. waterways, foreshores, wetlands, coasts, aquatic ecosystems and Moreton Bay;

2. *Enhance and restore Council's protected areas and strengthen the connections between core habitats through public open space plantings, pest management and appropriate street tree planting programs in accordance with SEQ Natural Resource Management targets.*
3. *A conservation acquisition program that prioritises acquisition of land for rehabilitation, offsets, corridors and long term protection to achieve cost effective environmental outcomes that contribute to facilitating biodiversity conservation (eg koala survival) and has community benefits.*
4. *Manage protected areas to provide the best possible buffering of the City's natural and cultural heritage values from the impacts of a changing climate.*"

Local Corridor Strategic Planning

Although strategic corridor planning is undertaken at a federal, state and regional level it is at the local level that the implementation of corridor management usually occurs. Over the past twenty years Redland City Council has developed and implemented a number of plans, strategies and mapping tools relating to wildlife habitat networks and corridors, including:

- Redland City Council Plans and Strategies:
  - Bushland and Habitat Corridor Plan 2004; and
- Mapping Tools:
  - Environmental Inventory (Chenoweth) 1996 to 2007;
  - Green Infrastructure 2009;
  - Wildlife Corridor Mapping Using Species Indicator Model 2010;
  - Natural Environment Decision System (AECOM and BAAM) 2011;
  - Redlands Trunk Green Corridors 2013; and
  - Wildlife Corridor Mapping (BAAM) 2014.

The implementation and success of these plans has been varied. Appendix 2 provides a summary and review of these Redland City Council documents and mapping products.

The most recent review of the Bushland and Habitat Corridor Plan 2004 (the precursor to this plan) revealed that of the 41 recommendations made within the 2004 plan, 17 have been implemented (or are ongoing), 15 were partially implemented and 9 were not implemented. It is noted that several of the implemented recommendations involved the development of a plan, strategy, mapping tool, research or advocacy, and that the on-ground actions derived from these may not have been realised.

Successful implementation of recommendations from the 2004 plan included:

- Surveys, reports and installation of treatments for fauna crossing points of roads in Redland City;
- Incorporation of the Environmental Inventory mapping into Redland Planning Scheme; and
- Koala habitat mapping projects.

Ecology and Principles of Wildlife Habitat Networks and Corridors

The basic ecological principles of wildlife habitat networks and corridors involve linking and improving connectivity between patches of core habitat in a fragmented landscape. Wildlife habitat networks and corridors must provide functional connectivity for flora and fauna species to move through fragmented landscapes to larger core habitat patches that contain greater resources and are more suitable for survival (Hess & Fischer 2001). A lack of connectivity in a fragmented landscape results in the isolation of flora and fauna populations, which reduces the possibility of demographic or genetic rescue (Doerr & Davies 2010).

The ability of networks and corridors to increase connectivity and provide for dispersal depends primarily on the dispersal behaviour of the species involved, as well as the characteristics of the corridors, core habitat patches and the surrounding matrix (Heinz et al. 2007). Wildlife behaviours (including home range, diet and social structure) and habitat preferences of locally relevant species should be used to determine the design and management of corridors and networks (Lindenmayer & Nix, 1993). The requirements of species most threatened by habitat fragmentation and also species acting as vectors for ecological processes (e.g. seed dispersers, pollinators, predators) are critical for successful wildlife habitat networks and corridors (Scotts & Cotsell 2014).

Wildlife habitat networks and corridors have multiple benefits, they are important for:

- Providing residential habitat for some species;
- Providing movement habitat for wide-ranging species, nomadic and migratory species, and dispersing individuals;
- Maintaining or enhancing genetic interchange between otherwise isolated animal or plant populations; and
- Facilitating the continuity of ecological processes through healthy and resilient animal and plant populations (Bennett 1998; Beier & Noss 1998; Lindenmayer & Franklin 2002; Hilty et al. 2006; Chester & Hilty 2010; Doerr et al. 2010).

The ecology and principles of wildlife habitat networks and corridors is a relatively well-studied and researched area. Appendix 3 provides a literature review on the major components of this topic. To summarise this work Table 2 describes the guiding principles for a functional wildlife habitat corridor.

Table 2 - Summary of Wildlife Habitat Networks and Corridors attributes functions and guiding principles.

Core Habitat Patches	
Large as Practical	To provide necessary resources and environmental conditions required for survivorship, reproduction and movement of a species core habitat patches should be as large as practical.
Circular Shape	The perimeter of core habitat patches should be minimised to reduce the impacts of edge effects (such as weed infestation, human-generated damage, microclimatic variables, and predation).
> 60m Buffer	A minimum 60m buffer of native vegetation should be provided for core habitat patches to reduce the risk of edge effects.
< 1100m Gaps	Core habitat patches should be no more than 1100m apart (even where structurally intact corridors are linking the core habitat patches).
Wildlife Habitat Corridors	
< 106m Gaps	To facilitate wildlife movement gaps (open areas) in habitat along wildlife habitat corridors should be no more than 106m.
> 100m Width	Wildlife habitat corridors should have a minimum width of 100m (preferably 250m to retain variety of bird species and complete suite of arboreal mammals).
> 50m Buffer	A minimum 50m buffer of native vegetation should be provided for wildlife habitat corridors to reduce the risk of edge effects.
Feathered Edge	To minimise exposure to edge effects and keep species movements within the corridor, wildlife habitat corridors should have an edge with a feathered shape.
Diverse Structure	A diversity of native flora (for example layers including grasses, small shrubs, and variety of trees) will benefit a greater number of species moving through wildlife habitat corridors.
Minimise Barriers	Minimising the number and impact of barriers (for example highways, railway lines and impermeable fences) will increase the success of wildlife habitat corridors.
Stepping Stones	Identification of critical stepping stone corridors (for example scattered street or paddock trees) will increase the success of wildlife habitat networks.

Wildlife habitat networks and corridors can operate at a variety of scales:

- National corridors operate at the continental scale, aiming to create or enhance major landscape links. The 'National Wildlife Corridors Plan: A framework for landscape-scale conservation 2012' provides the framework for Australia's national corridor network.
- Regional corridors are connections between larger areas of generally protected habitat. They provide a range of ecosystem processes and are capable of supporting viable wildlife populations within the corridors. Regional corridors are generally greater than 500m in width and typically connect along altitudinal or migratory ecological gradients such as coast to hinterland (DECC 2004). The South East Queensland Regional Plan and the South East Queensland Biodiversity Planning Assessment (State Significance Corridors) provide the framework for regional corridors in Queensland.
- Sub-regional corridors facilitate species movement and dispersal opportunities for a wide range of species, but are not wide enough to support an extensive range of viable populations. Sub-regional corridors are generally greater than 300m wide and typically link larger vegetated landscape features (DECC 2004). The South East Queensland Biodiversity Planning Assessment 2016 (Regional Significance Corridors) provides the framework for regional corridors in Queensland. The Gold Coast Bioregional Corridor Plans are an example of implementation of a sub-regional corridor planning (Conics 2009).
- Local scale corridors function as conduits for wildlife movement between patches of core habitat by providing adequate cover and refuge for the duration of the wildlife movement, but generally do not provide habitat which is able to sustain viable populations within the corridor (Bennett 2003). The wildlife habitat corridors is presented within this plan are local scale.

Modelling of Redlands Wildlife Habitat Networks and Corridors

Biodiversity Assessment and Management (BAAM) ecological consultants were commissioned by Redland City Council to geographically identify a well-defined wildlife habitat network of core habitat patches and connecting corridors in Redland City. The resulting 'Wildlife Habitat Networks and Corridor Mapping – Redland City' report (BAAM 2016), used spatial modelling to generate a heat map of key terrestrial wildlife corridor values that occur between core vegetation areas throughout Redland City.

The work was based on the refinement of a previous study (BAAM 2014), which provided a contemporary approach to modelling and mapping wildlife networks and corridors in Redland City using a network modelling tool called CircuitScape. CircuitScape is a connectivity analysis software package which uses algorithms from electronic circuit theory to predict patterns of movement among plant and animal populations. Circuit theory considers the effects of all possible pathways across a landscape simultaneously. (BAAM 2016) This modelling tool was again used to develop wildlife habitat network and corridor value maps for Redland City, based upon the attribution of several key anthropogenic and ecological parameters. These parameters included:

- Remnant vegetation mapping, with edges treated separately;
- Regrowth vegetation mapping, with edges treated separately;
- Urban trees - small patches of trees or isolated clumps of vegetation;
- Open areas - very sparse canopy, infrequent artificial obstacles;
- Urban land - lots equal to, or less than 2000m2 were classified as urban land; and
- Transport infrastructure - major, secondary and local roads, and the rail network.

Separate spatial layers were created for each parameter and the parameters were given a ranked score, based upon key assumptions about their relative conductivity contributions to wildlife movement. These layers were all used to inform the creation of a single raster suitable for input into the modelling software.

A separate raster of core habitat was created to identify the connectivity source points, which form a critical component of the model. The core habitat raster is based on interior areas of the remnant vegetation mapping (with a 60m edge-affected rim removed).

Each of the Redland City land areas (mainland, Coochiemudlo Island, the inhabited Southern Moreton Bay Islands and North Stradbroke Island) were modelled independently.

The model revealed a series of wildlife networks across Redland City, as shown in Figure 1. These are particularly well-defined on the mainland, but also evident on the Southern Moreton Bay Islands and, to a lesser extent, on North Stradbroke Island, which is comprehensively dominated by remnant vegetation (core habitat).

The output rasters were relativised and transformed into a single vector. The vector was then simplified into two levels of attribution (based on their medium–high "heat" scores outside of core areas) to represent two different types of wildlife corridor (as shown in Figure 2):

- **Established Corridor Values:** these are areas of particularly high ecological value that hold strong, pre-existing values in providing movement opportunities for wildlife in general; and
- **Enhancement Corridor Values**: these are areas that exhibit sufficient ecological value and linkages that would be appropriate targets for strategic enhancement to strengthen Established Corridors.

The output of networks and wildlife corridors were then critiqued using a series of overlays. These included local waterways, corridor dependent species database records, the Queensland Government Biodiversity Planning Assessment (BPA) regional and state corridors layer and a public land layer. This interrogation of the model outputs indicated that these corridors, despite being simplified versions of the model output, correspond closely with vegetated waterways, corridor dependent species records, and the independently derived BPA corridors.

This automated modelling system provided an objective connectivity map that can be used in conjunction with complimentary studies, land tenure data, key habitats, corridor-dependent species data and expert knowledge of the area to identify potential terrestrial wildlife corridors.

The mapping outputs from the CircuitScape modelling (core habitat patches, raster heat mapping outputs and Established and Enhancement Corridor layers) are used to help the visual identification of priority wildlife corridors throughout Redland City. These mapping outputs will be useful to inform planning and management of:

- Existing Council reserves
- Waterway, wetland and riparian programs
- Individual property planning
- Potential offset sites
- Conservation land acquisitions, and
- City wide land use planning

The mapping report recommends an analysis is undertaken to identify corridors for strategic protection and enhancement in future planning instruments. This recommendation has been implemented by the delineation of the priority wildlife habitat corridors, outlined in the following sections of this plan.

Limitations of Modelling Redlands Wildlife Habitat Networks and Corridors

Issue: Defining Established and Enhancement Corridor layers from heat mapping vector.

- **Reason**: Allows areas with higher connectivity value to stand out, which assist in prioritising decision making.
- **Limitation**: Areas of habitat that did not meet the cut-off for Established and Enhancement Corridors may still be important for the linkage of key core habitat areas.
- **Options to address:** Secondary rehabilitation of areas between enhancement corridors may result in additional areas being included in Established and/or Enhancement Corridor layers in the future.

Issue: Focus on terrestrial corridors.

- **Reason:** The BAAM report and modelling exercise is limited to the recognition of terrestrial wildlife corridors.
- **Limitation:** The modelling does not address non-terrestrial fauna movement, such as the movement of migratory shorebirds between intertidal areas.
- **Options to address:** The scope of the Wildlife Connections Plan is terrestrial fauna movement, in line with the current priority of Council. A change in scope, or separate plan would be required to address non-terrestrial fauna movement.

Issue: The formation of the model's core habitat layer did not include areas of regrowth vegetation.

- **Reason:** All areas of regrowth vegetation were excluded from the core habitat layer, as regrowth vegetation was not deemed to have sufficient habitat values to be considered as core habitat**.**
- **Limitation:** Some areas of high-quality regrowth vegetation with important habitat features were excluded from the core habitat layer. These areas of habitat may still include features of core habitat and they may still support a diversity of wildlife.
- **Options to address:** Include regrowth vegetation in core habitat layer in future runs of the model.

Issue: Removal of 60m edge-affected rim from core habitat.

- **Reason:** A minimum 60m buffer of native vegetation should be provided for core habitat patches to reduce the risk of edge effects. The core habitat is based on interior areas of the remnant vegetation mapping (with a 60m edge-affected rim).
- **Limitation:** Certain areas of recognised habitat value were excluded from the core layer in the model by applying and removing the 60m wide edge-affected rim. This does not necessarily suggest these areas are not ecologically important, and it should be recognised they may still support a diversity of wildlife.
- **Options to address:** Width of buffer could be adjusted in future runs of the model, in accordance with changes to contemporary knowledge and practice.

Issue: Habitat features beyond the Redland City boundary were excluded in the modelling. This could potentially influence wildlife network and corridor values within Redland City.

- **Reason:** The western edge of the city is largely bounded by remnant bushland areas with contiguous core habitat areas extending within and along the boundary itself (such as Tingalpa Creek Conservation Park, Daisy Hill Conservation Park, Venman Bushland National Park, Cornubia Nature Refuge and the Bayview, Days Road, Kidd Street and Serpentine Creek Conservation Areas).
- **Outcome:** The inclusion of areas outside of Redland City in the modelling process was considered likely to have little influence on the identification of wildlife network and corridor values within Redland City.
- **Options to address:** The scope of the Wildlife Connections Plan is terrestrial fauna movement throughout Redland City, in line with the current priority of Council. A change in scope, or separate plan would be required to address fauna movement across local government boundaries with neighbouring local governments.

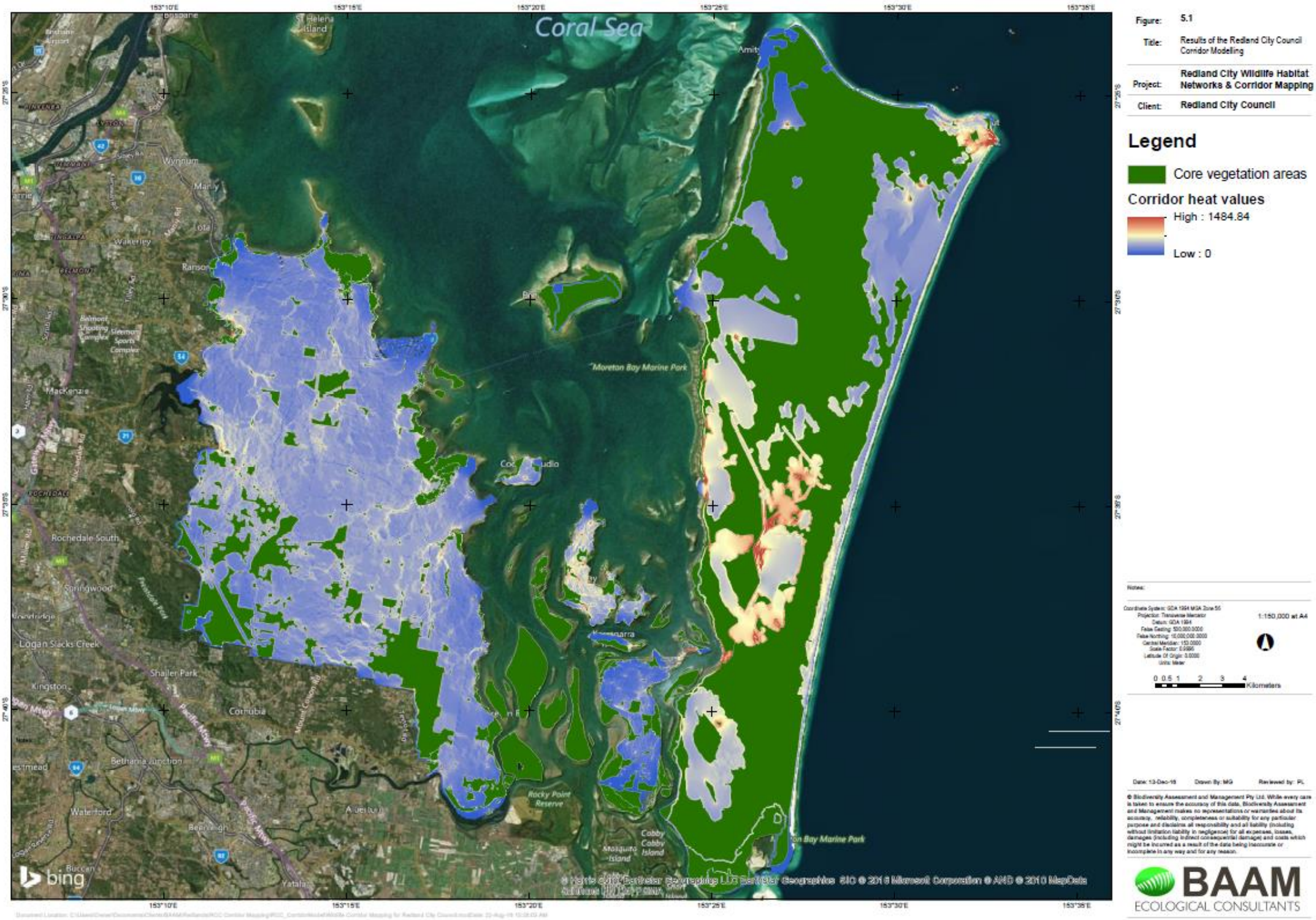

Figure 1 - Raster heat map output from CircuitScape modelling.

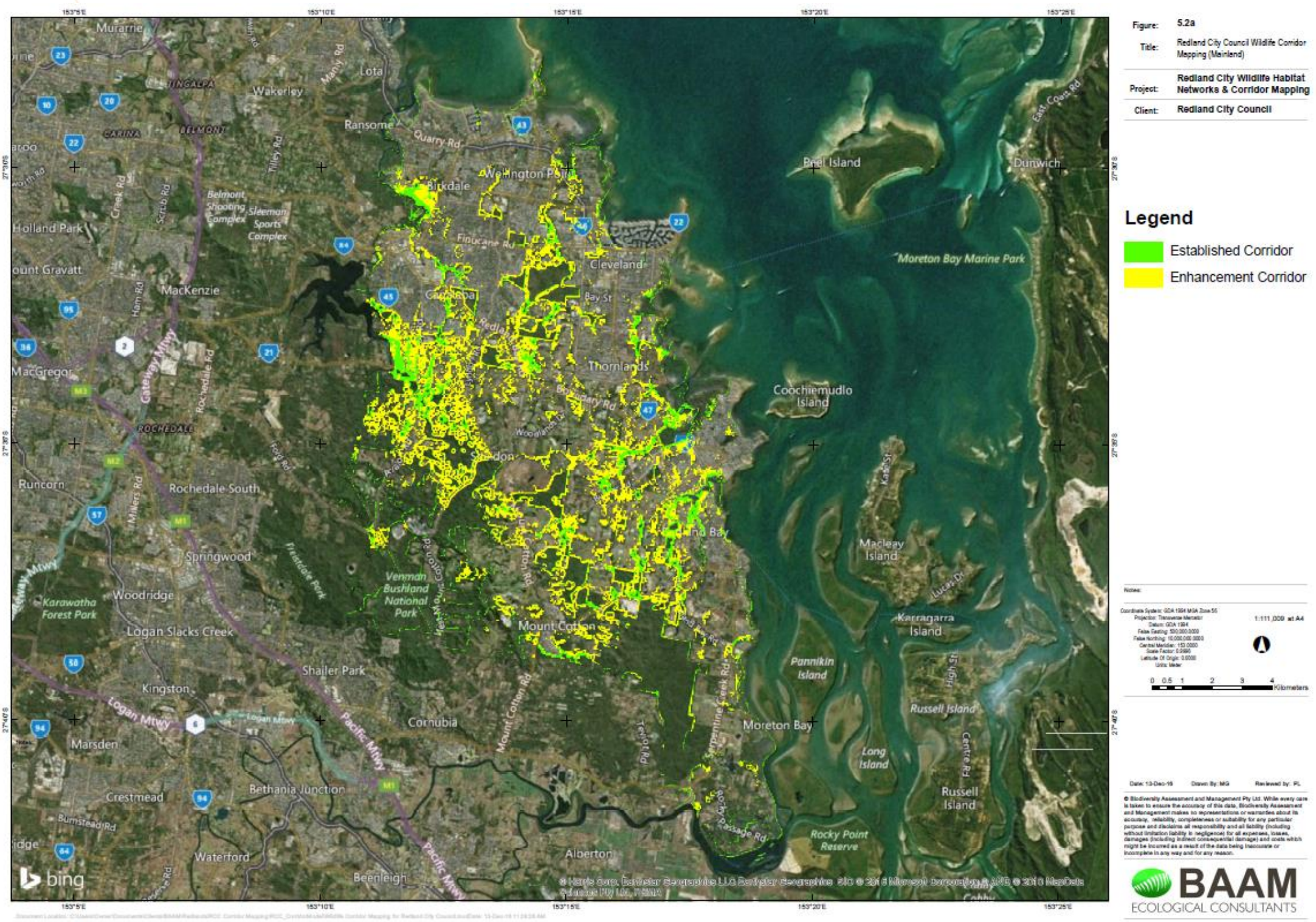

Figure 2 - Core Habitat, Established and Enhancement Corridors from CircuitScape Modelling

Developing the Redlands Wildlife Habitat Networks and Corridors

The CircuitScape modelling outputs have been used to develop the high priority corridors outlined in the proceeding sections of this plan. A series of workshops and working groups utilised expert local knowledge of habitat, wildlife, land use, connectivity and the CircuitScape modelling outputs to develop the wildlife habitat networks and corridors. The principles and data sets used to develop these priority networks and corridors were:

- The Core Habitat identified by the wildlife habitat networks and corridors modelling formed the 'core hubs' that the corridors aim to connect;
- The modelling was the primary source used to delineate the Established Corridors and the Enhancement Corridors;
- Where possible, multiple corridors were provided as alternative links between Core Habitat patches to account for potential disturbance events (such as fire, storms, flooding, disease and impacts from development); and
- Council owned and managed land was favoured to form the trunk centre line of corridors.

Whilst this plan only represents the corridors identified as containing a high level of corridor value, it is imperative to understand that many of the areas not identified will still play a vital role in providing habitat and movement opportunities for many species of wildlife.

The corridors have been assigned target widths and buffers, based on wildlife corridor ecology literature and principles (refer to Appendix 3). Based on these targets, the corridors have been presented as defined 'strips' through the landscape. However, it must be recognised that corridors should not always be viewed as clear pathways. For many wildlife species, movement is diffused through the landscape, and they may not adhere to bushland corridors.

Wildlife Habitat Networks and Corridors

Five categories of wildlife habitat corridors have been defined in this plan (Table 3).

The corridors are assigned names to engender local community recognition, acceptance and ownership. The naming reflects the corridor's local geographic location (Figure 3 and 4).

Core Habitat: The patches of Core Habitat (based on interior areas of remnant vegetation) form the 'core hubs' that the corridors aim to connect. The areas of Core Habitat are all of very high ecological value and a very high priority for protection and rehabilitation.

Table 3 - Definition of Wildlife Habitat Corridor Types

Corridor Type	Definition	Ecological Value	Priority for Rehabilitation
Established	Corridors of particularly high ecological value that hold strong, pre-existing values in providing movement opportunities for wildlife in general.	Highest Ecological Value	Highest Priority for Rehabilitation
Regional Riparian	Particularly significant riparian corridors for biodiversity that form a major element of habitat continuity, as identified in the Biodiversity Planning Assessment (BPA) for the Southeast Queensland Bioregion (EHP 2016).	Highest Ecological Value	Highest Priority for Rehabilitation
Coastal Foreshore	Coastal fringe corridor of the Redland City mainland, Southern Moreton Bay Islands, Coochiemudlo Island and the township areas of North Stradbroke Island. May contain Established, Enhancement or Stepping Stone values.	High Ecological Value	High Priority for Rehabilitation
Enhancement	Corridors that exhibit sufficient ecological value and linkages that would be appropriate targets for strategic enhancement to strengthen Established Corridors.	Medium Ecological Value	Medium Priority for Rehabilitation
Stepping Stone	Corridors of isolated patches of habitat that, while not physically connected, are functionally connected, allowing movement between larger patches.	Less Ecological Value	Lower Priority for Rehabilitation

For each of the wildlife habitat corridors, the values, connectivity, threats and priority management outcomes have been identified to increase the understanding of these priority corridors.

The following specific attributes are assigned to each of the priority corridors:

- Description
  - Location, orientation and linkages to Core Habitat patches.
- Environmental Values
  - Dominant vegetation types and keystone wildlife values.
- Core Habitat Linkages
  - Number of Core Habitat patches linked by corridor; and
  - Maximum distances between Core Habitat patches
- Land Uses
  - Tenure and planning scheme zonings.
- Community Uses
  - Values and potential uses.
- Threats and Barriers
  - Edge effects from urban, peri-urban and rural land use;
  - Road and rail infrastructure; and
  - Development potential within the planning scheme.
- Gaps and Pinch Points
  - Significant gaps (greater than 106m) of open or developed areas along the corridor; and
  - Narrow points of corridor (where width is less than 100m).
- Priority Outcomes
  - Mitigation of current threats and barriers; and
  - Rehabilitation of gaps and pinch points (focusing on where maximum distances between Core Habitat patches is more than 1100m apart)

The above attributes for each corridor are presented in the associated document 'Corridor Descriptions and Locations' (Appendix 4-8). Within this document all corridors display the mapped vegetation within the corridor as a solid colour (with the colour dependent on the corridor type). The areas within the corridor that do not contain mapped vegetation are presented with a transparent colouring. This presentation allows clear distinction between the higher ecological function sections of a corridor (i.e. mapped vegetation represented as solid colours) and other buffer areas of human uses (residential areas, roads etc.) or potential gaps or pinch points for rehabilitation. Please note that while every effort has been made to use the most up to date aerial imagery in the maps presented, not all images may be current.

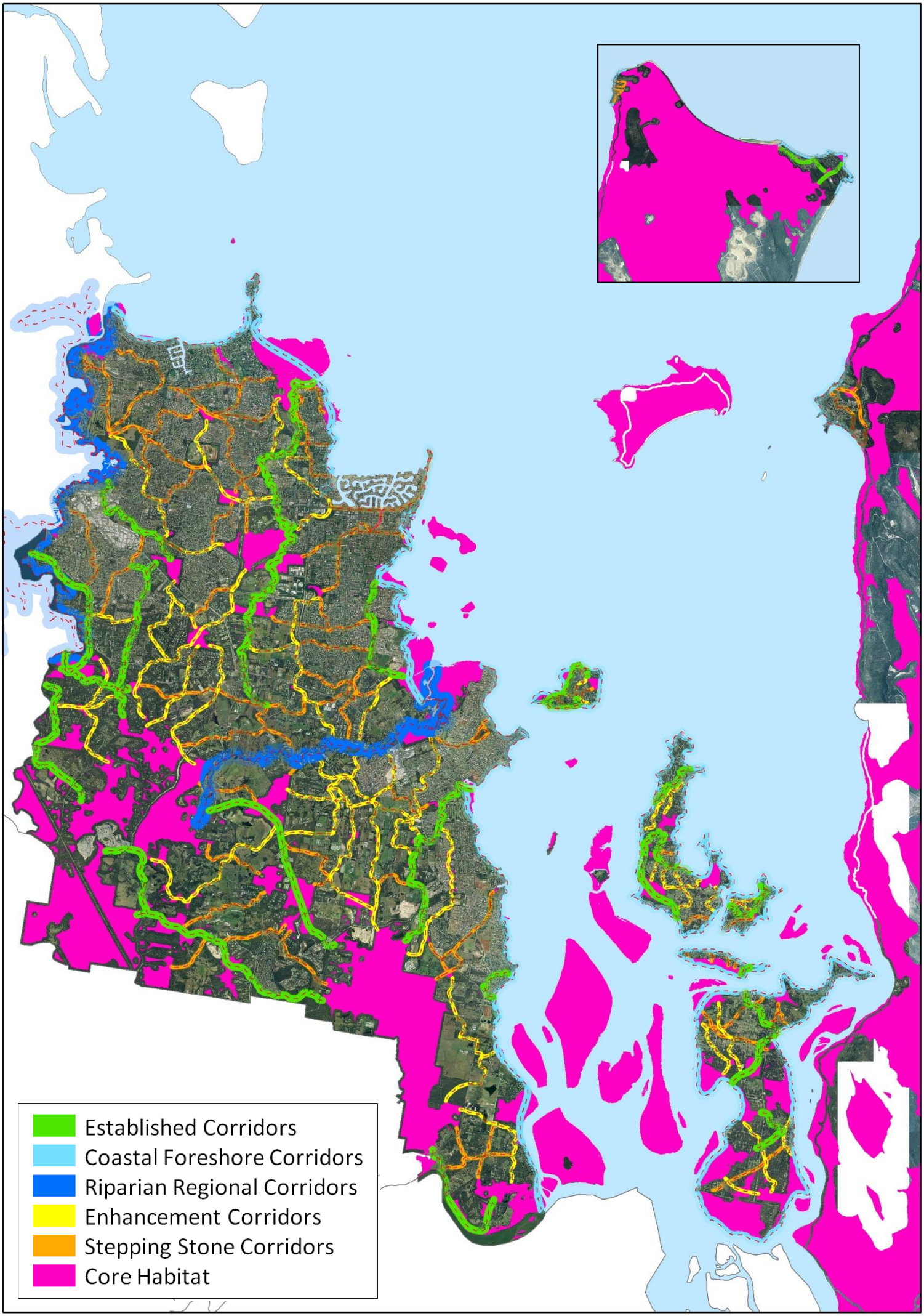

Figure 3 - Wildlife Habitat Network and Corridors in Redland City

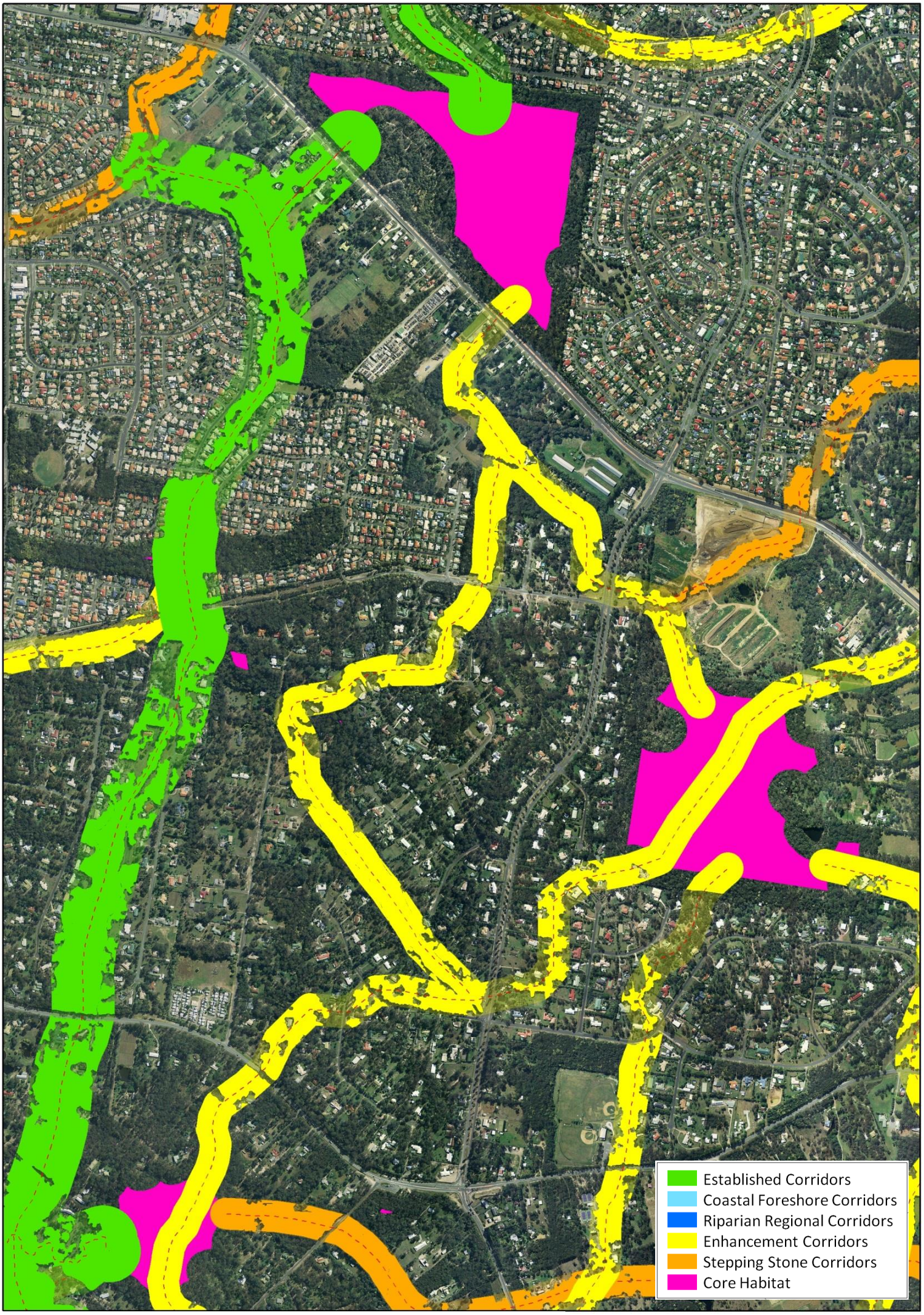

Figure 4 - Wildlife Habitat Network and Corridors – Detailed Example

Established Corridors

The Established Corridors are local scale corridors, and have been defined and mapped within the Redland City local government area. The Established Corridors are areas of particularly high ecological value that hold strong, pre-existing values in providing movement opportunities for wildlife.

To retain a variety of bird species and complete suite of arboreal mammals, the Established Corridors are defined as having a width of 100m, with a minimum 50m buffer of native vegetation (on each side) to reduce the risk of edge effects, resulting in a 200m wide corridor.

The Established Corridors are the highest priority for protection and rehabilitation, as they represent the best value in terms of financial and ecological benefits. The priority outcomes outlined in Appendix 4 should be implemented in the Established Corridors first.

A total of 24 Established Corridors have been identified in Redland City (Figure 5). Appendix 4 provides the full details (name; map; description; environmental values; core habitat linkages; land uses; community uses; threats and barriers; gaps and pinch points; and priority outcomes) for each of these corridors.

Table 4 provides a summary of the attributes of the Established Corridors.

Table 4 - Summary of the values and threats for the Established Corridors

Attributes	Amount	Percentage of Total Corridor
Total number of Established Corridors	24	
Total area of all Established Corridors (200m wide)	1775 ha	
Total area of mapped vegetation (Regional Ecosystem) within all Established Corridors	1320 ha	74%
Total area of open area, urban area, road and rail within all Established Corridors	455 ha	26%
Total area of Council owned land within all Established Corridors	589 ha	33%

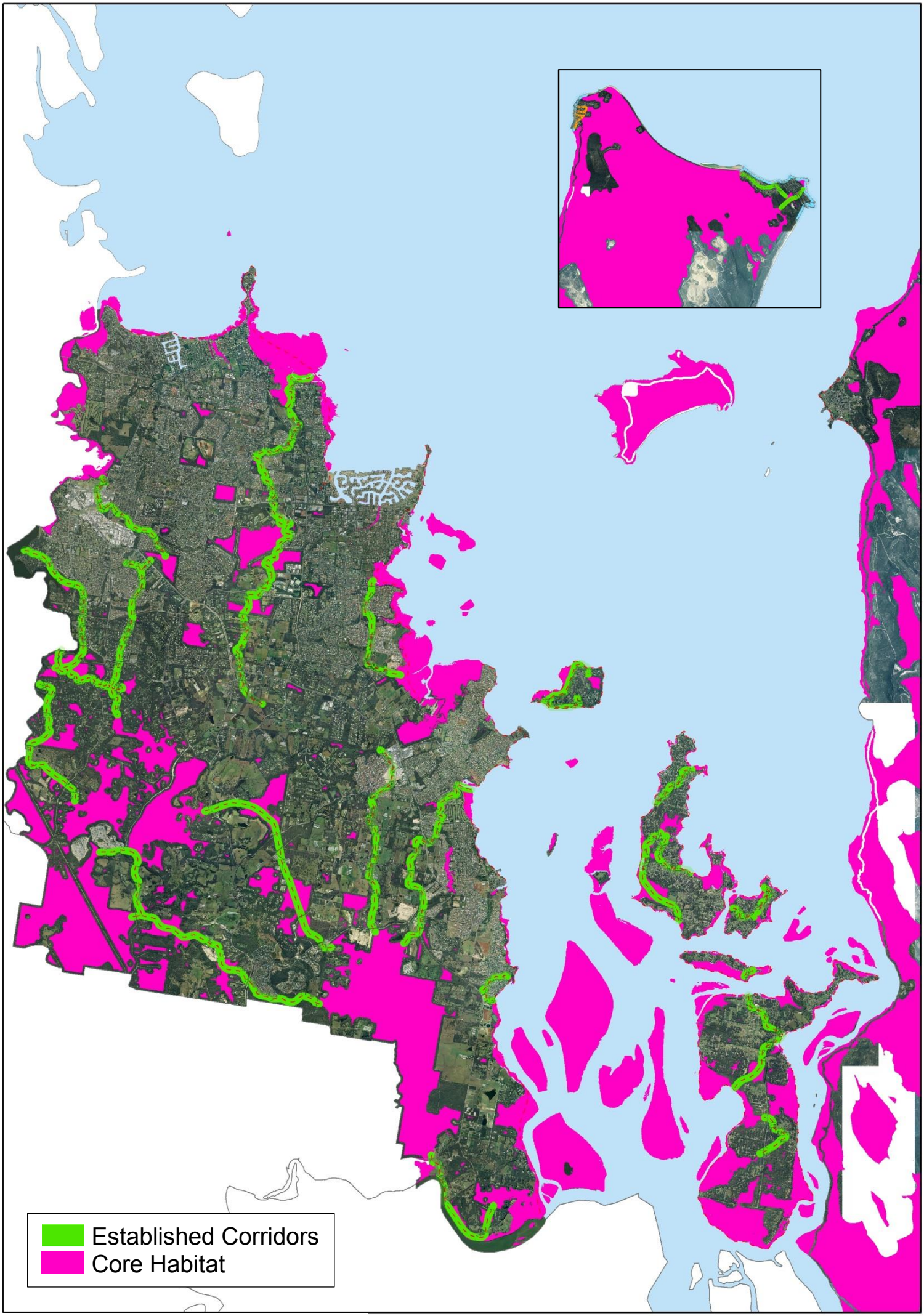

Figure 5 - Established Corridors

Regional Riparian Corridors

The Regional Corridors are identified in the Biodiversity Planning Assessment (BPA) for the Southeast Queensland Bioregion (EHP 2016). The riparian corridors from the BPA are included within this plan as they represent local scale corridors. The terrestrial BPA corridors are not included as they represent state and regional scale planning, beyond the scope of this plan.

The Regional Riparian Corridors are equal priority to the Established Corridors for protection and rehabilitation, as they represent the best value in terms of financial and ecological benefits. The BPA has assigned the regional riparian corridors a target width of 400m. The priority outcomes outlined in Appendix 5 should be implemented in the Established and Regional Riparian Corridors first.

A total of two Regional Riparian Corridors are located in Redland City (as shown in Figure 6). Appendix 5 provides the full details (name; map; description; environmental values; core habitat linkages; land uses; community uses; threats and barriers; gaps and pinch points; and priority outcomes) for each of these corridors.

Table 5 provides a summary of the attributes of the Regional Riparian Corridors.

Table 5 - Summary of the values and threats for the Regional Riparian Corridors.

Attributes	Amount	Percentage of Total Corridor
Total number of Regional Riparian Corridors	2	
Total area of all Regional Riparian Corridors (400m wide – within Redland City)	1065 ha	
Total area of mapped vegetation (Regional Ecosystem) within all Regional Riparian Corridors (in Redland City)	600 ha	56%
Total area of water reservoir, open area, urban area, road and rail within all Regional Riparian Corridors	465 ha	44%
Total area of Council owned land within all Regional Riparian Corridors	167 ha	16%

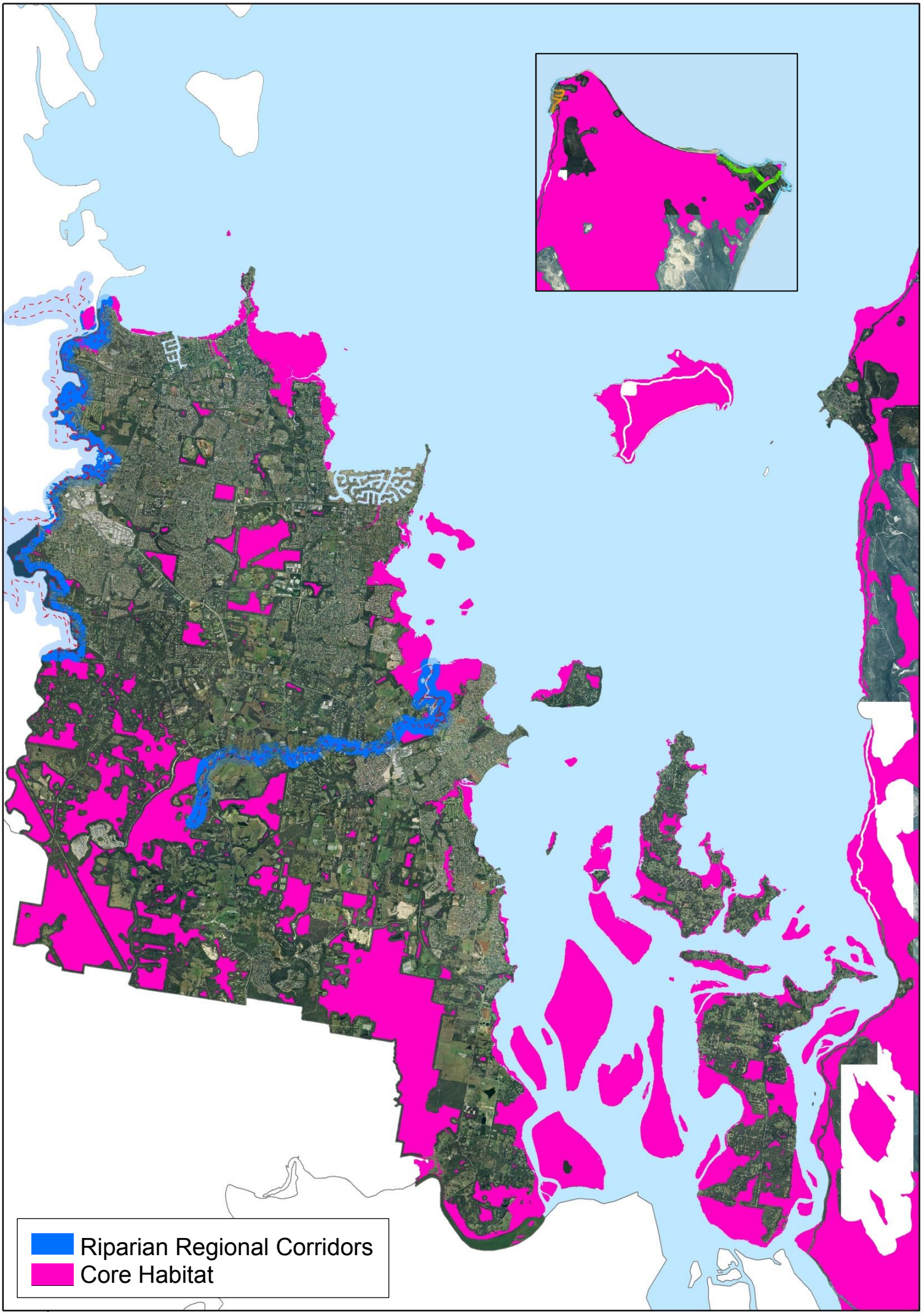

Figure 6 - Regional Riparian Wildlife Habitat Corridors

Coastal Foreshore Corridors

The Redlands Coastal Foreshore Corridors are local scale corridors, and have been defined and mapped within the Redland City local government area. The coastal foreshore corridors make up the coastal fringe of the Redland City mainland, Southern Moreton Bay Islands, Coochiemudlo Island and the township areas of North Stradbroke Island. Although these corridors may exhibit characteristics of Established, Enhancement or Stepping Stone Corridors, they have been grouped together as they have similar values, threats and management actions.

The Coastal Foreshore Corridors are a high priority for protection and rehabilitation, as they represent the value in terms of financial and ecological benefits. The priority outcomes for the Coastal Foreshore Corridors outlined in Appendix 6 should occur, following the implementation of actions in the Established and Regional Riparian Corridors.

The Coastal Foreshore Corridors predominately comprise of tidal flats, mangrove, saltpan, saltmarsh and casuarina habitats and may incorporate other fringing woodland vegetation (on coast dunes or alluvial land). These coastal foreshore corridors are crucial habitat for wader birds, intertidal marine vertebrates and invertebrates, and specialist species such as the Water Mouse.

To retain a variety of species the Coastal Foreshore Corridors are defined as having a width of 100m, with minimum 50m buffer (on each side) to reduce the risk of edge effects, resulting in a 200m wide corridor.

A total of 14 Coastal Foreshore Corridors have been identified in Redland City (as shown in Figure 7). Appendix 6 provides the full details (name; map; description; environmental values; core habitat linkages; land uses; community uses; threats and barriers; gaps and pinch points; and priority outcomes) for each of these corridors.

Table 6 provides a summary of the attributes of the Coastal Habitat Corridors.

Table 6 - Summary of the values and threats for the Coastal Foreshore Corridors

Attributes	Amount	Percentage of Total Corridor
Total number of Coastal Foreshore Corridors	14	
Total area of all Coastal Foreshore Corridors (200m wide)	2407 ha	
Total area of mapped vegetation (Regional Ecosystem) within all Coastal Foreshore Corridors (Please Note: does not include inter-tidal open areas)	908 ha	38%
Total area of marine zone, open area, urban area, road and rail within all Coastal Foreshore Corridors	1499 ha	62%
Total area of Council owned land within all Coastal Foreshore Corridors	295 ha	12%

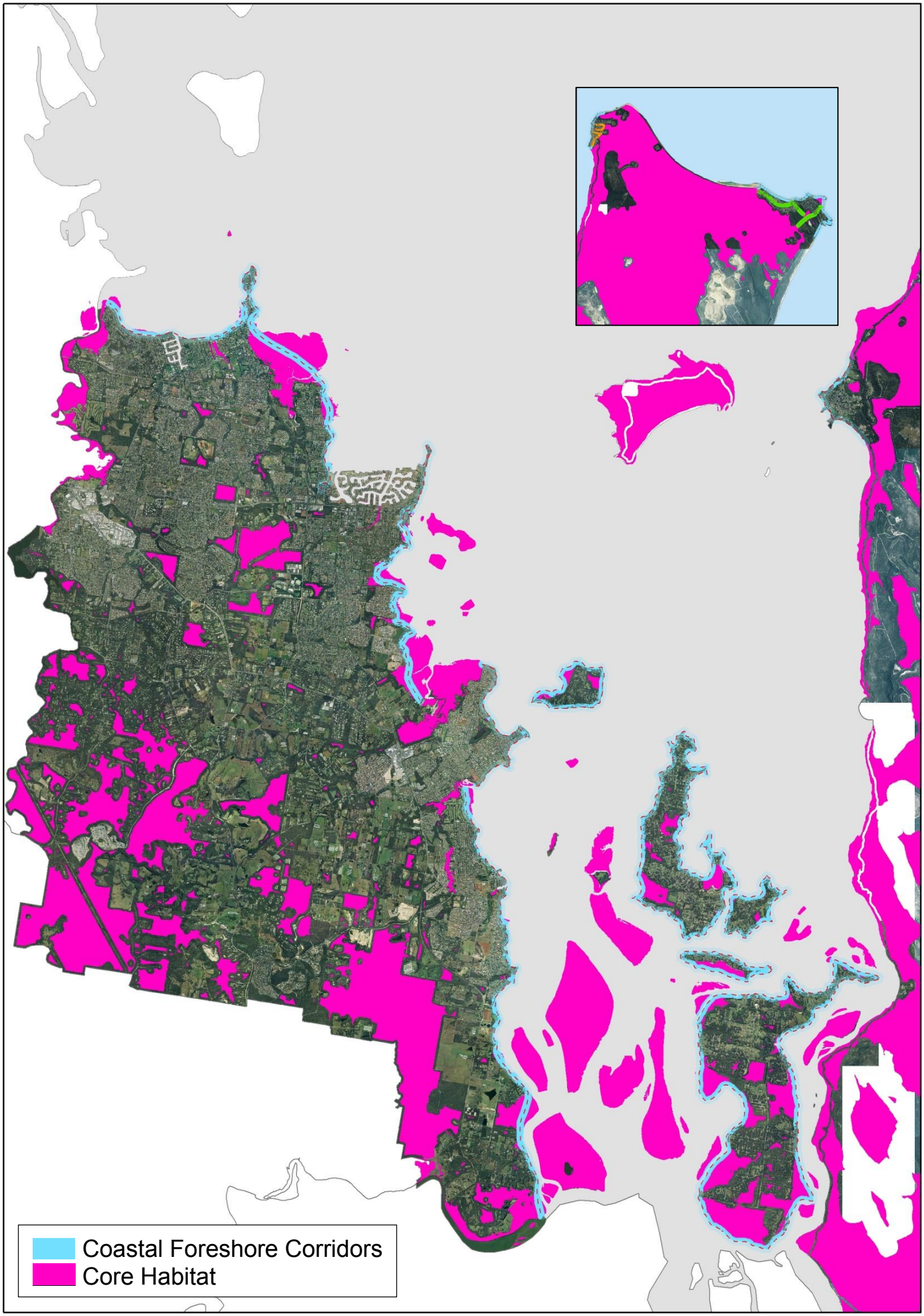

Figure 7 - Coastal Foreshore Wildlife Habitat Corridors

Enhancement Corridors

The Enhancement Corridors are local scale corridors, and have been defined and mapped within the Redland City local government area. The Enhancement Corridors are areas that exhibit sufficient ecological value and linkages that would be appropriate targets for strategic enhancement to strengthen Established Corridors.

The Enhancement Corridors are the second highest priority for protection and rehabilitation. The priority outcomes outlined in Appendix 7 should occur, following the implementation of actions in the Established, Regional Riparian Corridors and Coastal foreshore.

To retain a variety of bird species and complete suite of arboreal mammals, the Enhancement Corridors are defined as having a width of 100m.

Enhancement Corridors in Known Development Areas Corridors is a subgroup of Enhancement Corridors that are recognised as part of an identified development area under a planning instrument or existing approval (refer to Appendix 7a – Enhancement Corridors in Known Development Areas Corridors). These areas include Kinross Road Thornlands, South East Thornlands, Shoreline Redland Bay and the Bunker Road Victoria Point emerging community area. Additional 'property scale' corridors may be identified in these (and future) identified development areas, and established as different parts of the City are developed or as land uses change. It should be noted that it is not the role of the Wildlife Connection Plan to identify 'property scale' corridors.

A total of 44 Enhancement Corridors have been identified in Redland City (Figure 8). Appendix 7 and 7a provide the full details (name; map; description; environmental values; core habitat linkages; land uses; community uses; threats and barriers; gaps and pinch points; and priority outcomes) for each of these corridors.

Table 7 provides a summary of the attributes of the Enhancement Corridors.

Table 7 - Summary of the values and threats for the Enhancement Corridors

Attributes	Amount	Percentage of Total Corridor
Total number of Enhancement Corridors	44	
Total area of all Enhancement Corridors (100m wide)	1207 ha	
Total area of mapped vegetation (Regional Ecosystem) within all Enhancement Corridors	830 ha	69%
Total area of open area, urban area, road and rail within all Enhancement Corridors	377 ha	31%
Total area of Council owned land within all Enhancement Corridors	280 ha	23%

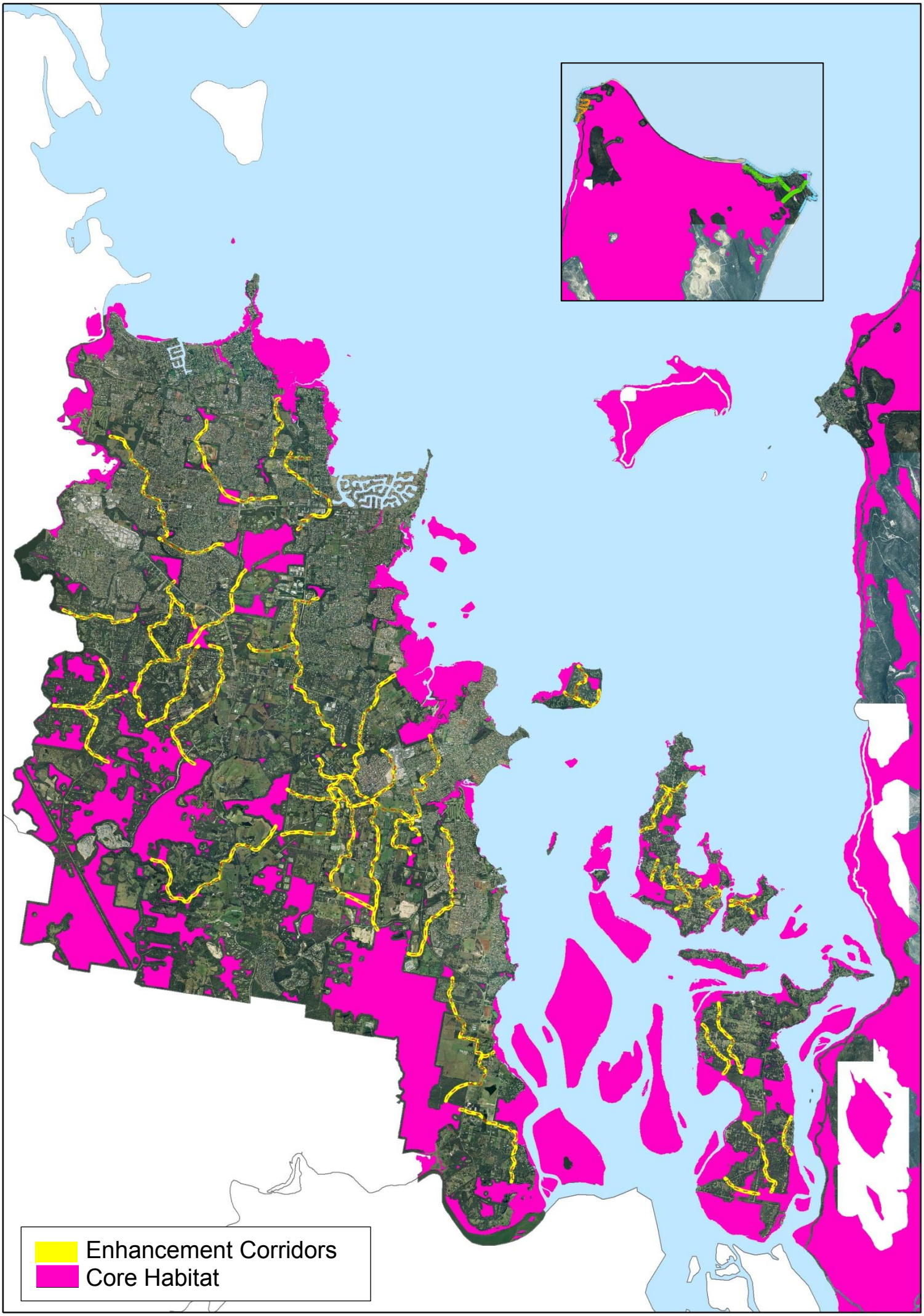

Figure 8 - Enhancement Corridors

Stepping Stone Corridors

The Stepping Stone Corridors are local scale corridors, and have been defined and mapped within the Redland City local government area. The Established and Enhancement Corridors represent predominately continuous and diversely structured habitat, and are generally the most appropriate for facilitating wildlife movement. However it is recognised that Stepping Stone Corridors (such as scattered trees) can be equally effective for certain species while dispersing or migrating. (Forman 1995 & Bennett 2003)

Stepping stones can be defined as isolated patches of habitat that, while not physically connected, are functionally connected, allowing movement between larger patches (National Wildlife Corridors Plan 2012). Stepping Stones of suitable habitat enhance connectivity in developed landscapes for species able to make short movements through disturbed environments. Stepping Stones may be natural patches, such as wetlands or patches of rainforest within drier forests or they may be small remnant patches of vegetation in a developed landscape. Scattered trees or patches of habitat are the most recognised form of Stepping Stones and are important to native fauna for movement, shelter, foraging habitat and nesting resources, especially in urban areas.

The Stepping Stone Corridors are a lower priority for protection and rehabilitation. The priority outcomes outlined in Appendix 8 should occur, following the implementation of actions in the Established, Regional Riparian, Coastal Foreshore and Enhancement Corridors.

To retain a variety of bird species and arboreal mammals, the outline of Stepping Stone Corridors are defined as having a width of 100m. However, by their nature, the Stepping Stone Corridors consist of patches of vegetation and not a continuous vegetated corridor.

A total of 62 Stepping Stone Corridors have been identified in Redland City (Figure 9). Appendix 8 provides the full details (name; map; description; environmental values; core habitat linkages; land uses; community uses; threats and barriers; gaps and pinch points; and priority outcomes) for each of these corridors.

Table 8 provides a summary of the attributes of the Stepping Stone Corridors.

Table 8 - Summary of the values and threats for the Stepping Stone Corridors

Attributes	Amount	Percentage of Total Corridor
Total number of Stepping Stone Corridors	62	
Total area of all Stepping Stone Corridors (100m wide)	1332 ha	
Total area of mapped vegetation (Regional Ecosystem) within all Stepping Stone Corridors	622 ha	47%
Total area of open area, urban area, road and rail within all Stepping Stone Corridors	710 ha	53%
Total area of Council owned land within all Stepping Stone Corridors	377 ha	28%

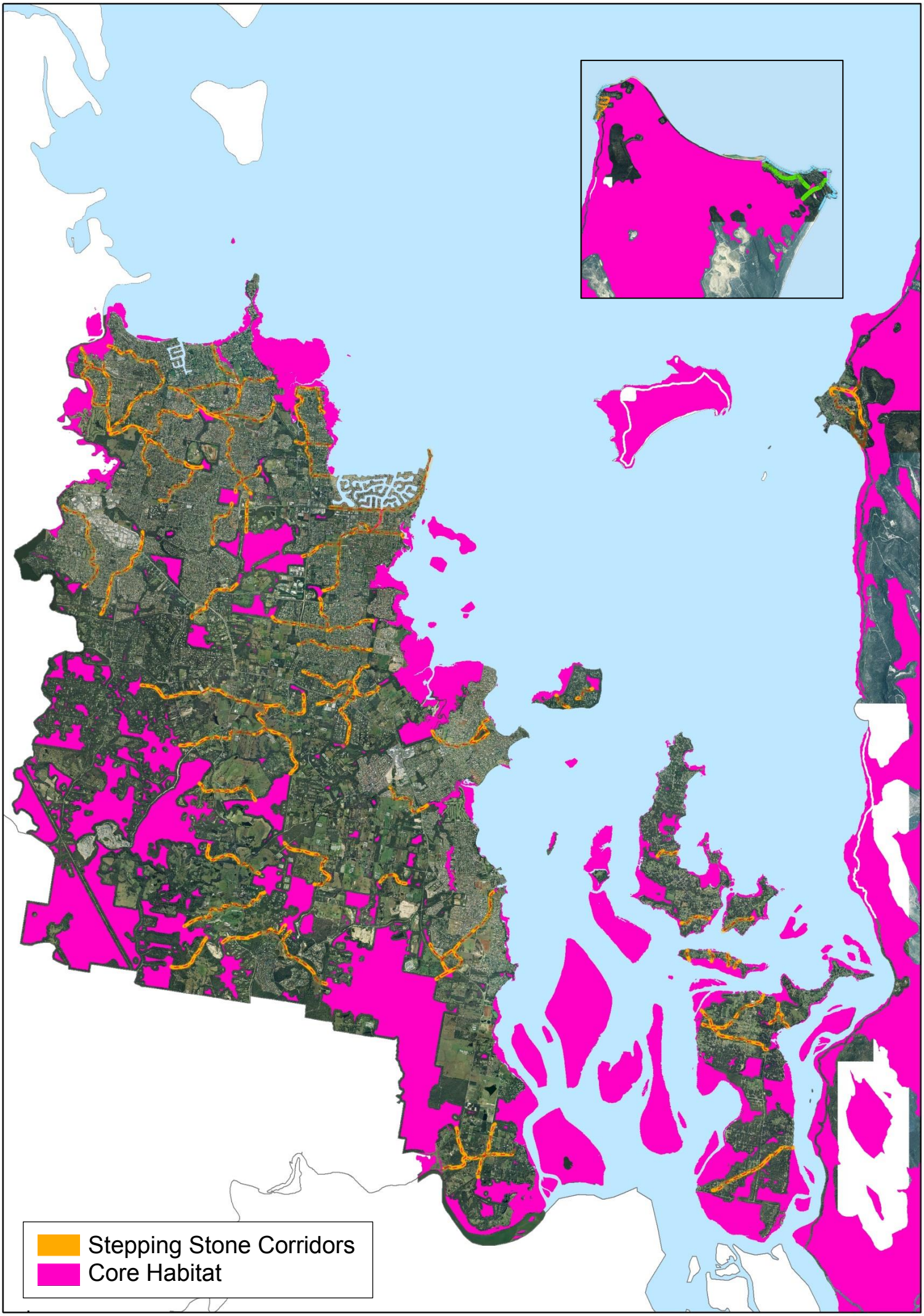

Figure 9 - Stepping Stone Corridors

Priority Outcomes for Wildlife Habitat Network and Corridors

Within associated document 'Corridor Descriptions and Locations (Appendices 4, 5, 6, 7 and 8), the priority outcomes are listed for each individual Established, Enhancement, Regional Riparian, Coastal Foreshore, and Stepping Stone Corridors. These priority outcomes aim to address the threats, barriers, gaps and pinch points for each, which are also listed for each corridor within Appendices 4, 5, 6, 7 and 8. Location descriptions are provided for each of the priority outcomes that recommend rehabilitation of gaps and pinch points. A summary of the types and number of priority outcomes for each corridor classification is provided in Table 9.

Table 9 - Summary of priority outcomes by corridor type

Priority for Rehabilitation	Corridor Type	Number of Corridors	Priority Outcomes	Number of Priority Sites
1	Established	24	Improve Corridor Habitat • Rehabilitation of gaps and pinch points	28
			Prevent Wildlife Deaths • Safe fauna passage across road (or rail) barriers	34
			Protect Corridor Habitat • Provide input into planning scheme	0
			Reduce Impacts on Corridors • Manage impacts of urban and/or peri-urban and/or rural areas	24
1	Regional Riparian	2	Improve Corridor Habitat • Rehabilitation of gaps and pinch points	3
			Prevent Wildlife Deaths • Safe fauna passage across road (or rail) barriers	6
			Protect Corridor Habitat • Provide input into planning scheme	0
			Reduce Impacts on Corridors • Manage impacts of urban and/or peri-urban and/or rural areas	2
2	Coastal Foreshore	14	Improve Corridor Habitat • Rehabilitation of gaps and pinch points	31
			Prevent Wildlife Deaths • Safe fauna passage across road (or rail) barriers	0
			Protect Corridor Habitat • Provide input into planning scheme	1
			Reduce Impacts on Corridors • Manage impacts of urban and/or peri-urban and/or rural areas	14
			• Management of impacts from storm tide and sea level rise impacts	14
3	Enhancement	44	Improve Corridor Habitat • Rehabilitation of gaps and pinch points	95
			Prevent Wildlife Deaths • Safe fauna passage across road (or rail) barriers	59
			Protect Corridor Habitat • Provide input into planning scheme	12
			Reduce Impacts on Corridors • Manage impacts of urban and/or peri-urban and/or rural areas	44
4	Stepping Stone	62	Improve Corridor Habitat • Rehabilitation of gaps and pinch points	118
			Prevent Wildlife Deaths • Safe fauna passage across road (or rail) barriers	55
			Protect Corridor Habitat • Provide input into planning scheme	2

Protecting and rehabilitating the highest value corridors will result in the best cost efficiency and often provides the greatest ecological benefit.

The Established Corridors and the Regional Riparian Corridors are equally the highest priority corridors, as they represent the most intact, connected and high ecological value corridors. The cost to protect and rehabilitate will provide the most ecological benefits for any investment.

The Coastal Foreshore are the second highest value ecological corridors, however may require significant investment for protection and rehabilitation, and consequently are lower priority for rehabilitation than the Established and Regional Riparian Corridors. The Enhancement Corridors are the third highest priority for protection and rehabilitation, as they will require a greater level of investment in protection and rehabilitation to achieve a high level of ecological benefit.

The Stepping Stone Corridors would require the greatest level of investment in protection and rehabilitation, and are therefore a lower priority.

It is important to note that the recommended priority actions for each corridor are developed based on a desktop assessment, utilising all available mapping resources, such as aerial imagery, vegetation mapping and the model outputs. The first step of implementation of any action is verifying the suitability of the recommendations on ground.

The priority outcomes listed for the management of impacts from urban, peri-urban and rural areas are somewhat general descriptions, and further work (including ground-truthing) is required to allow effective implementation of these actions.

Action Plan

The Wildlife Connections Action Plan lists the work areas within Council with responsibility for each action; implementation methods; implementation partners; performance measures; timeframe; and indication of cost of implementation.

The implementation of the priority outcomes within associated document 'Corridor Descriptions and Locations (Appendices 4, 5, 6, 7 and 8) can be achieved through a variety of methods based on tenure and location; and will be the responsibility of several areas within Council.

Implementation of the Action Plan will be undertaken with the following prioritisation considerations:

1. All areas of Core Habitat are a high priority for protection and rehabilitation. All actions within the Action Plan can be implemented in the identified Core Habitat areas;
2. The Established, Regional Riparian Corridors and Coastal Foreshore are the highest priority for protection and rehabilitation;
3. The Enhancement Corridors are the second highest priority for protection and rehabilitation;
4. The Stepping Stone Corridors are a lower priority for protection and rehabilitation;
5. All corridor rehabilitation and enhancement of buffer areas should follow South East Queensland (SEQ) Ecological Restoration Framework (SEQ Catchments, 2012); and
6. All corridor rehabilitation and enhancement of buffer areas must take into account fire management planning

Monitoring of Action Plan Implementation

The implementation of the actions in the plan will be reviewed annually. The review will assess the success of each action based on the 'Performance Measures' listed in the Wildlife Connections Action Plan. Information from each of the Council areas and external partners will be collated for the annual review.

If available, updated mapping (such as new Regional Ecosystem mapping or planning scheme zones) and other environmental data sets will be used to monitor changes to the values, attributes and threats of the wildlife habitat network and corridors.

Funding of the priority actions is critical to the success and performance of this plan. Delivery of the action plan will be funded through a combination of business as usual, general revenue, environment separate charge, reserve funds and resources obtained through external funding sources.

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Appendix 1 - Summary and review of Federal, State and Regional Corridor Plans and Strategies

National Wildlife Corridors Plan 2012

The *National Wildlife Corridors Plan* is an Australian Government document that highlights the need for habitat connectivity throughout the country (Department of Sustainability, Environment, Water, Population and Communities, 2012). The purpose of the national plan is to enable and coordinate efforts of landscape connectivity from all parties throughout Australia (Department of Sustainability, Environment, Water, Population and Communities, 2012). It is important that Australia's cities, rural areas, reserves, and national parks are connected to ensure movement through the landscape. The document consists of a five-point plan of action to be implemented gradually, and includes:

1. "Developing and supporting corridor initiatives
2. Establishing and ensuring institutional arrangements
3. Promoting strategic investment in corridors
4. Working with key stakeholders and supporting regional natural resource management planning
5. Monitoring, evaluating, and reporting"

(Department of Sustainability, Environment, Water, Population and Communities, 2012)

In order to be successful, the plan must incorporate a collaborative approach in the planning, management, and reporting of wildlife corridors. The government can plan corridors at a national, regional, or local scale, but they will not be successful without the cooperation of the community (Landcare Australia, 2011). The plan highlights that private land holders, community groups, NRM groups, Landcare, state agencies, and local government all have a role to play in managing and maintaining wildlife corridors.

The document examines why wildlife corridors need to be implemented, and provides limited information on how or what to implement. A number of existing national and state corridor initiatives are referenced including "the Gondwana Link, the Great Eastern Ranges Initiative, Habitat 141, NatureLinks, Trans-Australia Eco-Link, and the Tasmanian Midlandscapes" (Department of Sustainability, Environment, Water, Population and Communities, 2012). The Plan also promises to support and encourage regional and local corridor initiatives, which has had little success in implementation.

Corridor identification through the Biodiversity Planning Assessments 2015

This document was released by the Queensland Government in 2015, and highlights the key riparian and terrestrial corridors throughout the state. A number of specific state, and regional corridors are cited, accompanied with maps on different bioregions. The south east Queensland region consists of 48 state and regional terrestrial corridors that connect land to other regional areas (EHP 2015). Corridors were selected based on a number of factors, including the quality of existing habitat, location of existing regional corridors, altitudinal/geological/climatic gradients, ability to connect large tracts of habitat, and location of watershed, catchment, and coastal boundaries (EHP 2015). A map showing Queensland's State terrestrial corridors is seen in Figure 10 below.

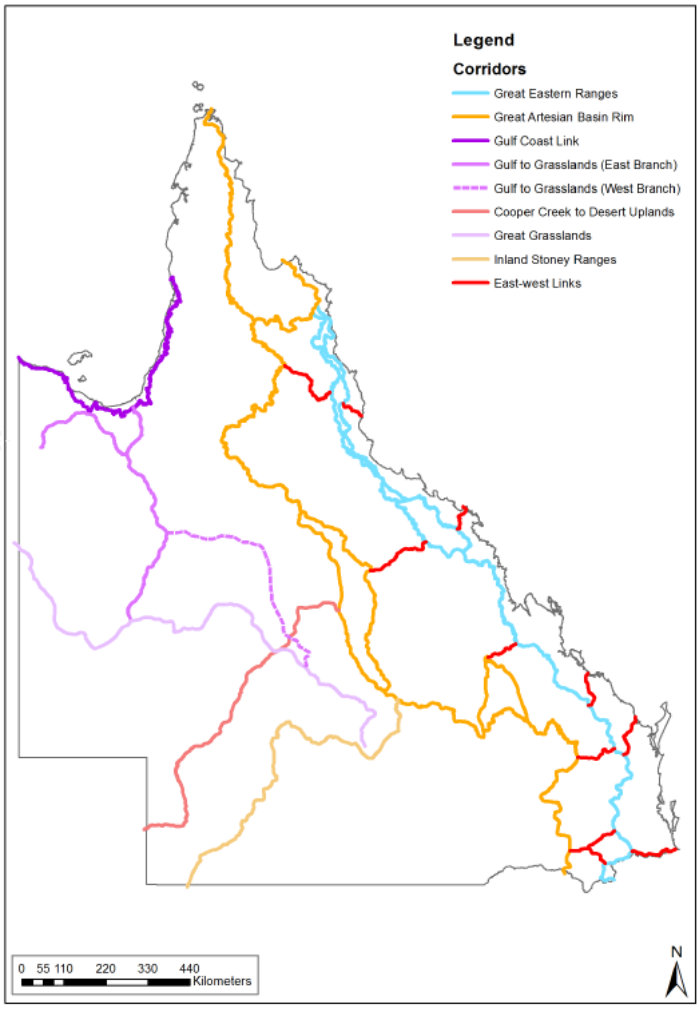

Figure 10 - Map of Queensland showing state-wide conservation corridors (Howell, et al., 2015)

Shaping SEQ - South East Queensland Regional Plan (Department of Infrastructure, Local Government and Planning, 2016)

ShapingSEQ is the Queensland Government's plan to guide the future of the South East Queensland (SEQ) region, prepared in collaboration with the region's 12 local governments. It aims to accommodate future growth sustainably and in a way that responds to change positively, and enhances the social, economic and environmental systems that support the region's liveability. For the purposes of the *Sustainable Planning Act 2009*, ShapingSEQ is the statutory regional plan for the SEQ region.

ShapingSEQ differs from previous regional plans in several new headline initiatives and key new functions including "Identifying and mapping regional biodiversity corridors and values to support the protection of these values."

Community consultation for ShapingSEQ revealed residents want to protect SEQ's natural environment, including: establishing wildlife corridors to allow safe passage and protection for the region's fauna. ShapingSEQ recognises fragmentation and degradation of natural corridors and habitats, has resulted in significant species decline.

Within ShapingSEQ, Goal 4: Sustain, Element 2: Biodiversity states "The regional biodiversity network is protected and enhanced to support the natural environment and contribute to a sustainable region." The strategies proposed to achieve this are:

1. Protect regional biodiversity values (including koala habitat), and ecological processes that support them, from inappropriate development;
2. Focus coordinated planning, management and investment, including offset delivery, in regional biodiversity corridors;
3. Avoid fragmentation of regional biodiversity corridors; and
4. Maintain and enhance the value of biodiversity corridors to optimise biodiversity conservation outcomes.

The regional biodiversity corridors aim to connect or improve connectivity through targeted rehabilitation of natural assets, including between existing areas of Matters of State Environmental Significance (MSES) or regional biodiversity values. These corridors are to be investigated and refined by local government for consideration as Matters of Local Environmental Significance (MLES) where MSES do not already exist.

Biodiversity Planning Assessment - Southeast Queensland Bioregion, Queensland Environmental Protection Agency, 2007

A Biodiversity Planning Assessment (BPA) identifies the terrestrial ecological values in a region, or bioregion, according to their conservation significance. BPAs are used by governments, members of the community and landholders to make planning decisions about appropriate land use.

The SEQ Bioregion shares its western boundary with the Brigalow Belt Bioregion, and extends from the New South Wales border, north to the dry coastal corridor between Gladstone and Rockhampton that forms part of the Brigalow Belt Bioregion.

The SEQ BPA relied on a Biodiversity Assessment and Mapping Methodology (BAMM, Version 2.2) to provide a consistent approach for assessing biodiversity values at the landscape scale in Queensland using vegetation mapping data generated or approved by the Queensland Herbarium as a fundamental basis. The SEQ BPA also identifies and maps landscape scale corridors at a state-wide level for most of the state. The network is being expanded as BPAs are completed for each bioregion. Their broad purpose is to provide for ecological and evolutionary processes at a landscape scale by:

- maintaining long term evolutionary/genetic processes that allow the natural change in distributions of species and connectivity between populations over long periods of time;
- maintaining landscape/ecosystems processes associated with geological, altitudinal and climatic gradients, to allow for ecological responses to climate change;
- maintaining seasonal migrations and movement of fauna;
- maximising connectivity between large tracts/patches of remnant vegetation; and
- identifying key areas for rehabilitation and offsets.

The corridors have been selected to reflect:

- major watershed and catchment boundaries;
- intact river systems;
- major altitudinal/geological/climatic gradients;
- connectivity between remnant vegetation in good condition;
- linkages between bioregions; and
- linkages between permanent waterholes.

The methods used to identify bioregional terrestrial and riparian corridors, and gaps and critical weaknesses in terrestrial corridors, are outlined in Corridor Identification through Biodiversity Planning Assessments (EHP 2015). Corridors that form part of the state-wide network are assigned State significance. Other corridors providing connectivity at a sub-regional scale are assigned Regional significance.

The landscape expert panel workshops reviewed the existing network of corridors from version 3.5 of the BPA, making amendments and adding new corridors. The panel also discussed whether the definitions of corridors need to be modified in a highly fragmented bioregion like SEQ.

Appendix 2 – Summary and review of Existing Corridor Strategies and Actions for Redland City Council

A review and summary of the status of the strategies, plans, actions and mapping for corridors planning produced for Redland City Council is provided below.

Bushland and Habitat Corridor Plan - 2004

This document was adopted by Council in August 2004 and sets out a series of principles for protecting, managing and enhancing wildlife habitat and corridors in Redland City. This plan also outlines existing 'tools' for conserving habitat and makes recommendations for future directions. The Environmental Inventory Mapping (Stage 4) forms the basis of this plan.

The first part of the Plan describes objectives and principles. The objectives of the plan are to:

- identify and protect all core habitat areas in the Shire;
- manage and enhance corridors for wildlife movement;
- identify, protect, manage and enhance species and areas of special interest; and
- manage and enhance all core habitat areas and the balance habitat areas of the Shire.

The second part of the Plan describes the threats to habitat, seven primary and ten secondary tools and recommended actions. The threats include: development allowed under the planning scheme; existing and future roads; indiscriminate clearing; bushfires; and pest plants and pest animals.

The Primary Tools listed are: The Redland Environmental Inventory; State Planning Policy 1 / 97 – Conservation of koalas in the Koala Coast (subsequently superseded by SPP 1/05); Redland Shire Planning Scheme and the draft Redland Planning Scheme; Local Law No.6 – Protection of Vegetation; Environment Charge; Voluntary Conservation Agreement program; and Research.

The Secondary Tools are: Land for Wildlife Program; Transferable development rights; Conservation tax incentives; Rural Support program; Statutory Covenants on property title; Easements for management purposes; Voluntary land exchange; Councillor advocacy; Bushcare program; and Alternative forms of residential development.

41 specific recommendations are provided to meet the principles and concepts of the Plan and the associated 7 primary and 10 Secondary Tools. A recent review of the 41 recommendations found that 17 were implemented (or ongoing), 15 were partially implemented and 9 were not implemented. Successful implementation of recommendations from the plan included:

- Surveys, reports and installation of treatments for fauna crossing points of roads in Redland City;
- The incorporation of the Environmental Inventory mapping in the Redland Planning Scheme; and
- Koala habitat mapping projects.

It is noted that several of the implemented recommendations involved the development of a plan, strategy, mapping tool, research or advocacy, and the on-ground actions derived from these may not have been realised.

Environmental Inventory - 1996 to 2007

The Redland Shire Environmental Inventory is a spatial tool used to understand environmental priorities. The Environmental Inventory uses a Geographic Information System (GIS) database of mapped Conservation Management Areas (CMAs) and additional polygons selected as potential corridor links and environmental enhancement areas. The CMAs are prioritised according to four categories (Priority, Major, General and Enhancement) and are also assigned functional roles (Habitat, Corridor, Tidal, Patch etc) as part of a city-wide conservation network for retaining biodiversity, based on the principles of conservation biology.

This method was developed in 1996 by Chenoweth, prior to the availability of State Government mapping of Regional Ecosystems. The 2007 project review updated the boundaries of mapped CMAs and incorporated the State Government Regional Ecosystem and biodiversity mapping data (EPA) to review categories. The CMA system has proven to be an adaptable basis for land use planning and management. In 2011, version 4.3 of the Environmental Inventory was created by updating ground-truthed data and inputting additional survey data. The Environmental Inventory V4.3 was used as one of the primary inputs to NEDS.

Green Infrastructure - 2009

The Green Infrastructure Mapping (GIM) project was a geographic information system (GIS) based initiative that;

1. developed understanding of the relationship between remaining habitat across the city;
2. facilitated analysis of emerging issues and their impacts on the biodiversity of the Redlands; and
3. directed and prioritises the resources of the community, Redland City Council, the State and other stakeholders.

The GIM project aimed to improve Council officers understanding of the connectivity between remaining habitats, streamline service delivery and generate cost savings. The GIM project was a requirement of the Biodiversity Strategy 2008-2012 and the Redlands Koala Policy & Implementation Strategy 2008.

The GIM project was based on GIS layers for: Redland City Council Land; Environmental Inventory 4 (EI4); Road treatments; Interim State Koala areas; Extension Program participants; Urban Tree project and the Culvert Study.

The end product of the GIM was the identification of principal patches of habitat and priority corridors.

Wildlife Corridor Mapping Using Species Indicator Model - 2010

This internal Council report outlines the use of an Indicator Species Model (ISM) to identify critical wildlife corridors for seven indicator species throughout Redland City's mainland. The ISM utilises Geographic Information Systems (GIS) to determine the optimal locations for new corridors to link currently unconnected patches of vegetation.

The report uses Habitat Suitability Models, Patch Habitat Model, Corridor Modelling and Critical Corridor Analysis. The corridor maps produced illustrate the movement preferences of different

species between patches of habitat. These maps improve the ability of managers to identify the most favourable locations for corridor restoration or impact mitigation. By comparing corridors with the overlays of other planning intentions such as proposed development, managers can foresee and proactively contend with possible conflicts.

The seven key indicator species being utilized to assess the viability of the City's green infrastructure were:

- Koala *Phascolarctos cinereus*;
- Squirrel Glider *Petaurus norfolcensis;*
- Swamp Wallaby *Wallabia bicolour;*
- Northern Brown Bandicoot *Isoodon macrourus;*
- Large Footed Myotis *Myotis macropus;*
- Striated Pardalote *Pardalotus striatus*; and
- Tusked Frog *Adelotus brevis.*

The report recommends implementation of the modelling by:

1. Applying Indicator Species Model to property/area in question to identify 'critical corridor' or 'species corridor' locations;
2. Performing field survey to ground-truth GIS analysis of area;
3. Determining extent of restoration and other enhancement actions required on site; and
4. Select the relevant program or plans most suitable to implement on site (including acquisitions, offsets, environmental education, Habitat Protection Programs and Bushcare).

Natural Environment Decision System - 2011

Natural Environment Decision System (NEDS) is a spatial model developed by AECOM and Biodiversity and Assessment Management (BAAM) designed to provide an expression of conservation value within Redland City. NEDS aims to supersede the Environmental Inventory mapping. In Phase 1 of NEDS, the system was developed and implemented. Phase 2 involved a number of changes to the spatial layers. This innovative tool delivers a highly sophisticated mapping and data management system that provides strong evidence to assist with environmental policy planning.

NEDS accepts all common digital data and integrates with all Councils existing systems. It primarily utilises updated information layers from the Regional Ecosystems, Wetlands, Conservation Significant Fauna and Flora records, Biodiversity Planning Assessment (BPA) Version 3.5 and Koala Habitat data sets. The supplementary data layers include LiDAR, Protected Areas, Nature Refuges, Essential Habitat and the Environmental Inventory v4. 3. The final output of NEDS is the mapped expression of "Conservation Values" for Redland City.

Redlands Trunk Green Corridors - 2013

The Redlands Trunk Green Corridors was a GIS mapping exercise used to inform large-scale corridor, or connectivity conservation projects. The exercise primarily utilised the Environmental Inventory mapping as the basis for identification of corridors. The mapping was also used to review the list of Council conservation acquisitions and the investigation of potential Council conservation land surplus to requirement.

Wildlife Corridor Mapping - 2014

A report on Wildlife Corridor Mapping for the Redland City Council Mainland was prepared by Biodiversity Assessment and Management Pty Ltd (BAAM). The report generated a heat map of key wildlife corridors that occur between core vegetation areas throughout Redland City's mainland areas.

The wildlife corridor mapping exercise involved:

- Literature review on current wildlife corridor mapping, positioning and ecological function;
- Analysis, weighting and scoring of key factors that impact wildlife corridor formulation and function;
- Identification of a core vegetation areas to find wildlife corridor linkages; and
- Using spatial datasets and the scoring system to create a map rating the level of connectivity between the core vegetation areas.

This completely automated system provided an indicative wildlife corridor map that can be modified and enhanced by expert knowledge and other key habitats and conservation significant species data. It was anticipated that the maps would inform the 2015 Redlands Planning Scheme and set the scene for future detailed work. Ultimately, the development of this mapping is intended to facilitate scientifically robust decision making of wildlife corridors within Redland City.

Redlands Planning Scheme Version 7

The Redlands Planning Scheme 2006 v7 is the primary tool through which land use and development decisions are made across the city.

The policy intent of the Redlands Planning Scheme is underpinned by six 'Desired Environmental Outcomes' which relate to:

"Natural Environment, Character and Identity, Community Health and Well Being, Access and Mobility, Essential Services, Economic Development"

These outcomes are supported by maps that indicate different zoning and attributes of the city. A 'Rural and Habitat Corridor Network' is identified, along with existing 'Urban Habitat Corridors'. The 'Habitat Protection' overlay also provides 'enhancement corridors' which trigger a table of assessment for any development applications. To achieve the 'Natural Environment' desired outcomes, the plan aims to enhance existing natural environment, and support significant ecosystems by providing corridor linkages that support wildlife throughout the city.

Draft City Plan

Council is preparing a new planning scheme. Draft City Plan was released for public notification in late in 2015 and in February 2017 Council resolved to forward the draft planning scheme to the Planning Minister for approval to adopt. The draft City Plan will commence following the Minister's approval and Council adoption.

The draft City Plan incorporated updated mapping of regional ecosystems, koala habitat and waterways, and integrated matters of national, State and local biodiversity significance.

The draft City Plan includes in its strategic framework a strategic outcome for the natural environment specifically addressing corridors that states:

> "*Viable and resilient wildlife corridors link habitat areas and facilitate the movement and migration of native fauna throughout the Redlands and beyond. Corridors connect terrestrial and aquatic environments (including waterways, wetlands and along the foreshore) and significant habitat. Ecological corridors are primarily protected by the environmental significance and waterway corridors and wetlands overlays as well as the conservation, environmental management and recreation and open space zones. However, other land may also perform corridor functions that are to be protected."*

This is then implemented primarily through the Environmental Significance overlay and the Waterway corridors and wetlands overlay, which together with the Environmental Management, Conservation, and Recreation and Open Space zones identify the city's areas of environmental value, and include specific provisions within the relevant codes that require development to provide for viable and resilient wildlife corridors.

Appendix 3 – Literature Review of Ecology and Principles of Wildlife Habitat Networks and Corridors

Core Habitat Patches

Core habitat patches are discrete areas of habitat surrounded by areas that are unsuitable as habitat for specific species. A core habitat patch must provide the necessary resources environmental conditions required for survivorship, reproduction, and movement of a species (Hess & Fischer 2001). Smaller habitat patches generally result in smaller flora and fauna populations and this can increase levels of inbreeding, reduce genetic variability, and increase sensitivity to environmental events (Doerr & Davies 2010). To ensure species populations have the required resources for survival, the patch size should be as large as possible to reduce mortality due to movement into unsuitable habitats.

The size and shape of a patch is important in determining suitable habitat for species in the area. For example, an irregular shaped patch will incur maximized edge effects as the area of perimeter is increased, and the area of high quality 'inner' habitat in decreased. This theory therefore favours a circular patch, as the area of perimeter is minimised, along with the presence of edge effects (Forman & Godron, 1986). A buffer of native vegetation also reduces the risk of edge effects, resulting from weed infestation, human-generated damage, microclimatic variables, and predation. A study conducted in New South Wales concluded that a buffer width of 60m was suitable to minimise adverse edge effects from a neighbouring urban environment (Smith & Smith, 2010).

Core habitat patches can be connected by corridors and networks (Milne, 1996). To maximise the use of habitat patches, the patch should be located adjacent to a corridor, and be as large as the environment can accommodate (Fleury & Brown, 1996). The home range of fauna species is also an important factor to consider, as species tend to increase their home range in a more fragmented landscape (Mabry & Barrett, 2002).

Gaps

Doerr & Davies 2010 used literature on bird and mammal species inhabiting wooded habitats to calculate a mean gap-crossing threshold of 106m, indicating that many species are unable to cross open areas that exceed this distance. It was also calculated an interpatch-crossing threshold of 1100m, indicating that many species are unable to disperse between patches of habitat separated by >1100m, even where structural connectivity exists between the patches (Doerr & Davies 2010). Although these calculations were based on limited data, and it is important to remember that different species will have different gap-crossing thresholds, they can provide a useful starting point for modelling and planning.

Length

The length of a successful wildlife corridor is species specific and will alter depending on the fauna being examined. Speed and movement behaviours vary the amount of time a species occupies a corridor, and therefore the required resources for survival. For example, burrowing animals may only move 1m a day, while some birds can travel 100km or more in the same time (Fleury & Brown, 1996). Shorter lengths are ideal to minimise the time spent in corridors, and to maximise

usage of habitat patches (Fleury & Brown, 1996). This also ensures habitat patches are linked closely within a network, and are easy to travel between for a variety of species.

Width

The width of a corridor is vital to its success, influencing edge effects and mortality of the inhabiting species. The wider the corridor, the more successful it tends to be in reducing mortality (Fleury & Brown, 1996). The area of high value habitat is increased in a wider corridor, and edge effects such as predation, solar radiation, wind, humidity, temperature, and pollution are reduced (Sunshine Coast Council, 2011).

Assuming land is available, the width of the corridor should be based on the requirements of a species found in the area that is 'high on the food chain' (Fleury & Brown, 1996). This ensures that the structure of the corridor is suitable for a variety of species, and is specific to the area.

It is important that an appropriate buffer width is provided for wildlife habitat networks and corridors to minimise edge effects and increase efficiency. For riparian corridors, studies have shown that a buffer width of 40m is appropriate to maintain ecological functionality and to minimise impacts from human activities (Seng Mah, et al., 2015). For terrestrial corridors, studies have determined that 50m is an appropriate buffer to minimise edge effects (Cardo Chenoweth, 2012; Smith & Smith, 2010). These width recommendations were determined by the distance human-generated damage, weed invasion, microclimatic variation, predation, and parasitism has been recorded by previous studies conducted in Australia, New Zealand, and the United States (Smith & Smith, 2010).

A study of wildlife presence within corridors in Eden, New South Wales, determined that the optimum corridor width is 250m (Cardo Chenoweth, 2012). A corridor of this width was able to retain a variety of local bird species, along with a complete suite of arboreal mammals from the area. A corridor of 100m or less was able to retain most of the same arboreal mammals, although lacked diversity in other species (Cardo Chenoweth, 2012). Based on this study, a highly successful corridor should be 350m wide, including the 50m buffers to reduce edge effects.

Corridors of varying width can perform different ecological functions. The 'Landscape Corridors of the Coffs Harbour Local Government Area' (Scotts & Cotsell 2014) adopted the following corridor with classifications:

- Regional Corridors: 650 metres wide;
- Subregional Corridors: 350 metres wide;
- River Corridor: 100 metres wide;
- Local Corridors: 80 metres wide;
- Riparian Corridors: 80 metres wide (on 3rd & 4th order streams); and
- Urban Links: variable width but typically less than 80 metres.

Shape

The shape of a corridor affects what species can successfully enter and move through the corridor to reach suitable core habitat patches. It is important that the corridor is easily accessible, with as much linearity as possible (Fleury & Brown, 1996). This ensures that species don't reside in the edge of the corridor where there is a higher risk of mortality. Generally corridors are rectangular in shape, although this is sometimes restricted due to land use. When conflicting land use is a factor, alternative areas of vegetation might become vital in the connectivity of the corridor network. This

can include stepping stones such as street trees and residential gardens that aid in providing a linear corridor to a habitat patch (Hess & Fischer, 2001). Studies have shown that a constant width with 'feathered edges' is the preferred corridor shape, as it minimises exposure to any edge effects, and keeps species movements within the corridor (Fleury & Brown, 1996).

Edge Effects

Edge effects are commonly known as the negative effects on wildlife and natural environments caused by urbanisation (Villasenor, et al., 2014). The effects are due to edge contrast, which is defined as being the compositional or structural difference between adjacent ecosystems at either side of the boundary (Villasenor, et al., 2014). Edges with a high contrast often present greater risks for wildlife, with more elements entering the corridor or habitat patch, and stronger barriers to movement. These hard edges are often formed with urban development such as roads, residential areas, and commercial or industrial developments (Brearley, 2011). Soft edges are preferred, and provide easier permeability to species. These types of edges are formed by wildfires, and vegetation with different ages that eventually blend together (Brearley, 2011).

Abiotic and biotic changes in vegetation can be a result of edge effects in urban environments. A primary response is a direct result of edge creation, which results in abiotic changes such as increased light pollution, fluctuations in temperature, and increased wind speed (Brearley, 2011). As a result of these ecological changes, secondary responses are observed including alterations in vegetation structure and composition (Brearley, 2011). This can include decreased canopy cover, sparse vegetation, and increased debris due to the exposure to the bordering environment.

Other negative edge effects created from an encroaching urban environment include increased competition, predation, changes in microclimate, and human-generated damage (Smith & Smith, 2010). Flora and fauna both experience competition, with invasive weeds becoming a major cause of environmental degradation (Smith & Smith, 2010). Predation by domestic cats on small mammals and birds has been widely researched, and is a common cause of mortality in urban-edge forests (Brearley, 2011). Microclimatic changes are often found up to 50m from the habitat edge, which can affect the native species diversity of the area (Smith & Smith, 2010). Human-generated damage is due to a variety of causes including the dumping of waste and green waste, firewood gathering, destruction of trees, and destruction of understory due to usage as a recreational area. These effects usually occur within the first 30m of the habitat edge, although can often be experienced up to 100m away from the edge (Smith & Smith, 2010).

As edge effects have such a detrimental effect on occupying wildlife, it is importance that an appropriate buffer is maintained around significant habitats. Research indicates that a minimum buffer width of 60m should be applied around all edges of habitat patches to minimise the negative effects of a neighbouring urban environment (Smith & Smith, 2010). The buffer should be comprised of native vegetation, and appropriate measures such as fencing and weed control may be necessary to reduce impacts on the interior habitat (Smith & Smith, 2010). A buffer of 50m should be applied on each side of corridors to reduce edge effects (Cardo Chenoweth, 2012). The purpose of a buffer is to provide protection to the interior habitat without requiring constant active management.

Structure

The structure and composition of wildlife habitat networks and corridors is generally related to the flora species present (Hess & Fischer, 2001). Species requirements of food source trees, vegetation density, and canopy cover will vary. A corridor with diverse flora will generally benefit a greater number of species, and any discontinuity in the composition of the corridor should be avoided (Fleury & Brown, 1996). To increase the structural diversity of a corridor, layers should be incorporated, including grasses, small shrubs, and a variety of native trees (Fleury & Brown, 1996). This increases the habitat available within the corridor by providing a number of horizontal and vertical nesting and foraging sites. Regional Ecosystems can be used to determine the appropriate composition of vegetation communities for a specific area. Other elements such as rock piles, hollows and brush piles can also add to corridor diversity by providing nesting sites and protection.

While wildlife habitat corridors containing continuous and diversely structured habitat are generally the most appropriate for facilitating movement, stepping stone corridors (such as scattered paddock trees) can be equally effective (Doerr & Davies 2010). These stepping stone corridors are not continuous, and may be broken by currently degraded or cleared areas. Stepping stone patches provide connectivity and can function as corridors for mobile species, particularly those willing to cross expanses of cleared land (Scotts & Cotsell 2014).

Barriers

Barriers to species movement along wildlife habitat corridors can come in many forms. Barriers such as highways, railway lines and impermeable fences can increase the mortality rate of some wildlife attempting to cross the barrier (Selles, O'Hare & Veage, 2008). Roads can be particularly significant barrier to wildlife movement, causing deaths and enabling behavioural avoidance due to traffic density, noise, and lighting (Clevenger & Kociolek, 2013). To encourage safe movement across roads, crossing infrastructure can be implemented in hot spots (areas with a high wildlife presence) (Garrah, et al., 2015). Crossing infrastructure includes underpasses such as culverts, passages, and tunnels, and overpasses such as bridges (Lister, et al., 2015). Barrier fencing can be a useful strategy to filter wildlife and ensure crossing is made at these underpasses or overpasses, which are often known as 'fauna guiding fences' or drift fences' (Gleeson & Gleeson, 2012). However not all barriers present a complete impasse for all wildlife movement, some barriers may be a hindrance for certain species and not others. For example, barbed wire fences allow passage for many species however fruit bats and gliders are susceptible to being caught on these structures.

Stepping Stones

Stepping Stones can be defined as patches of habitat that, while not physically connected, are functionally connected, allowing movement between larger patches (National Wildlife Corridors Plan 2012). Stepping stones of suitable habitat enhance connectivity in developed landscapes for species able to make short movements through disturbed environments. Connectivity is achieved by a sequence of short movements or 'hops' from stepping stone to stepping stone along the length of the linkage, or by the combined dispersal movements of numerous individuals moving between populations resident within a chain of stepping stone habitats (Bennett 2003).

Stepping stones may be natural patches, such as wetlands or patches of rainforest within drier forests or they may be small remnant patches of vegetation in a developed landscape. They can also be anthropogenic in form of forestry plantations, artificial water bodies or urban. Scattered trees are the most recognised form of stepping stones and are important to native fauna for movement, foraging habitat and nesting resources (Gleeson & Gleeson 2012). Vegetated stepping stones are used by various mobiles species, and are important sources of seed for regeneration of adjacent vegetation.

Stepping stones are likely to be an effective approach to maintaining landscape connectivity:

- for species that regularly move between different resource patches in the landscape (such as temporally varying food sources, or spatially separated nesting and foraging habitat);
- for species that are relatively mobile and able to move substantial distances in relation to the intervening distance between fragments;
- for species that are tolerant of disturbed landscapes, although not necessarily able to live within the modified zone; and
- where the objective is to maintain continuity of ecological processes that depend on animal movements and the animal vectors are capable of movement across gaps (Bennett 2003).

For Appendices 4 to 8 refer to associated document 'Corridor Descriptions and Locations 2018-2028'

Appendix 4 – Established Corridors

Appendix 5 – Regional Riparian Corridors (BPA)

Appendix 6 – Coastal Foreshore Corridors

Appendix 7 – Enhancement Corridors

Appendix 7a – Enhancement Corridors in Known Development Areas Corridors

Appendix 8 – Stepping Stone Corridors

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Wildlife Connections Action Plan

2018 - 2023

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Acronyms and Definitions

Redland City Council Departments		
Group	**Unit**	
CPA		City Planning & Assessment Group
	SPU	Strategic Planning Unit
	EngEU	Engineering & Environment Unit
CCS		Community and Cultural Services
	ICCC	Integrated Customer Contact Centre
CI		City Infrastructure Group
	RDMU	Roads, Drainage & Marine Unit
	CIPU	City Infrastructure Planning Unit
	TTPU	Traffic & Transport Planning Unit
CS		City Spaces Group
	PCU	Parks & Conservation Services Unit
ER		Environment & Regulation Group
	EEU	Environment & Education Unit
	DCU	Development Control Unit
	CSU	Compliance Services Unit
ESMP	**CP**	City Plan Project Manager
DP&O	**DP&O**	Disaster Plan and Operations
Indicative Costs		
High*	Over $100,000	
Medium*	$10,000 - $100,000	
Low*	Below $10,000	
BAU	Business as Usual (within existing resources, officer time and budgets)	
*Subject to budget consideration and Portfolio Management Office processes		
Time Frames		
Ongoing	These actions will continually be dealt with throughout the life of the plan	
Immediate	The actions will commence in the next 12 months	
Short	The actions will be undertaken in the next 2 years	
Long	The actions will be undertaken in the next 5 years	

Wildlife Connections Plan Implementation

This plan documents the priority actions to progress the outcomes outlined in the Wildlife Connections Plan 2018-2028. The Plan and associated Action Plan aim to guide management actions to protect, manage and enhance a network of core wildlife habitat patches and corridors on the mainland, Coochiemudlo, North Stradbroke Island and Southern Moreton Bay Islands. The Wildlife Connections Action Plan 2018-2023 identifies immediate on-ground measures that are achievable by Council.

Each action addresses issues identified through the analysis of the current understanding of corridor ecology and viable mitigating measures to improve connectivity in the Redland City Council area.

This Action Plan lists the work areas within Council with responsibility for each action; implementation methods; implementation partners; performance measures; timeframe; and indication of cost of implementation. Each outcome provides an indicator to assess the successful implementation of each action.

Head of Power

Corporate Plan 2015-2020

The Redland Corporate Plan 2015-2020 sets the strategic direction and priorities for the natural environment by delivering on the outcomes of the Redlands 2030 Community Plan for:

'*a diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through our awareness, commitment and action in caring for the environment*'.

Specifically in relation to the importance of connectivity through these outcomes:

"1. A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through our awareness, commitment and action in caring for the environment."

1.1 – Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored

1.2 - Threatened species are maintained and protected, including the vulnerable koala species"

Natural Environment Policy POL-3128

Redland City Council through the Natural Environment Policy in 2015 (POL-3128) states:

'*our corporate decisions protect, enhance and restore the health and viability of the City's natural values both on public and private lands and waterways for the benefit, use and lifestyle of current and future generations of our community'*.

The Policy statements:

1. *Protect, enhance, restore the natural values of the City that include:*

    a. *Koalas and other native animal and plant populations and habitats;*
    b. *core habitat areas as sanctuaries for wildlife;*
    c. *safe wildlife movement corridors across the landscape;*
    d. *maintaining no net loss of native vegetation as defined in the Vegetation Management Act 1999;*
    e. *biological diversity and ecosystem services;*
    f. *waterways, foreshores, wetlands, coasts, aquatic ecosystems and Moreton Bay;*

2. *Enhance and restore Council's protected areas and strengthen the connections between core habitats through public open space plantings, pest management and appropriate street tree planting programs in accordance with SEQ Natural Resource Management targets.*

3. *A conservation acquisition program that prioritises acquisition of land for rehabilitation, offsets, corridors and long term protection to achieve cost effective environmental outcomes that contribute to facilitating biodiversity conservation (eg koala survival) and has community benefits.*

4. *Manage protected areas to provide the best possible buffering of the City's natural and cultural heritage values from the impacts of a changing climate.*"

Action Plan Outcomes

The Wildlife Connection Plan 2018-2028 has identified the outcomes for the for the management, protection and enhancement of the priority corridors (i.e. established, regional riparian, coastal foreshore, enhancement and stepping stone) located on the mainland, Coochiemudlo, North Stradbroke and Southern Moreton Bay Islands, which include:

- Improve Corridor Habitat
    - Rehabilitation of gaps and pinch points
- Prevent Wildlife Deaths
    - Safe fauna passage across road or rail barriers
- Reduce Impacts on Corridors
    - Management of urban and/or peri-urban and/or rural area impacts
    - Management of storm tide and sea level rise impacts
- Protect Corridor Habitat
    - Review City Plan to determine any necessary consequential amendments.

Implementation of the Action Plan will be undertaken with the following prioritisation considerations:

1. All areas of Core Habitat are a high priority for protection and rehabilitation. All actions within the Action Plan can be implemented in the identified Core Habitat areas;
2. The Established, Regional Riparian Corridors and Coastal Foreshore are the highest priority for protection and rehabilitation;
3. The Enhancement Corridors are the second highest priority for protection and rehabilitation;
4. The Stepping Stone Corridors are a lower priority for protection and rehabilitation;
5. All corridor rehabilitation and enhancement of buffer areas should follow South East Queensland (SEQ) Ecological Restoration Framework (SEQ Catchments, 2012); and
6. All corridor rehabilitation and enhancement of buffer areas must take into account fire management planning.

The implementation of the actions in the plan will be reviewed annually. The review will assess the success of each action based on the 'Performance Measures' listed in the Wildlife Connections Action Plan. Information from each of the Council areas and external partners will be collated for the annual review.

If available, updated mapping (such as new Regional Ecosystem mapping or planning scheme zones) and other environmental data sets will be used to monitor changes to the values, attributes and threats of the wildlife habitat network and corridors.

The successful implementation of the actions requires support and contribution from many sections within Council, the general community and State Government. Cooperation and assistance will also be required from government agencies, other councils, universities and industry and community groups.

Funding of the priority actions is critical to the success and performance of this plan. Delivery of the action plan will be funded through a combination of business as usual, general revenue, environment separate charge, reserve funds and resources obtained through external funding sources.

Improve Corridor Habitat

Outcome: Rehabilitation of gaps (greater than 106m) and pinch points (width less than 100m) to allow wildlife movement and dispersal through the landscape.

Priority Outcome	Action	Performance Measure	Time Frame	Responsibility	Partners	Cost
Rehabilitation of corridor gaps and pinch points on **Council land** through the ***Parks and Conservation Unit*** and ***Bushcare Program***	**Planning Stage** Identify, prioritise and assign areas for planting through contractors, in house, or Bushcare program	Prioritised area program including annual costing	Immediate (Year 1)	Parks & Conservation Services Unit	Environment & Education Unit (Bushcare)	BAU
	Implementation Stage Priority planting of native vegetation (matched to appropriate Regional Ecosystem) in identified corridor gaps and pinch points on Council land	Area (ha) of revegetation within priority corridors. % of corridor rehabilitated	Short and ongoing	City Spaces and Environment & Education Unit		
Rehabilitation of corridor gaps and pinch points on **freehold land** through ***Environmental Partnerships Program*** (voluntary extension)	**Planning Stage** Identify, prioritise and assign areas for extension program visits	Prioritised area program including annual costing	Immediate (Year 1)	Environment & Education Unit	Environment & Education Unit (Environmental Partnerships)	BAU
	Implementation Stage Priority planting of native vegetation (matched to appropriate Regional Ecosystem) in identified corridor gaps and pinch points on freehold land	Area (ha) of revegetation within priority corridors. % of corridor rehabilitated	Short and ongoing	Environment & Education Unit (Environmental Partnerships)		
Rehabilitation of corridor gaps and pinch points on freehold land by ***Conservation Land Acquisitions***	**Planning Stage** Review Conservation Land Acquisition list based on adopted Corridor Mapping	Revised Strategic Acquisition List	Immediate (Year 1)	Environment & Education Unit	Strategic Planning & Property Services	BAU
	Implementation Stage Acquisition of land for corridors and long term protection to achieve cost effective environmental outcomes	Area of acquired land within priority corridors	Short and ongoing	Environment & Education Unit	Property Services	

Prevent Wildlife Deaths

Outcome: Safe fauna passage across road (or rail) barriers.

Priority Outcome	Action	Performance Measure	Time Frame	Responsibility	Partners	Cost
Safe fauna passage across road (or rail) barriers	**Planning Stage** Assessment of wildlife road strike data using Council and State Government fauna strikes and incident data sets to assess each identified corridor 'barrier' at road and rail crossings	A detailed report prioritising and identifying the location of 'barrier' sites and recommended mitigation methods.	Immediate (Year 1)	Environment & Education Unit	Infrastructure Planning and State Government	BAU (Low)
	Implementation Stage Detail design and estimate of costs of the mitigation options identified in the Planning Stage for inclusion into the Capital Works and PMO programs. Advise to State Government Agencies where applicable	Revised Action Plan which details locations, costing and timeframes for on-ground works (which may include retrofitting road culverts, fencing, new over or under passes, fish passage retrofit). PMO's for Capital Works programs where identified.	Short (Year 2)	Infrastructure Planning	State Government where applicable	

Reduce Impacts on Corridors

Outcome: Management of impacts from urban, peri-urban and rural land areas to improve the function of the corridors.

Priority Outcome	Action	Performance Achieved	Time Frame	Responsibility	Partners	Cost
Enhancement of buffer on **Council land** to reduce edge effects through the *Parks and Conservation Unit*	Create buffer of native vegetation to reduce the risk of edge effects along priority corridors	Area of revegetation within priority corridor buffers	Ongoing	Parks & Conservation Services Unit	Environment & Education Unit (Bushcare)	BAU
Enhancement of buffer on **freehold land** through *Environmental Partnerships Program (voluntary extension)*	Offer advice and action oriented support to landholders in creating buffer of native vegetation to reduce the risk of edge effects along priority corridors	Area of revegetation within priority corridor buffers	Ongoing	Environment & Education Unit (Environmental Partnerships)		
Education of residents on impact of domestic and feral animals on wildlife	Education programs targeted at residents within close proximity to priority corridors	Number of education tools/campaigns	Ongoing	Environment & Education Unit (Environmental Partnerships)	Animal Management Team	BAU
Enforcement of Local Laws to reduce impact of domestic and feral animals on wildlife	Enforcement programs targeted at residents within close proximity to priority corridors	Number of enforcement actions	Ongoing	Animal Management Team	Environment & Education Unit	
Assessment of noise and light disturbance from dwellings, traffic and road infrastructure	**Planning Stage** Investigate potential for mitigation measures where light and noise impact identified priority corridors	A detailed report prioritising and identifying the location of impacted sites and recommended mitigation methods.	Immediate (Year 1)	Environment & Education Unit	City Infrastructure Group	BAU (Low)
	Implementation Stage Detail design and estimate of costs of the mitigation options identified in the Planning Stage, for the inclusion into the Capital Works and PMO programs. Advise to State Government Agencies where applicable.	Revised Action Plan which clearly details specific on-ground works, locations, costing and timeframes. PMO's for Capital Works programs where identified	Short (Year 2)	City Infrastructure Group	State Government Agencies	

Reduce Impacts on Corridors

Outcome: Management of impacts from storm tide and sea level rise to protect corridors.

Priority Outcome	Action	Performance Achieved	Time Frame	Responsibility	Partners	Cost
Enhancement of coastal foreshore buffer on Council reserve through the *Parks and Conservation Unit*	Enhance the coastal foreshore corridor buffers to compensate for rise in sea level along priority corridors	Area of revegetation within priority corridor buffers	Ongoing	Parks & Conservation Services Unit	Environment & Education Unit (Bushcare)	BAU
Enhancement of coastal foreshore buffer freehold land by *Conservation Land Acquisitions*	Acquisition of land to compensate for rise in sea level and achieve cost effective environmental outcomes along priority corridors	Area of acquired land within priority corridors	Ongoing	Environment & Education Unit	Property Services	

Protect Corridor Habitat

Outcome: Identify need for consequential changes to regulating development under City Plan

Priority Outcome	Action	Performance Achieved	Time Frame	Responsibility	Partners	Cost
Redland City Plan	Review City Plan to determine any necessary consequential amendments	Recommendations for necessary amendments to City Plan	Short	City Planning & Assessment Group	Environment & Education Unit City Plan Project Manager	BAU
Advice to applicants	Provide training and supporting materials for CPA and ICCC staff to assist in providing advice to applicants relating to development in and around identified corridors	Work instructions for advice to applicants	Short	City Planning & Assessment Group	Environment & Education Unit	BAU

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Wildlife Connections Plan

2018 - 2028

Corridor Descriptions and Locations

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Contents

Introduction

This Corridor Descriptions and Locations document is a companion document to the Wildlife Connections Plan 2018-2028 and Action Plan 2018-2023. This document identifies and describes each of the mapped corridors and provides the key values and associated priority outcomes for each corridor. This document must be read in conjunction with the Wildlife Connections Plan 2018-2028 and the associated Action Plan 2018-2023.

This plan and associated mapping will assist Council's strategic planning and prioritisation of works for activities such as rehabilitation works, extension programs visits, community and Bushcare plantings, or infrastructure upgrades.

The following specific attributes are assigned to each of the priority corridors:

- Description
    - Location, orientation and linkages to core habitat patches.
- Environmental Values
    - Dominant vegetation types and keystone wildlife values.
- Core Habitat Linkages
    - Number of core habitat patches linked by corridor; and
    - Maximum distances between core habitat patches
- Land Uses
    - Tenure and planning scheme zonings.
- Community Uses
    - Values and potential uses.
- Threats and Barriers
    - Edge effects from urban, peri-urban and rural land use;
    - Road and rail infrastructure; and
    - Development potential within the planning scheme.
- Gaps and Pinch Points
    - Significant gaps (greater than 106m) of open or developed areas along the corridor; and
    - Narrow points of corridor (where width is less than 100m).
- Priority Outcomes
    - Mitigation of current threats and barriers; and
    - Rehabilitation of gaps and pinch points (focusing on where a maximum distance between core habitat patches is more than 1100m apart).

Implementation of the Action Plan will be undertaken with the following prioritisation considerations:

1. All areas of Core Habitat are a high priority for protection and rehabilitation. All actions within the Action Plan can be implemented in the identified Core Habitat areas;
2. The Established, Regional Riparian Corridors and Coastal Foreshore are the highest priority corridors for protection and rehabilitation;
3. The Enhancement Corridors are the second highest priority corridors for protection and rehabilitation;
4. The Stepping Stone Corridors are a lower priority for protection and rehabilitation;
5. All corridor rehabilitation and enhancement of buffer areas should follow South East Queensland (SEQ) Ecological Restoration Framework (SEQ Catchments, 2012); and
6. All corridor rehabilitation and enhancement of buffer areas must take into account fire management planning.

The implementation of the priority outcomes within this document can be achieved through a variety of methods based on tenure and location and will be the responsibility of several areas within Council. The priority outcomes of this plan will be achieved through:

- Improving Corridor Habitat
  - Rehabilitation of gaps and pinch points
- Preventing Wildlife Deaths
  - Safe fauna passage across road or rail barriers
- Reducing Impacts on Corridors
  - Management of urban and/or peri-urban and/or rural area impacts
  - Management of storm tide and sea level rise impacts
- Protecting Corridor Habitat
  - Review City Plan to determine any necessary consequential amendments.

The figure below provides a visual representation of how the outcomes of the Wildlife Connections Plan can be achieved:

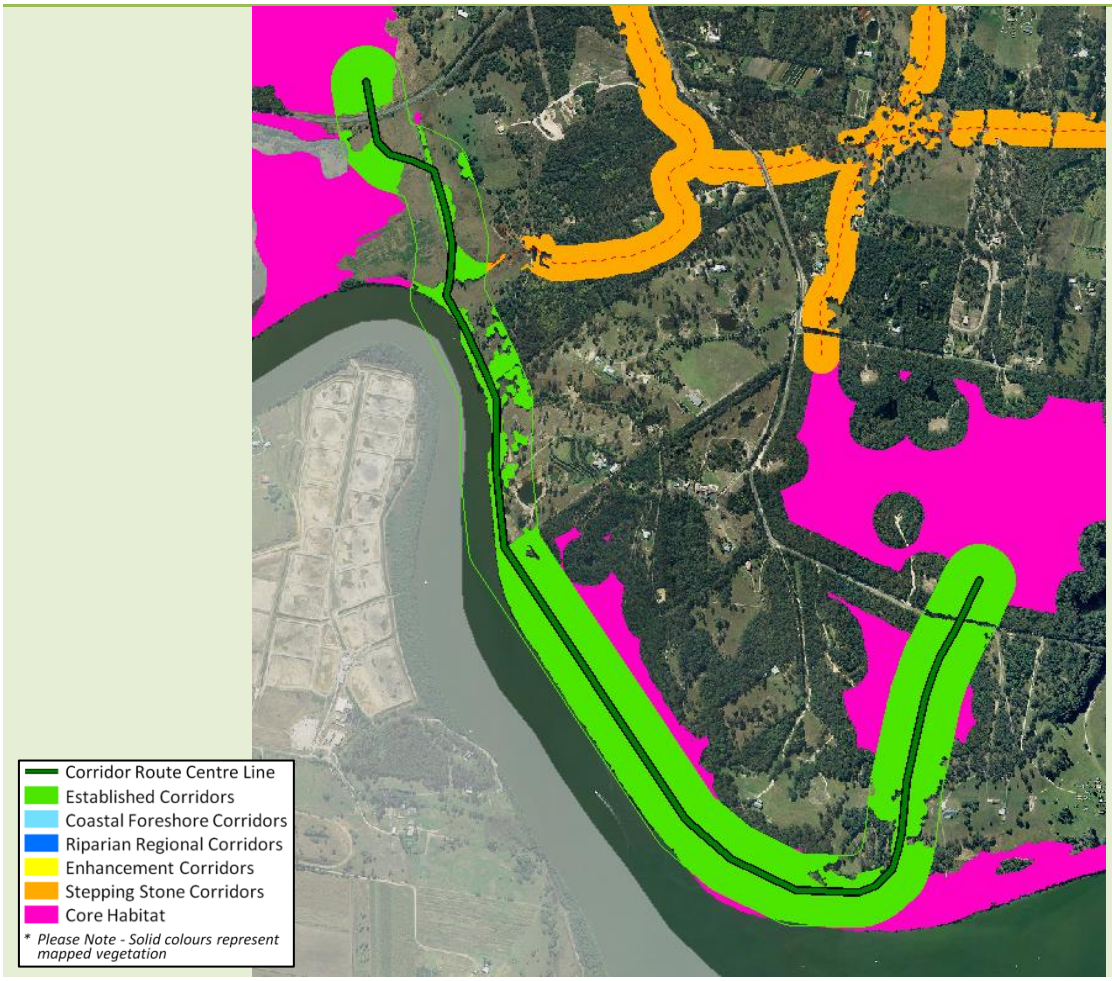
The corridors presented in the following appendix sections are grouped by corridor type. As outlined in the Wildlife Connections Plan 2018-2028, the Established, Regional Riparian and Coastal Foreshore Corridors are of the highest ecological value and highest priority for rehabilitation. Enhancement Corridors are of medium ecological value and medium priority for rehabilitation. Stepping Stone Corridors are of less ecological value and lower priority for rehabilitation. However within each of the appendix sections the individual corridors are presented in no particular order and are not listed in order of individual priority.

The route centre lines of each individual corridor discussed in the following appendices are emphasized by a solid green line. All corridors display the mapped vegetation within the corridor as a solid colour (with the colour dependent on the corridor type). The areas within the corridor that do not contain mapped vegetation are presented with a transparent colouring. This presentation allows clear distinction between the higher ecological function sections of a corridor (i.e. mapped vegetation represented as solid colours) and other buffer areas of human uses (residential areas, roads etc.) or potential gaps or pinch points for rehabilitation.

Please note that while every effort has been made to use the most up to date aerial imagery in the maps presented in the following appendices, not all images may be current.

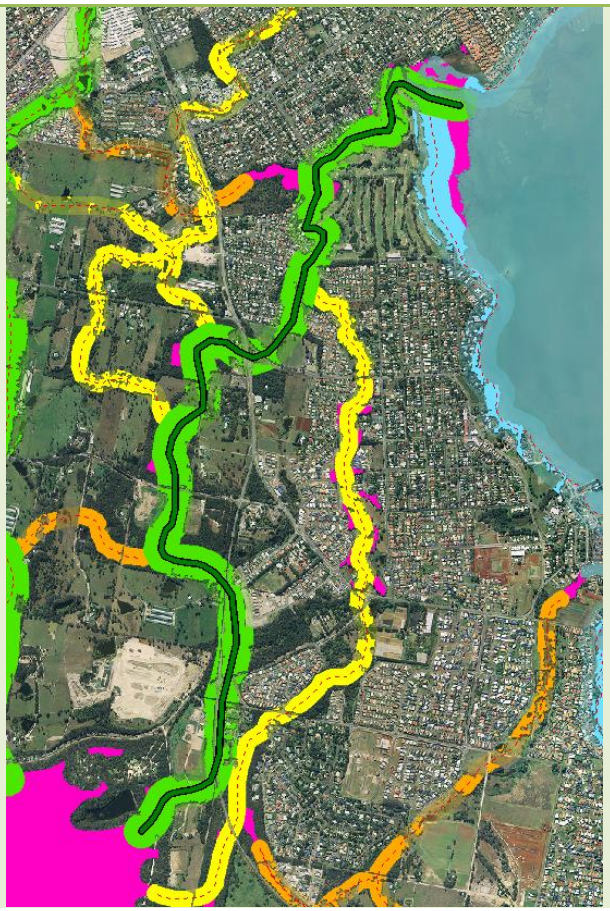
Appendix 4 – Priority Established Corridors

Longland Road to Logan River Mouth - Established Corridor



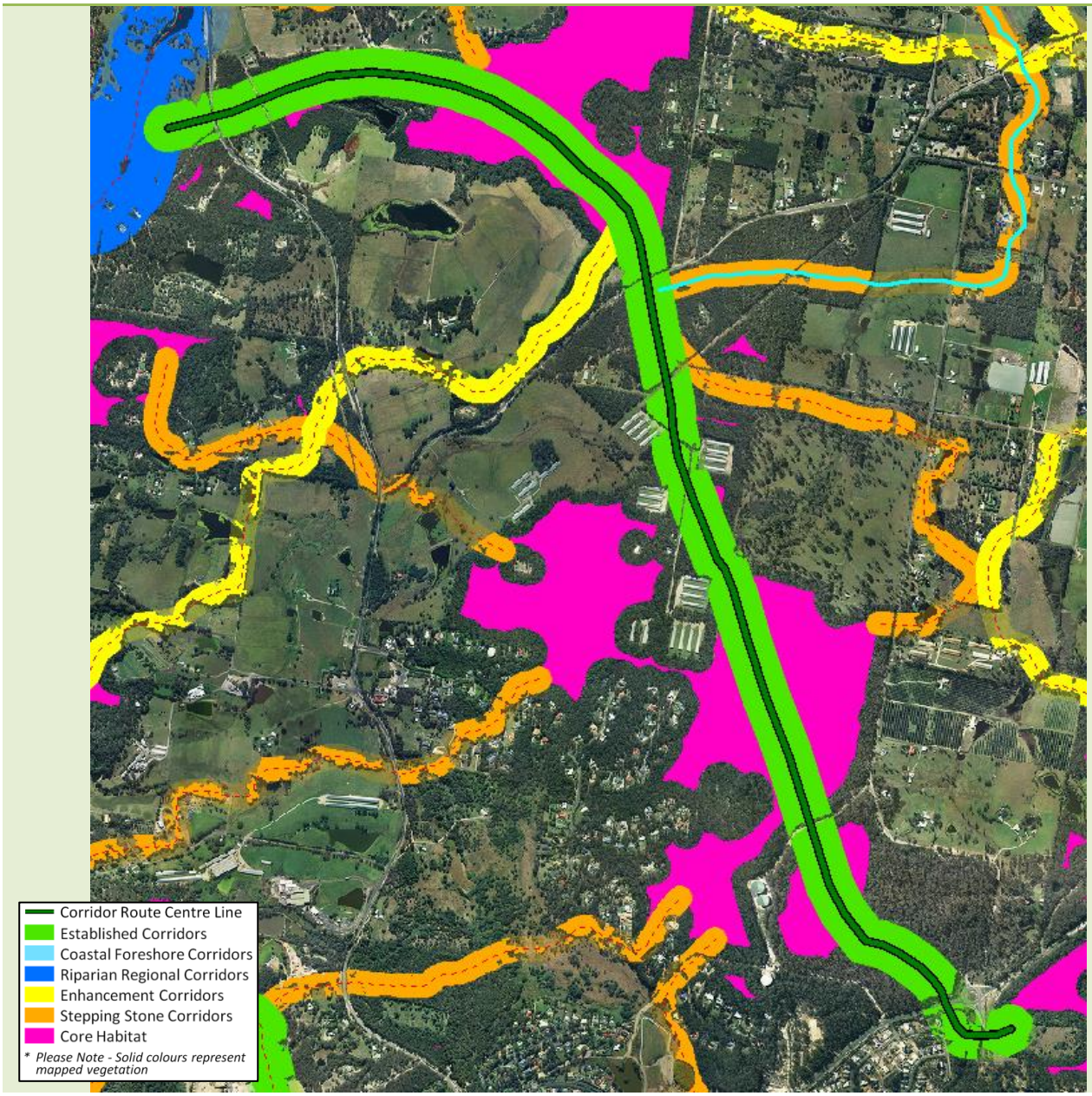
Description	North to south corridor linking Longland Road area to Rock Passage Road.
Environmental Values	Linking large tracts of 12.1.2 (saltpan vegetation) around Longland Road to spotted gum forests (12.11.5a) around the mouth of Logan River. Also incorporates areas of 12.3.5 (paperbark open-forest to woodland) in lowland sections of Kidd Street Conservation Area, 12.1.3 (mangrove shrubland) and 12.1.2 (saltpan vegetation) along Logan River. Multiple corridor and waterway dependent bird species and a Short-beaked Echidna recorded at north end of corridor. Aquatic and riparian fauna values of lower Logan River. Contains HIGH Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~5 per cent of corridor length.
Core Habitat Linkages	Links 5 core habitat patches. Maximum distance between patches is ≈800m.
Land Uses / Tenure	Predominately freehold land zoned Conservation, Environmental Protection and Rural in the south along Logan River. Council reserves (Kidd Street Conservation Area) in the north to freehold rural land.
Community Use	Recreational uses in Kidd Street Conservation Area. Waterway recreation and access along Logan River.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Serpentine Creek Road. Impacts from poor management of mangrove and saltmarsh/saltpan. Fauna barrier at Beenleigh Redland Bay Road, Rocky Passage Road.
Gaps & Pinch Points	Pinch points south of Longland Road, adjoining Logan River.
Priority Outcomes	Safe fauna passage across Beenleigh Redland Bay and Rock Passage Roads. Rehabilitation of Pinch points south of Longland Road, adjoining Logan River.

Moogurrapum Creek to Kindilan/Days Road - Established Corridor



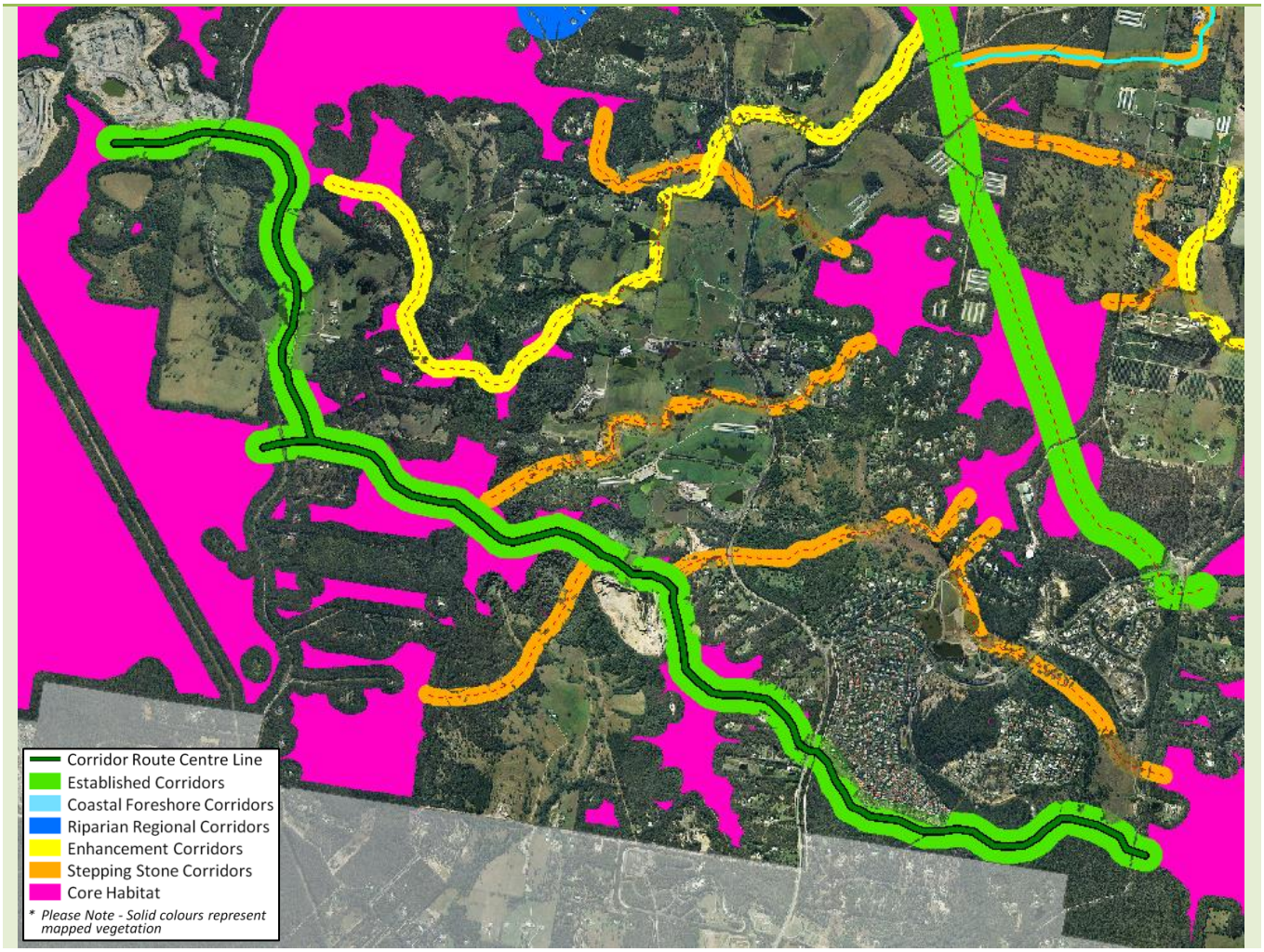
Description	North south corridor linking Moogurrapum Creek Corridor to Kindilan/Days Road Conservation Area, via Giles Road Conservation Area and Carolyn Place Bushland Refuge.
Environmental Values	Linking coastal foreshore vegetation (12.1.2 saltpan and 12.1.3 mangrove) at lower reach of Moogurrapum Creek to coastal spotted gum forests (12.11.5j), via coastal riparian vegetation in Redland Bay area (12.3.6). Links to blackbutt forest at Kindilian and Days Road (12.11.23). Wader bird habitat along coastal foreshore/intertidal zone. Aquatic species values in Moogurrapum Creek. Multiple corridor and waterway dependent bird species recorded at south end of corridor (including Glossy Black-Cockatoo). Numerous koala records along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~15 per cent of corridor length.
Core Habitat Linkages	Links ≈9 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Trunk of northern section of corridor made up of Moogurrapum Creek Corridor reserves, surrounded by urban residential development the north and west and a golf course to the east. Mid-section of corridor made up Conservation, Environmental Protection and Community Purposes zoned land, with urban development to the east and rural areas to the west. South section of corridor includes Park Residential zoning and the German Church Road Landfill Site.
Community Use	Recreational uses in Conservation areas. Waterway recreation and access along Moogurrapum Creek. Charlie Buckler Sports field.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings of Redland Bay Road, Gordon Road and Boundary Street. Golf course and landfill impacts.
Gaps & Pinch Points	Pinch point at Charlie Buckler Sports Field.
Priority Outcomes	Safe fauna passage across Redland Bay Road, Gordon Road and Boundary Street. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, etc).

Sandy Creek Conservation Area to Days Road Conservation Area - Established Corridor



Description	North to south corridor linking Sandy Creek Conservation Area to Days Road Conservation Area.
Environmental Values	Open forest with spotted gum and common species (12.11.5a and 12.11.5k) in the north of corridor, linking to open blackbutt forest (12.11.23) to the south. Multiple corridor dependent bird species recorded in north and south end of corridor. Tusked Frog and Scute-snouted Calyptotis recorded at north end of corridor.
Core Habitat Linkages	Links ≈8 core habitat patches. Maximum distance between patches is ≈650m.
Land Uses / Tenure	Conservation estates at north and south ends of corridor, linked via Rural and Conservation zoned land. Some Urban Residential development along Valley Way and Heinemann Roads.
Community Use	Recreational values of conservation estates.
Threats & Barriers	Poor rural and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Valley Way and German Church Road.
Gaps & Pinch Points	No significant pinch points less than 100m wide or gaps greater than 106m.
Priority Outcomes	Safe fauna passage across Valley Way and German Church Road.

Bayview Conservation Park to Venman Bushland National Park - Established Corridor

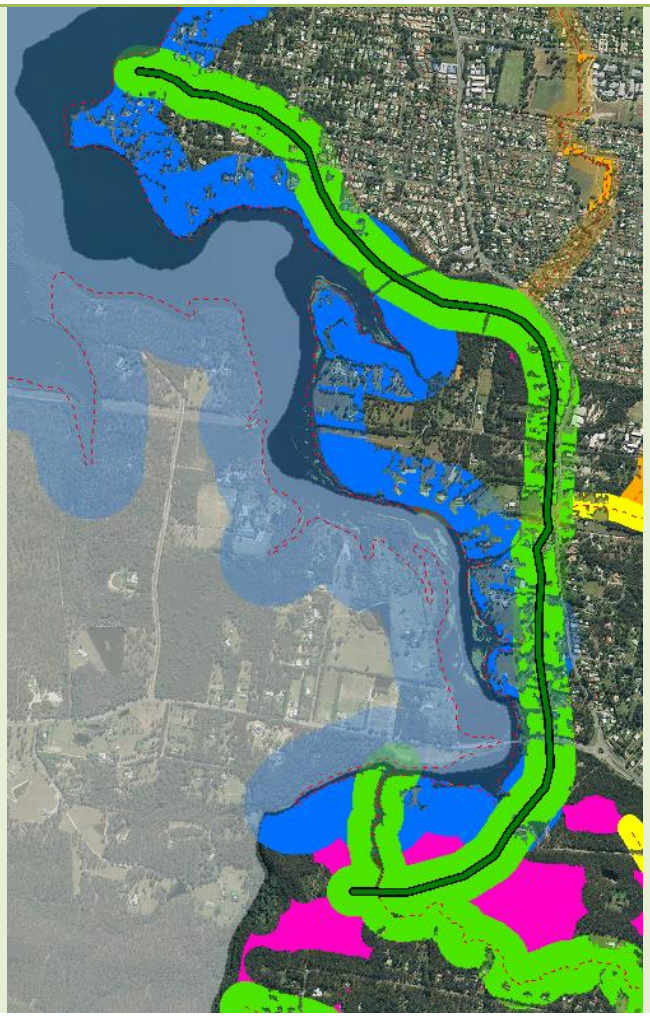


Description	East to west corridor linking Bayview Conservation Park to Venman Bushland National Park, via Mount Cotton
Environmental Values	Dominated by open spotted gum forests (12.11.5a) and blackbutt forests (12.11.23). Includes areas of paperbark open-forest to woodland along Orchard Drive, Mount Cotton. Glossy Black-cockatoo and Tinkling Froglet recorded at eastern end of corridor. Multiple corridor dependent bird species recorded in centre and west sections of corridor.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1200m.
Land Uses / Tenure	Bayview and Venman conservation estates to the east and west. Mount Cotton urban development to east of Mount Cotton Road, Rural and Conservation zoned land to the West of Mount Cotton Road.
Community Use	Recreational uses in Bayview Conservation Park and Venman Bushland National Park.
Threats & Barriers	Poor urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Quarrying activity.
Gaps & Pinch Points	No significant pinch points less than 100m wide or gaps greater than 106m.
Priority Outcomes	Safe fauna passage across Mount Cotton Road and West Mount Cotton Road. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, etc).

Point Talburpin to Sandy Cove Foreshore - Established Corridor

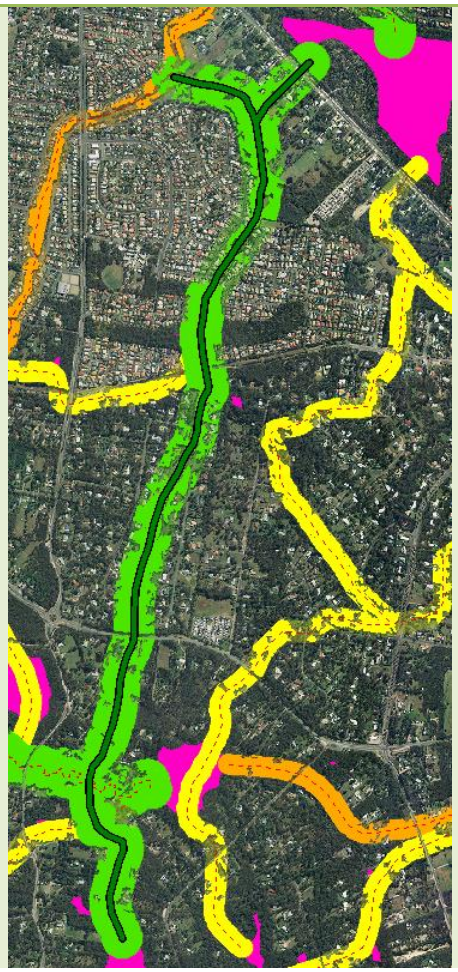
Description	North-east to south-east corridor linking Point Talburpin Park to Sandy Cove Foreshore.
Environmental Values	Linking saltpan vegetation (12.1.2) and complex to simple notophyll vine forest (12.3.1) of Point Talburpin Park to paperbark riparian coastal vegetation and bloodwood, blue gum grassy open forest to woodland (12.3.6/12.5.2) of Sandy Cove Foreshore. Records of corridor dependent bird species. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~60 per cent of corridor length.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Trunk primarily Conservation zoned land, surrounded by open Space and relatively dense Urban Residential land.
Community Use	High value recreational area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Potential road strike and definite barrier from Serpent Creek Road crossings (2) and Azure Avenue roundabout exit.
Gaps & Pinch Points	Potential pinch adjacent to basketball court area across Junee Street Park. Pinch point behind houses on western side of Seabrae Drive and immediately south of the end of Seabrae Drive.
Priority Outcomes	Safe fauna passage across Serpentine Creek Road. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, etc).

Tingalpa Reservoir to Wallaby Creek Bushland Refuge - Established Corridor



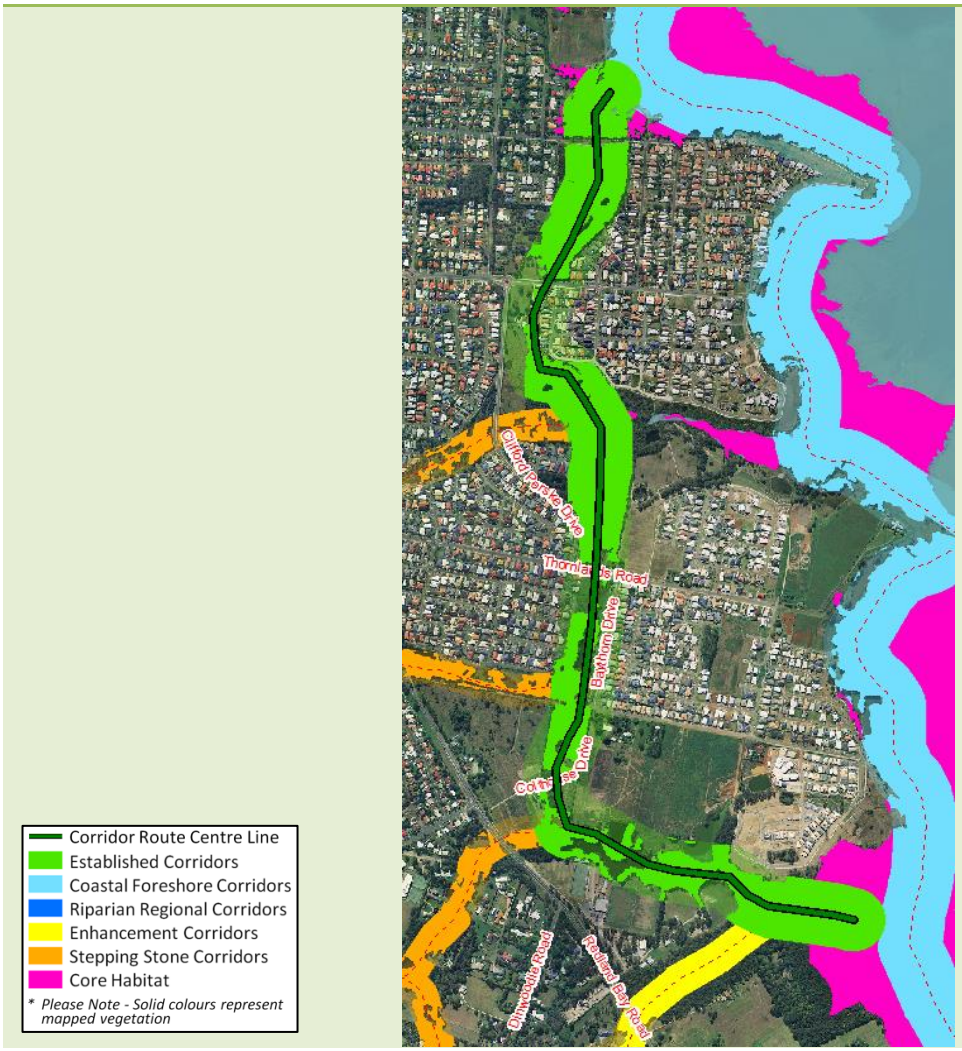
Description	North to south corridor linking Tingalpa Reservoir to Wallaby Creek Bushland, via Howlett Road Chatsworth Circuit Urban Habitats and Leslie Harrison Conservation Area.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) in the north of the corridor, leading to open spotted gum forests (12.11.5a and 12.11.5k) to the south (Wallaby Creek Bushland Reserve). Multiple corridor and waterway dependent bird species recorded along corridor. Australian Owlet-nightjar (core habitat patch species) recorded in Leslie Harrison Conservation Area. Numerous koala records along corridor.
Core Habitat Linkages	Links ≈9 core habitat patches. Maximum distance between patches is ≈1800m.
Land Uses / Tenure	Environmental Protection and Conservation zoned land, boarded by Urban and Park Residential zoned land to the east of the corridor.
Community Use	Recreation in Wallaby Creek Bushland Refuge, Howlett Road Chatsworth Circuit Urban Habitats and Leslie Harrison Conservation Area.
Threats & Barriers	Poor peri urban and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossing Broadwater/Mount Cotton Road.
Gaps & Pinch Points	Pinch points immediately north and south of Howlett Road and north and south of Degen Road.
Priority Outcomes	Safe fauna passage across Broadwater/Mount Cotton Road. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Pinch points immediately north and south of Howlett Road and north and south of Degen Road (to create core habitat patch and reduce ≈1800m gap distance between patches).

Greater Glider Reserve to Henderson Road - Established Corridor



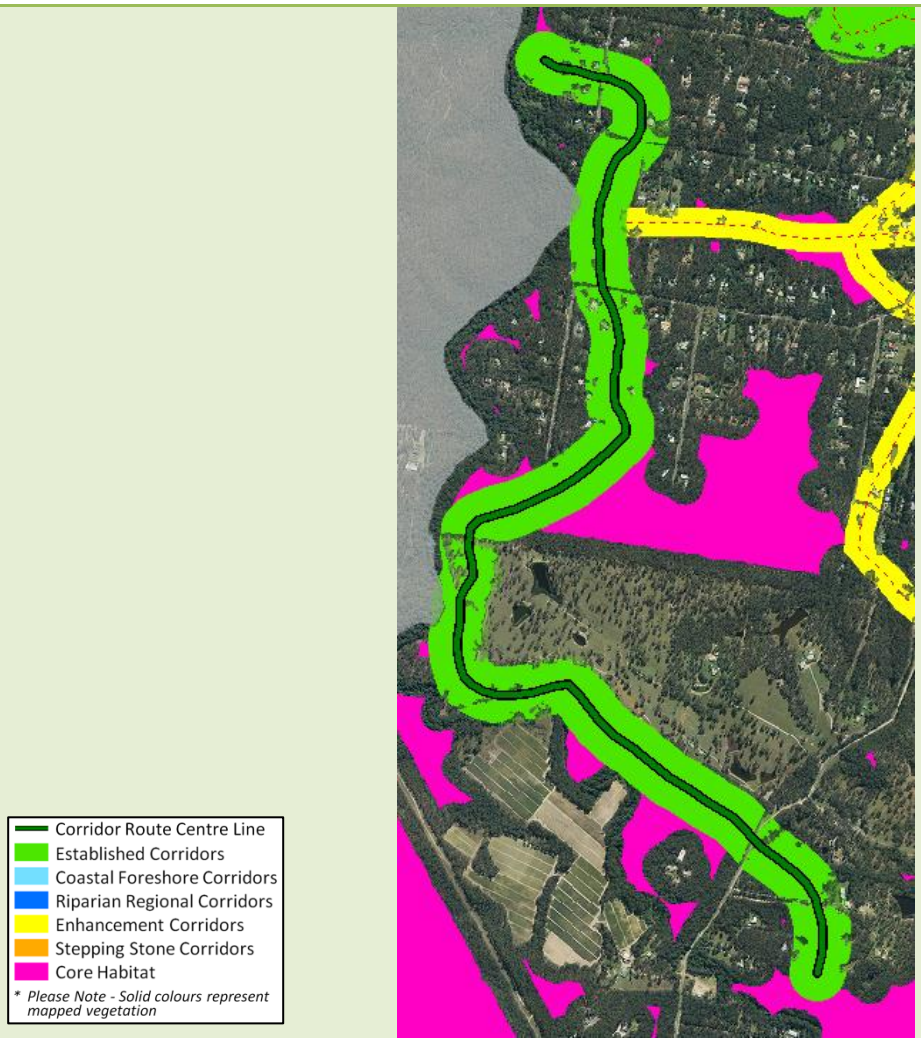
Description	North to south corridor linking Greater Glider Reserve to Henderson Road Reserve (via Coolnwynpin Nature Reserve).
Environmental Values	Linking large tracts of scribbly gum core habitat (12.9-10.4) in Kidd St Conservation Area to 12.5.3 in Coolnwynpin Nature Refuge to 12.11.5k/12.11.5a between Henderson Road and Avalon Road. Also incorporates 12.3.6 along Coolnwynpin waterways and 12.3.11 between Henderson and Avalon Rd. Multiple corridor dependent bird species recorded along corridor. Tinkling Froglet and Yellow-footed Antechinus recorded in north section of corridor. Glossy Black-cockatoo recorded in south of corridor. Numerous koala records along corridor.
Core Habitat Linkages	Links ≈9 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Council reserves (Greater Glider and Coolnwynpin). Conservation zoned land along trunk of corridor, boarded by Urban land in the north of the corridor and Park residential in the south.
Community Use	Recreational uses in Greater Glider and Coolnwynpin. Waterway recreation along Coolnwynpin Creek.
Threats & Barriers	Crossing of Redland Bay and Mount Cotton Roads. Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point immediately south-west of Redland Bay Road (opposite Greater Glider Reserve).
Priority Outcomes	Safe fauna passage across Redland Bay and Mount Cotton Roads. Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point immediately south-west of Redland Bay Road.

Holden Street Wetlands to Pinklands Bushland Refuge - Established Corridor



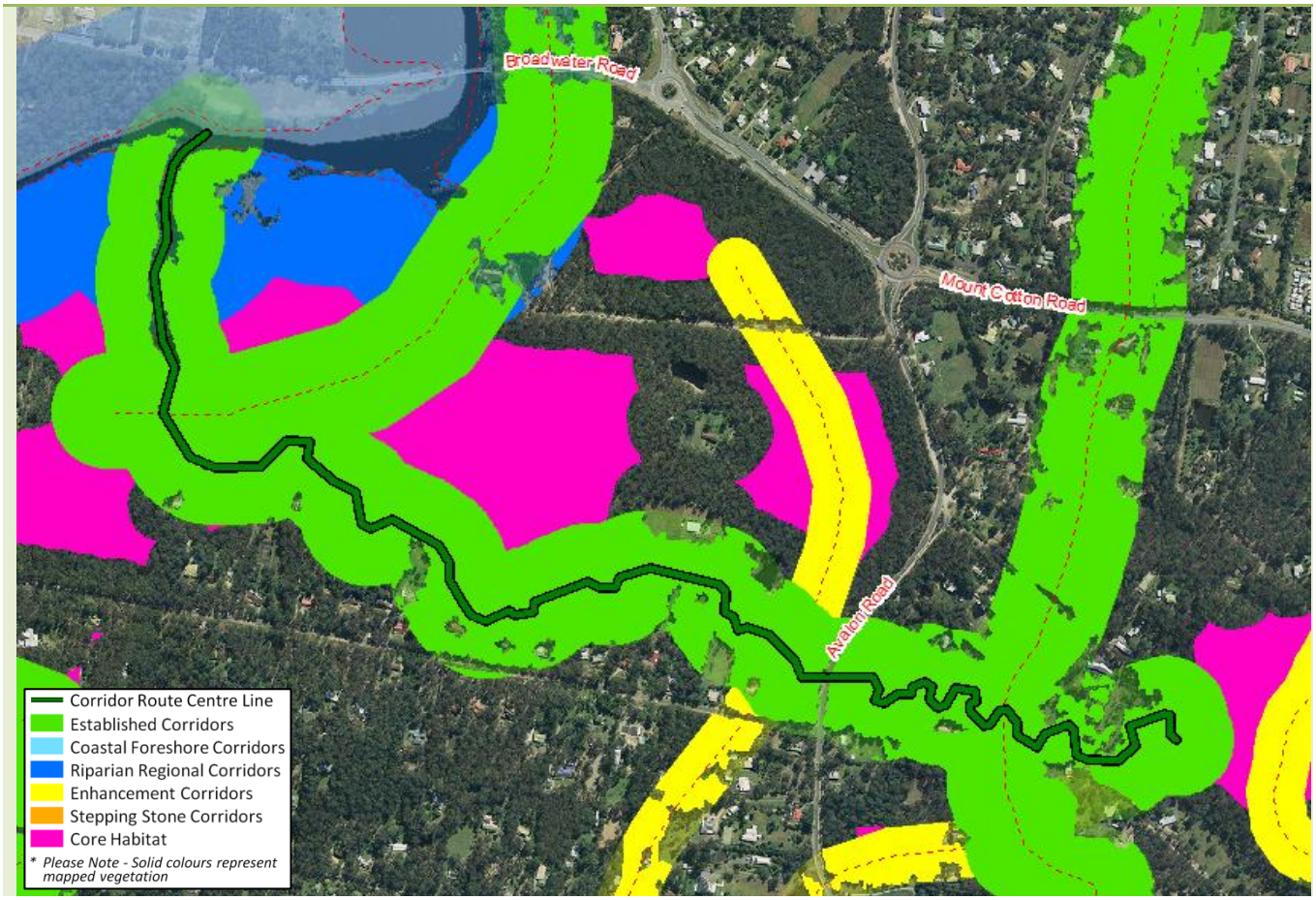
Description	North to south corridor linking Holden Street Wetlands to Pinklands Bushland Refuge, via Santagiuliana Parade Bushland Refuge, Thornlands Bushland Refuge, Primrose Drive Wetlands and Sandalwood Street Creek Corridor.
Environmental Values	Linking casuarina and mangroves open forest (12.1.1) of Holden Street Wetlands and Pinklands Bushland Refuge, via coastal riparian vegetation (12.3.6) and bloodwood and blue gum open forest to woodland (12.5.2). Multiple corridor and waterway dependent bird species recorded along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~10 per cent of corridor.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1600m.
Land Uses / Tenure	Trunk of corridor zoned open Space and Conservation, bounded by Urban Residential development.
Community Use	Recreation within reserves, and waterway recreation values.
Threats & Barriers	Crossings of King Street, Thornlands Road, South Street and Goleby Esplanade. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points immediately south of South Street and immediately south of Thornlands Road.
Priority Outcomes	Safe fauna passage across King Street, Thornlands Road, South Street and Goleby Esplanade. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points immediately south of South Street and immediately south of Thornlands Road (to create core habitat patch and reduce ≈1600m gap distance between patches).

Wallaby Creek Bushland Refuge to Avalon Road - Established Corridor



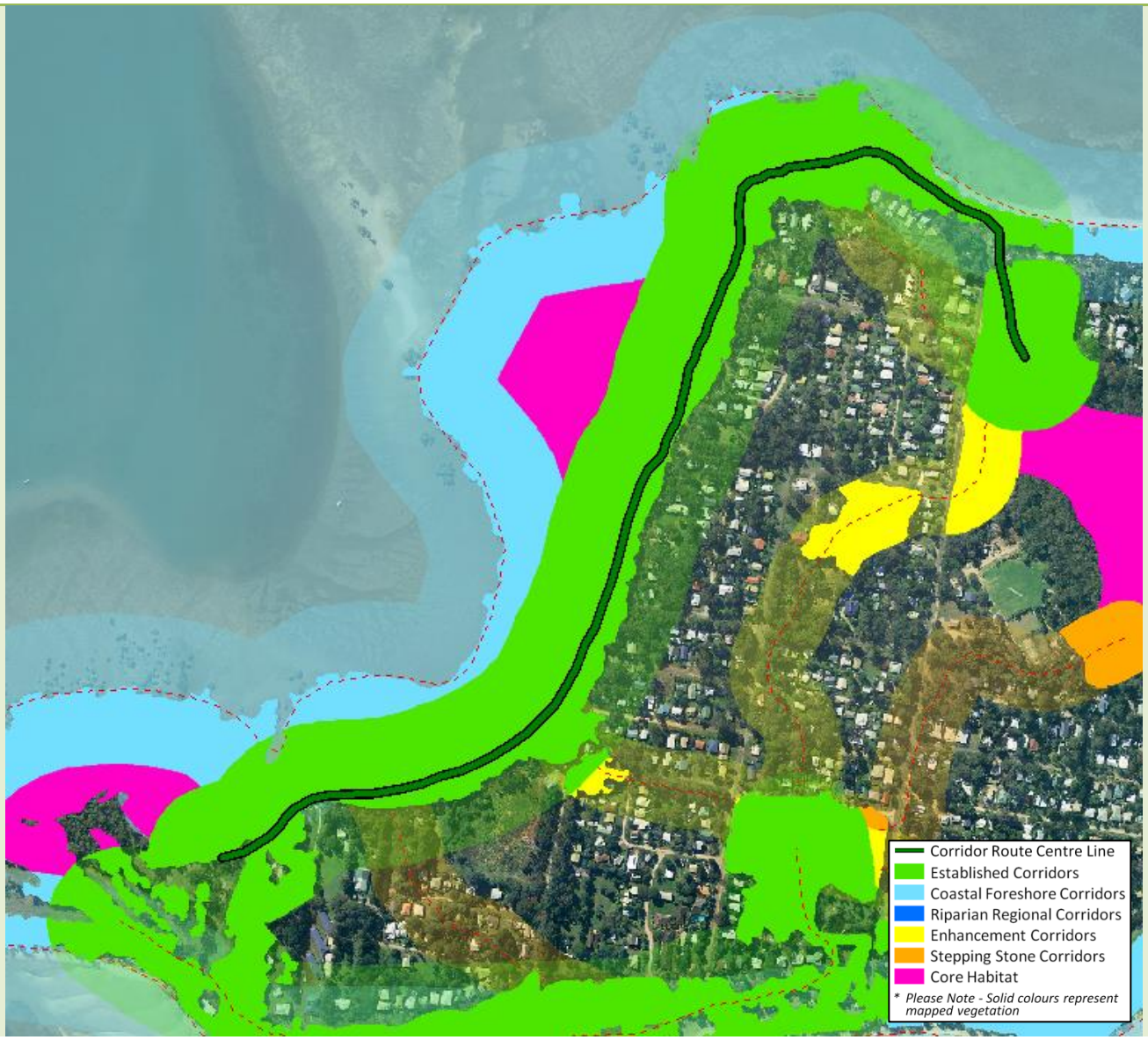
Description	North to south corridor linking Wallaby Creek Bushland Refuge to Avalon Road, via Pioneer Street Nature Belt, Emu Street Bushland Refuge and Tingalpa Creek Corridor.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5k) of Wallaby Creek Bushland Refuge to open spotted gum dominated forest complex (12.11.5a) of Avalon Road, via riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) of Pioneer Street Nature Belt; open spotted gum dominated forest complex (12.11.5a) of Emu Street Bushland Refuge; and open-forest with grey ironbark and small-fruited grey gum (12.11.3) of Tingalpa Creek Corridor. Numerous koala records along corridor.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈400m.
Land Uses / Tenure	Mix of Environmental Protection and Conservation zoned land.
Community Use	High value recreational area within reserves.
Threats & Barriers	Potential road strike and barrier at Avalon Road crossing. Poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Potential pinch point south of Emu Street Bushland Refuge at northern end of Tingalpa Creek Corridor.
Priority Outcomes	Safe fauna passage across Avalon Road. Rehabilitation of potential pinch point south of Emu Street Bushland Refuge at northern end of Tingalpa Creek Corridor. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Wallaby Creek - Established Corridor



Description	North-west to south-east corridor through Wallaby Creek.
Environmental Values	Riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) throughout trunk of corridor bound by open spotted gum dominated forest complex (12.11.5k and/or 12.11.5a). Multiple corridor dependent bird species recorded along corridor
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈450m.
Land Uses / Tenure	Conservation zoned land on immediate northern side and Environmental Protection zoned land on immediate southern side.
Community Use	High value recreational use of Wallaby Creek Bushland Refuge.
Threats & Barriers	Potential road strike and barrier at Avalon Road crossing. Poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Priority Outcomes	Safe fauna passage and assessment for road strike across Avalon Road. Management of impacts from peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Melaleuca Wetlands to Doug & Mary Morton Reserve – Coochiemudlo Island – Established Corridor

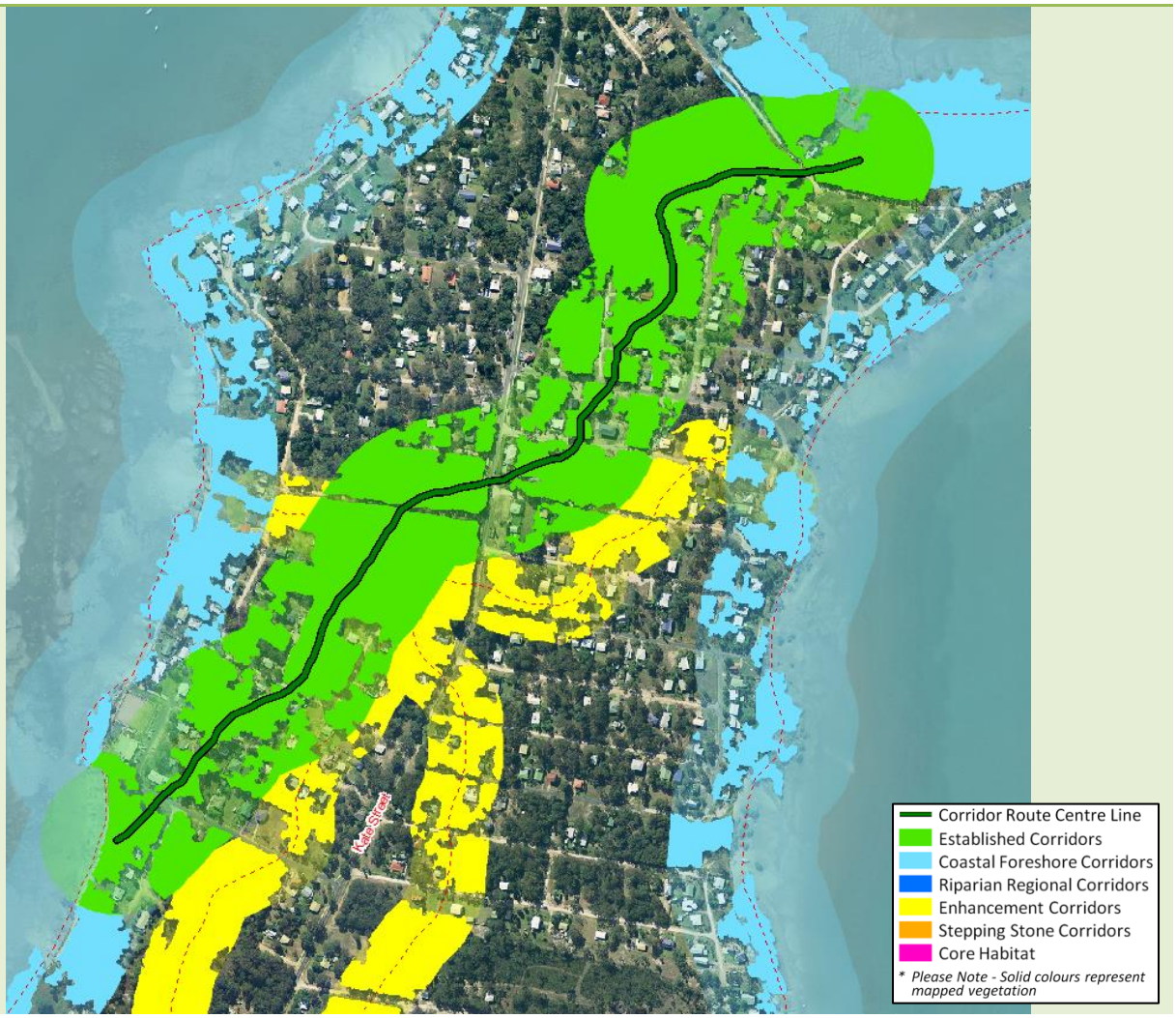


Description	East to west corridor connecting Melaleuca Wetlands to Doug & Mary Morton Reserve, via Flinders Foreshore and Doug & Mary Morton Foreshore.
Environmental Values	Linking paperbark open forest on sand (12.2.7) and scribbly gum woodland (12.5.3) of the Melaleuca Wetlands to the bloodwood, blue gum grassy open forest to woodland (12.5.2) and scribbly gum woodland (12.5.3) of the Doug & Mary Morton Reserve, via the bloodwood, blue gum grassy open forest to woodland (12.5.2) of Flinders Foreshore and Doug & Mary Morton Foreshore. Seaward edge of corridor Ramsar listed.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈250m.
Land Uses / Tenure	Trunk of corridor Conservation zoned land bounded by Urban Residential zoned development.
Community Use	Seaward edge of corridor State Marine Park. High value coastal recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	No significant gaps greater than 106m.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Doug & Mary Morton Reserve to Perulpa Street - Coochiemudlo Island – Established Corridor

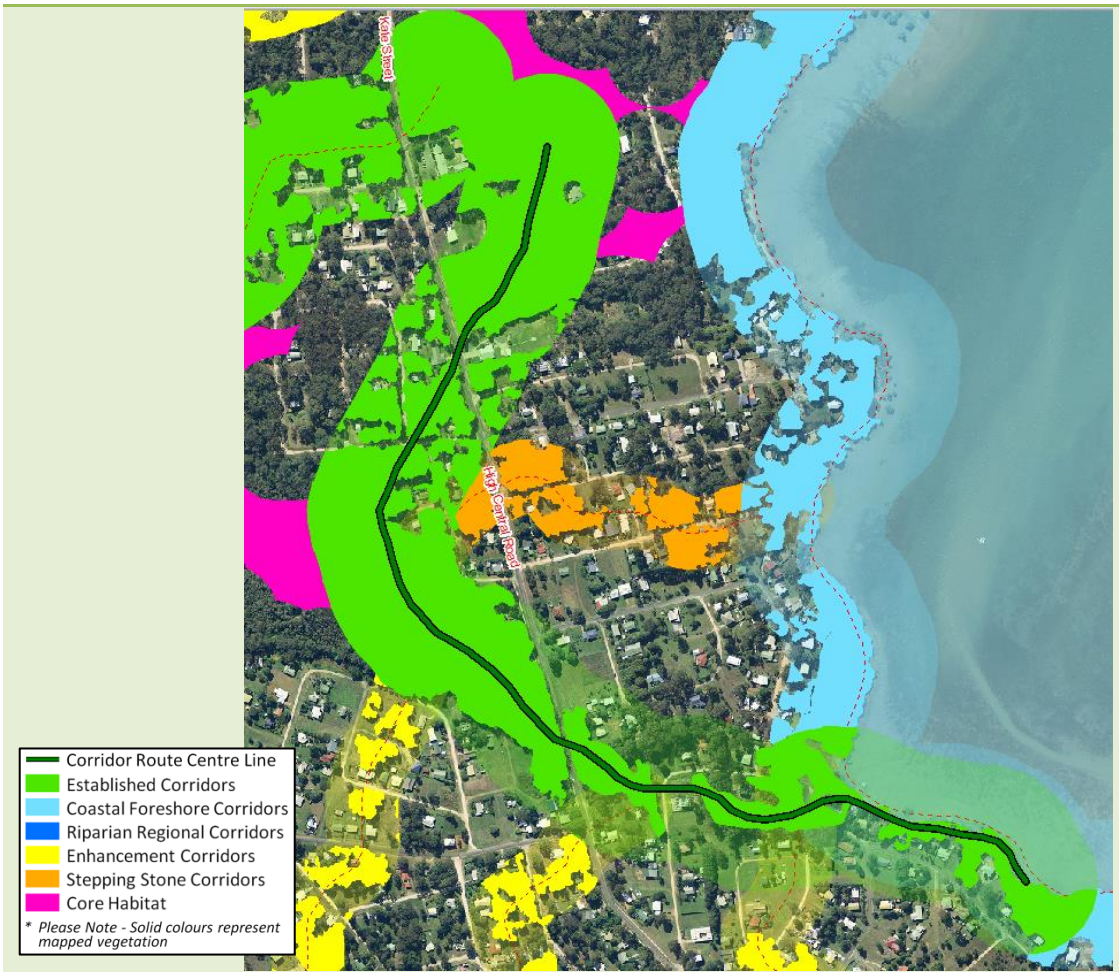
Description	East west corridor linking Doug & Mary Morton Reserve to Perulpa Street, via Coochiemudlo Foreshore West.
Environmental Values	Linking the mangrove closed forest (12.1.3) of Doug & Mary Reserve to the paperbark riparian coastal vegetation (12.3.6) and scribbly gum woodland (12.5.3) of Perulpa Street, via Coochiemudlo Foreshore West's scribbly gum woodland (12.5.3). Seaward edge of corridor Ramsar listed.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Trunk of corridor predominately Conservation zoned land bounded by Urban Residential and Medium Density Residential zoned development.
Community Use	Seaward edge of corridor State Marine Park. High value coastal recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats.
Gaps & Pinch Points	Pinch point immediately north of Victoria Parade South, and west of Elisabeth Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point immediately north of Victoria Parade South.

Beelong Street to Coast Road Foreshore – Macleay Island – Established Corridor



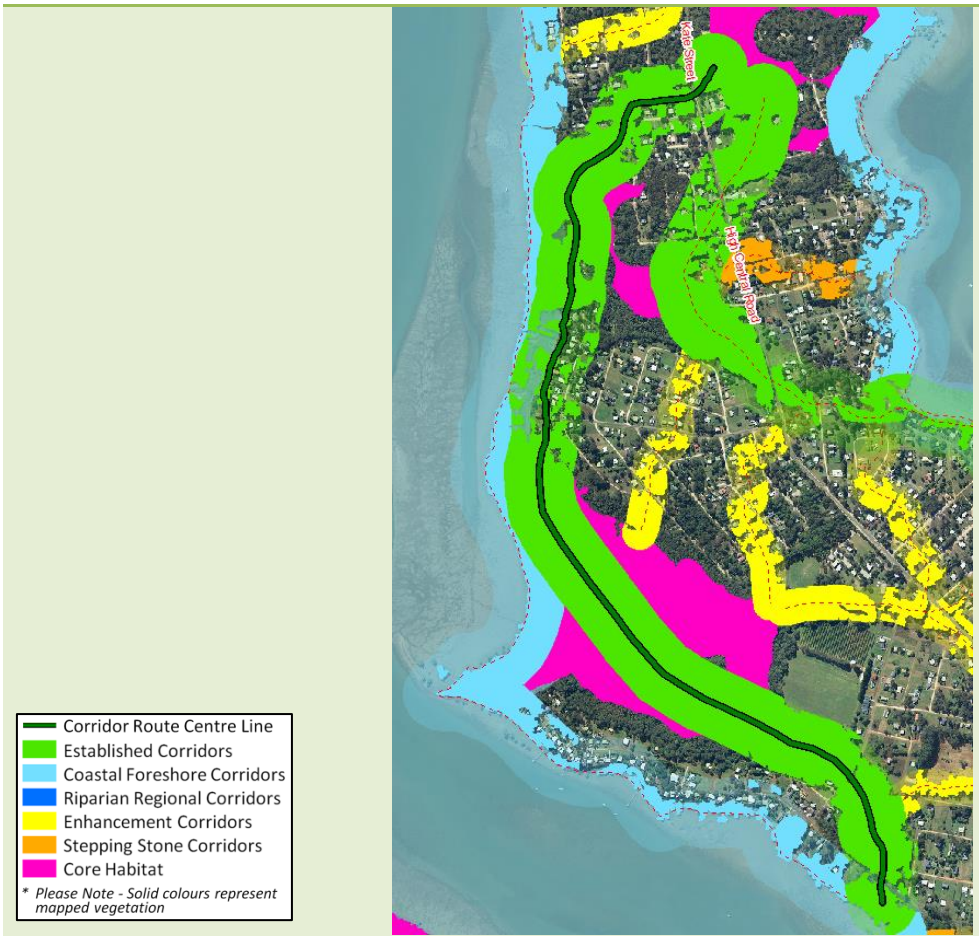
Description	North-east to south-west to linking Beelong Street Park to Coast Road Foreshore, via Aruma Street Park, Balaka Street Urban Habitat, Orana Street Walkway, and Kalara Street Walkway.
Environmental Values	Linking the casuarina and mangrove open forest (12.1.3) and endangered coastal bloodwood, blue gum open forest to woodland vegetation (12.5.2) of Beelong Street Park to the sandy paperbark open forest (12.2.7), mangrove closed forest (12.1.3) and coastal bloodwood, blue gum open forest to woodland of the Coast Road Foreshore, via Balaka Street Urban Habitat's bloodwood, blue gum open forest to woodland (12.5.2) and scribbly gum woodland (12.5.3). Passes near flying fox roost (Balaka Street).
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Coast Road Foreshore end zoned as Open Space, adjacent to Conservation land. Beelong Street Park end zoned as SMBI Residential, adjacent to Conservation land. Trunk zoned as Conservation and SMBI Residential.
Community Use	High value coastal and peri urban recreation area.
Threats & Barriers	Runs through many low-density, small and narrow streets. Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points at western end bend of Benowa Street and between Cathy and Oomool Streets.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points at western end of Benowa Street and between Cathy and Oomool Streets.

Nunkeri Drive to Charmian Street – Macleay Island – Established Corridor



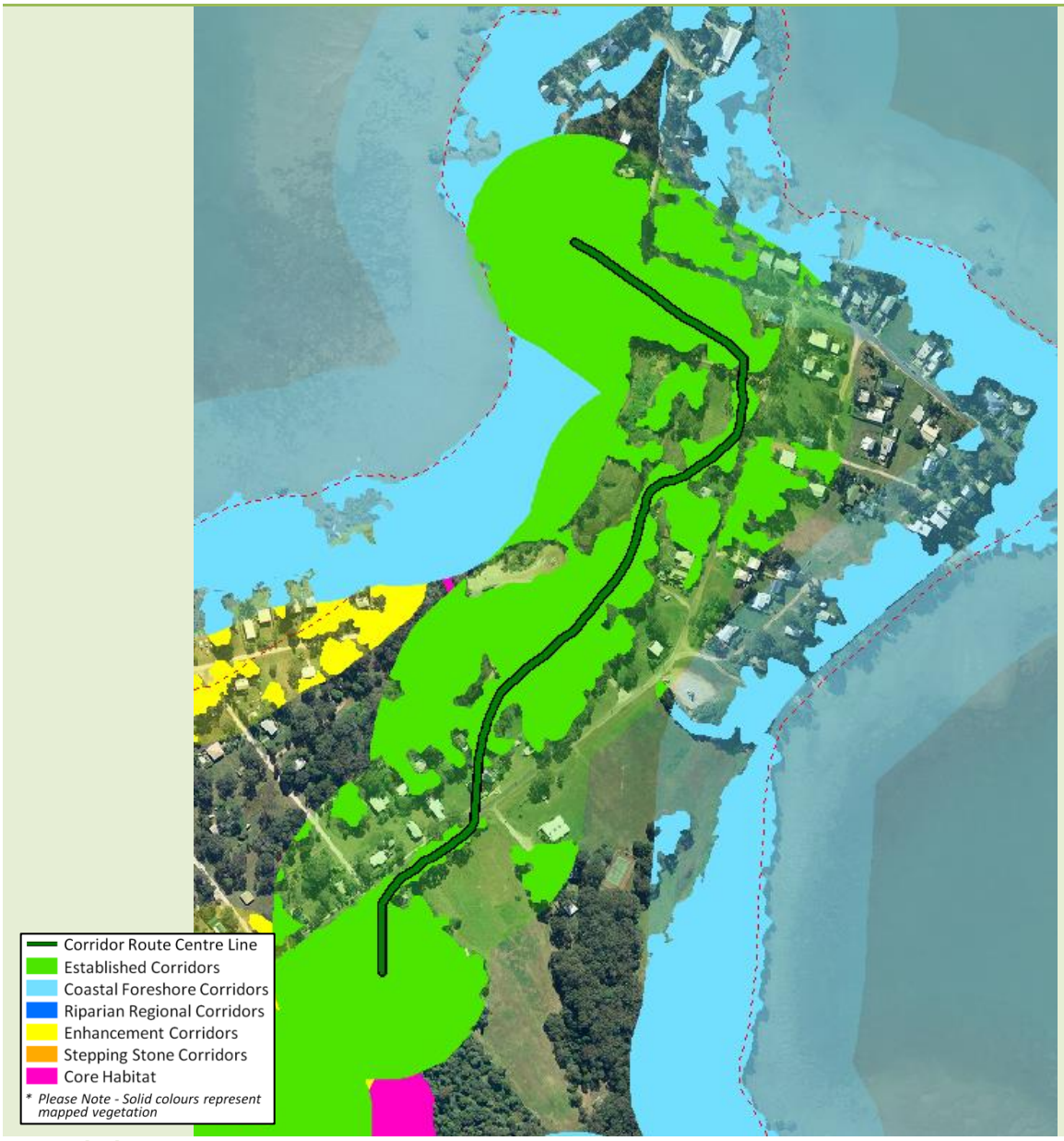
Description	North to south corridor connecting Nunkeri Drive bushland to Charmian Street.
Environmental Values	Linking scribbly gum woodland (12.5.3) at Nunkeri Drive and Wandoo Avenue to mangrove closed forest (12.1.3) and bloodwood, blue gum grassy open forest to woodland (12.5.2) at Timothy/Charmian Street, via scribbly gum woodland (12.5.3) at High Central Road's Urban Habitat and Tim Shea's Wetlands. Many records of Glossy Black-cockatoos at northern end of corridor, along Wandoo Avenue and Nunkeri Drive. Passes through flying fox roost (Lake Street) at halfway of trunk.
Core Habitat Linkages	Links 4 core habitat patches. Maximum distance between patches is ≈750m.
Land Uses / Tenure	Halfway region of corridor runs through Conservation zoned land, bounded by SMBI Residential at each end. Partially includes Community Purposes land towards northern end.
Community Use	Bushland and reserve wetland recreational area.
Threats & Barriers	Poor urban and peri land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats. Potential road strike and barrier at High Central Road crossings (2).
Gaps & Pinch Points	Minor gap (≈60m) at Citron Street crossing. Pinch point along coastline at northern end of Beach Road (≈350m in length).
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of coastal vegetation at pinch point along coastline at northern end of Beach Road. Rehabilitation of minor gap immediately east of Pecan Street/Citron Street crossing. Safe fauna passage and assessment for road strike at High Central Road crossings (2).

Nunkeri Drive to Thomas Street Wetlands – Macleay Island – Established Corridor



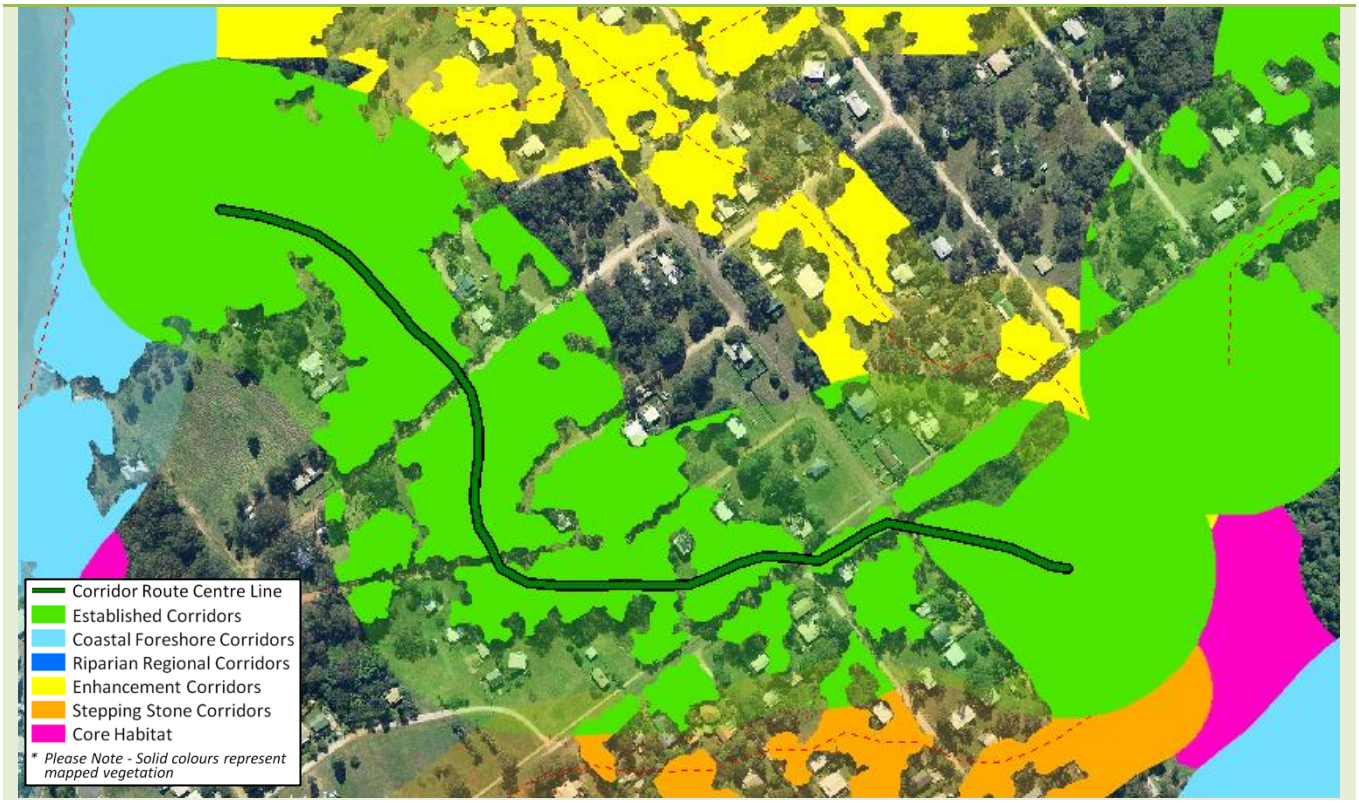
Description	North to south corridor connecting Nunkeri Drive bushland to Thomas Street Wetlands.
Environmental Values	Linking Endangered scribbly gum woodland (12.5.3) at Nunkeri Drive and Karrawarra Street Park to saltpan vegetation (12.1.2) at Thomas Street Wetlands, via bloodwood, blue gum grassy open forest to woodland (12.5.2) along Charles Terrace Walkway; mangrove closed forest through Paul Carter Walkway (12.1.3); and bloodwood, blue gum grassy open forest to woodland at Lonicera Street Urban Habitat. Osprey nest and many records of Glossy Black-cockatoos at northern end of corridor.
Core Habitat Linkages	Links ≈6 core habitat patches. Maximum distance between patches is ≈475m.
Land Uses / Tenure	Trunk of corridor contains mix of Conservation and SMBI Residential zoned land, with Thomas Street Wetlands end bound by Conservation and Open Space, Community Purposes and Island Industry zoned land at Nunkeri Drive end.
Community Use	Bushland and coastal reserves recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats. Presence of cleared Island Industry land at Nunkeri Drive end. Potential road strike and barrier at High Central Road crossing.
Gaps & Pinch Points	Minor gap (≈50m) immediately south of Noon-Muckle Street. Pinch point immediately west of Hamilton Parade/Charles Terrace crossing.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gap immediately south of Noon-Muckle Street and of pinch point immediately west of Hamilton Parade/Charles Terrace crossing. Safe fauna passage and/or assessment for road strike at High Central Road crossing.

Goodsell Crescent to Lucas Drive – Lamb Island – Established Corridor



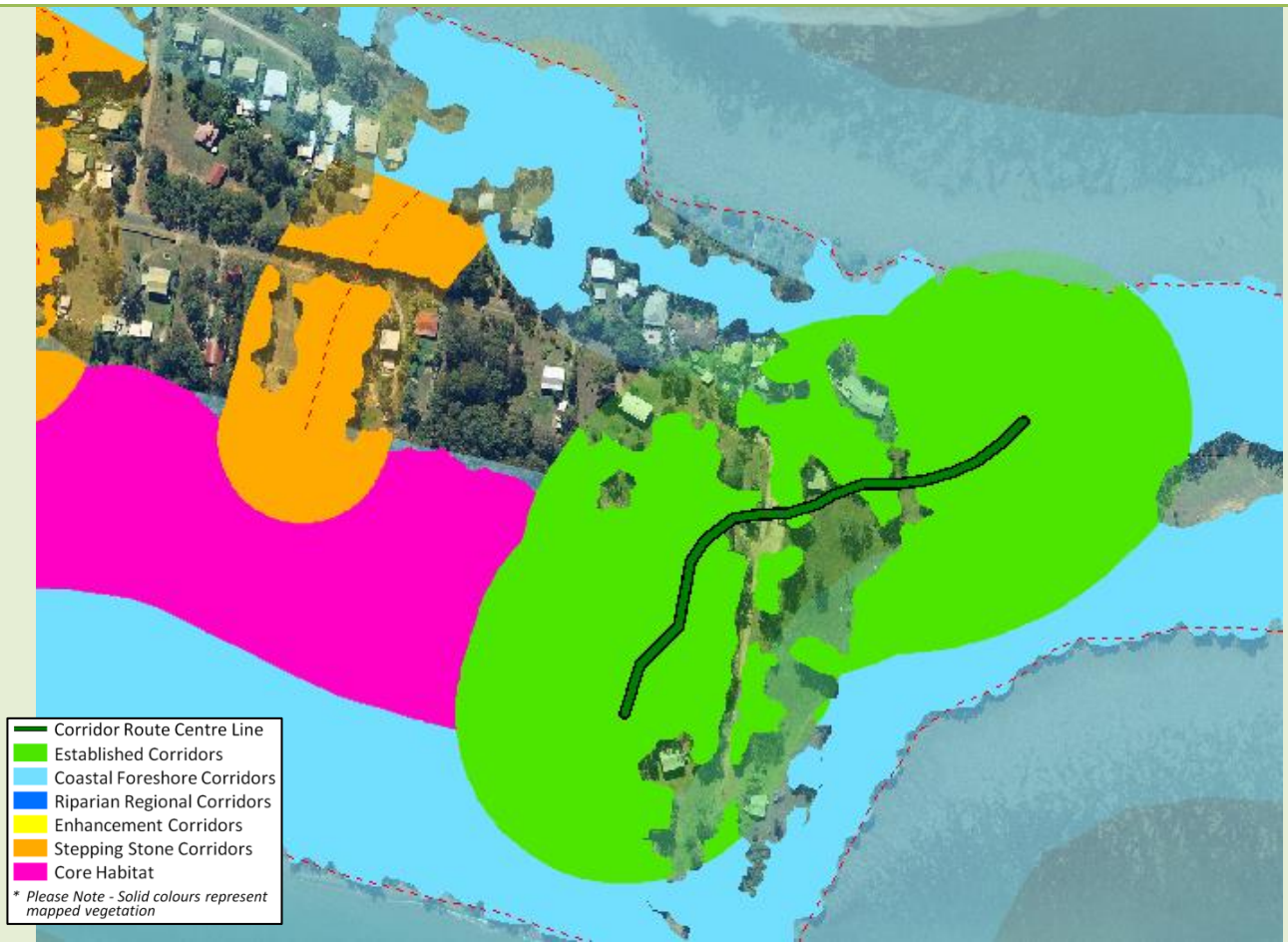
Description	North to south corridor linking Goodsell Crescent to Lucas Drive.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) and broad-leaved paperbark open-forest to woodland (12.3.5) at Goodsell Crescent to bloodwood, blue gum grassy open forest to woodland (12.5.2) at Lucas Drive. Multiple corridor dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈900m.
Land Uses / Tenure	Trunk of orridor predominantly Conservation zoned land, with lesser features of SMBI Residential zoned development and Rural Non Urban zoned land.
Community Use	Valuable coastal and bushland reserve recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points between Pinetrees Avenue and Perulpa Drive and immediately next to the south-west side of Pioneer Park.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of vegetation immediately between Pinetrees Avenue and Perulpa Drive and immediately next to the south-west side of Pioneer Park.

Harry Brook Bushland Refuge to Lucas Drive – Lamb Island - Established Corridor



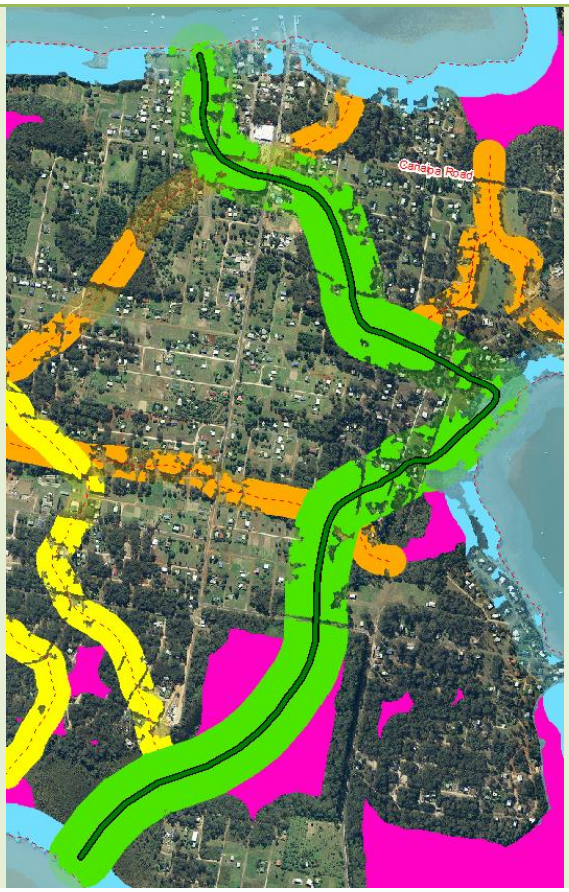
Description	East to west corridor linking Harry Brook Bushland Refuge and Lucas Drive.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) and broad-leaved paperbark open-forest to woodland (12.3.5) at Harry Brook Bushland Refuge to bloodwood, blue gum grassy open forest to woodland (12.5.2) at Lucas Drive.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Each end of corridor is Conservation zoned land. Trunk of corridor zoned approximately half SMBI Residential development, half Conservation.
Community Use	Valuable bushland reserve recreation area.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Potential pinch point between corner of Lucas Drive and Helen Parade and Lucas Drive and Paula Parade. Potential pinch point on northern side of Pier Haven, leading into Harry Brook Bushland Refuge.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch between corner of Lucas Drive and Helen Parade and Lucas Drive and Paula Parade. Rehabilitation of pinch point on northern side of Pier Haven, leading into Harry Brook Bushland Refuge.

Karragarra Island Foreshore South to East Road – Karragarra Island - Established Corridor



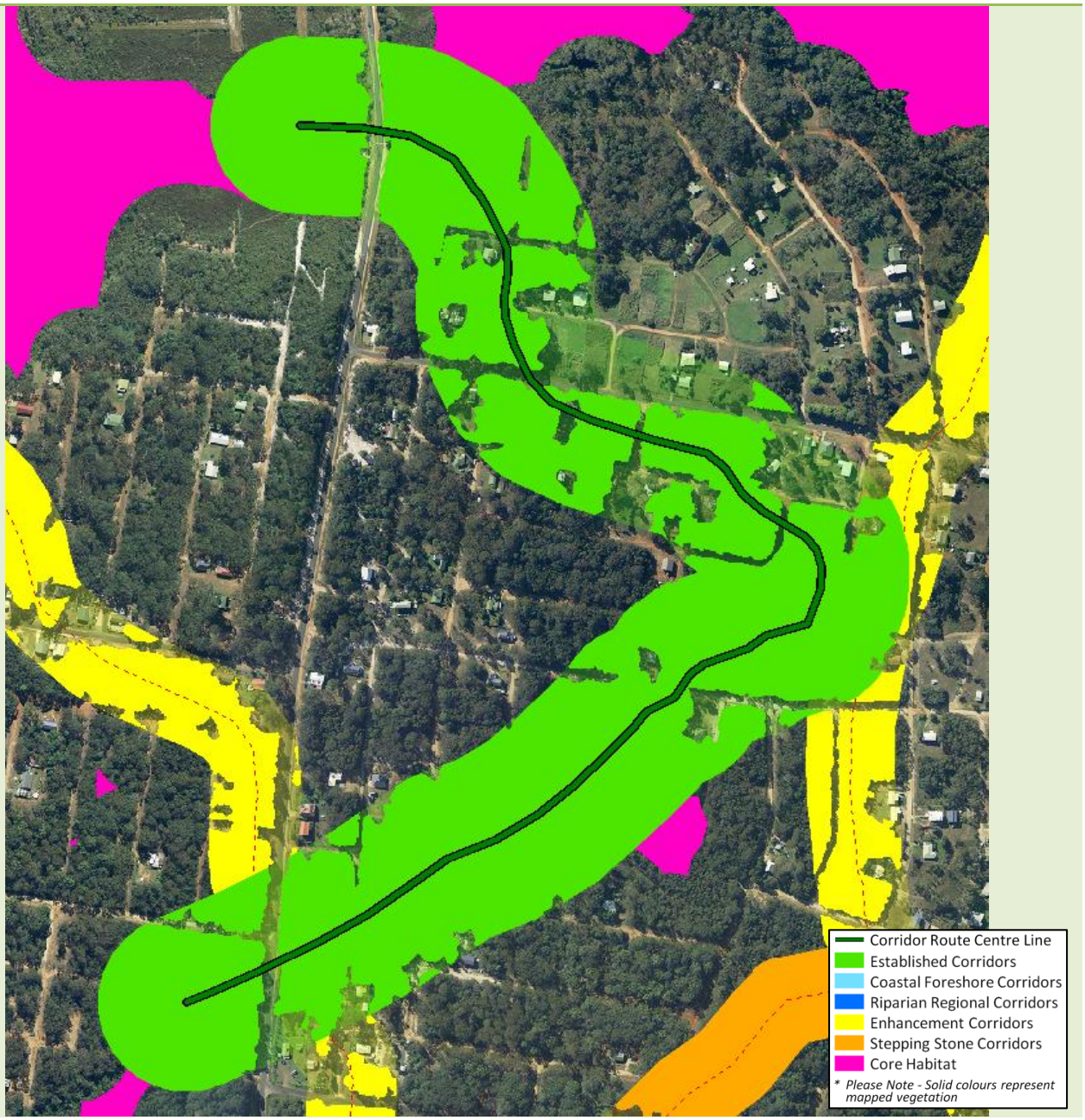
Description	East to south-west corridor linking Karragarra Island Foreshore South to East Road.
Environmental Values	Linking the mangrove closed forest (12.1.3), scribbly gum woodland (12.5.3) and bloodwood, blue gum grassy open forest to woodland (12.5.2) of East Road to the scribbly gum woodland (12.5.3) and mangrove closed forest (12.1.3) of the Karragarra Island Foreshore South.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈300m.
Land Uses / Tenure	Each end is zoned as Conservation land, with Rural Non Urban and SMBI Residential development between.
Community Use	Bushland reserve recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Potential pinch point across northern part of East Road and eastwards towards northern end of corridor.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point across East Road and eastwards towards northern end of corridor.

Bayview Road Urban Habitat to Whistling Kite Wetland – Russell Island – Established Corridor



Description	North to south corridor linking Bayview Road Urban Habitat to Whistling Kite Wetlands, via Borrows Street Bushland Refuge, Fern Terrace Bushland Refuge and Inlet Avenue Foreshore.
Environmental Values	Linking the mangrove closed forest (12.1.3) of Bayview Road Urban Habitat to the saltpan vegetation (12.1.2) and complex of coastal sedgeland/paperbark open-forest to woodland/closed (or wet) heathland (12.2.15/12.3.5/12.3.13) at Whistling Kite Wetlands; via the paperbark open-forest to woodland vegetation of Borrows Street Bushland Refuge (12.3.5); the grey ironbark, blackbutt, small-fruited grey gum open-forest of Fern Terrace Bushland Refuge (12.5.6c), which also comprises the Inlet Avenue Foreshore with mangrove closed forest (12.5.6c/12.1.3). Multiple corridor dependent bird species recorded in along corridor. Flying fox roost (Oxford Road) at northern end of corridor.
Core Habitat Linkages	Links ≈8 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Ends and trunk of corridor predominantly Conservation zoned land, with some of SMBI Residential lots along mid-section of corridor.
Community Use	Valuable coastal and bushland reserve recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats. Potential road strike at major road crossings (High Street, Mingerriba Road).
Gaps & Pinch Points	Pinch point immediately north-east of Inlet Avenue and Cutter Street intersection and between Yacht Street and Inlet Avenue.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Assessment for road strike at High Street and Minjerriba Road crossings. Rehabilitation of pinch points immediately north-east of Inlet Avenue and Cutter Street intersection and between Yacht Street and Inlet Avenue.

Turtle Swamp Wetlands to Water Mouse Wetlands – Russell Island - Established Corridor

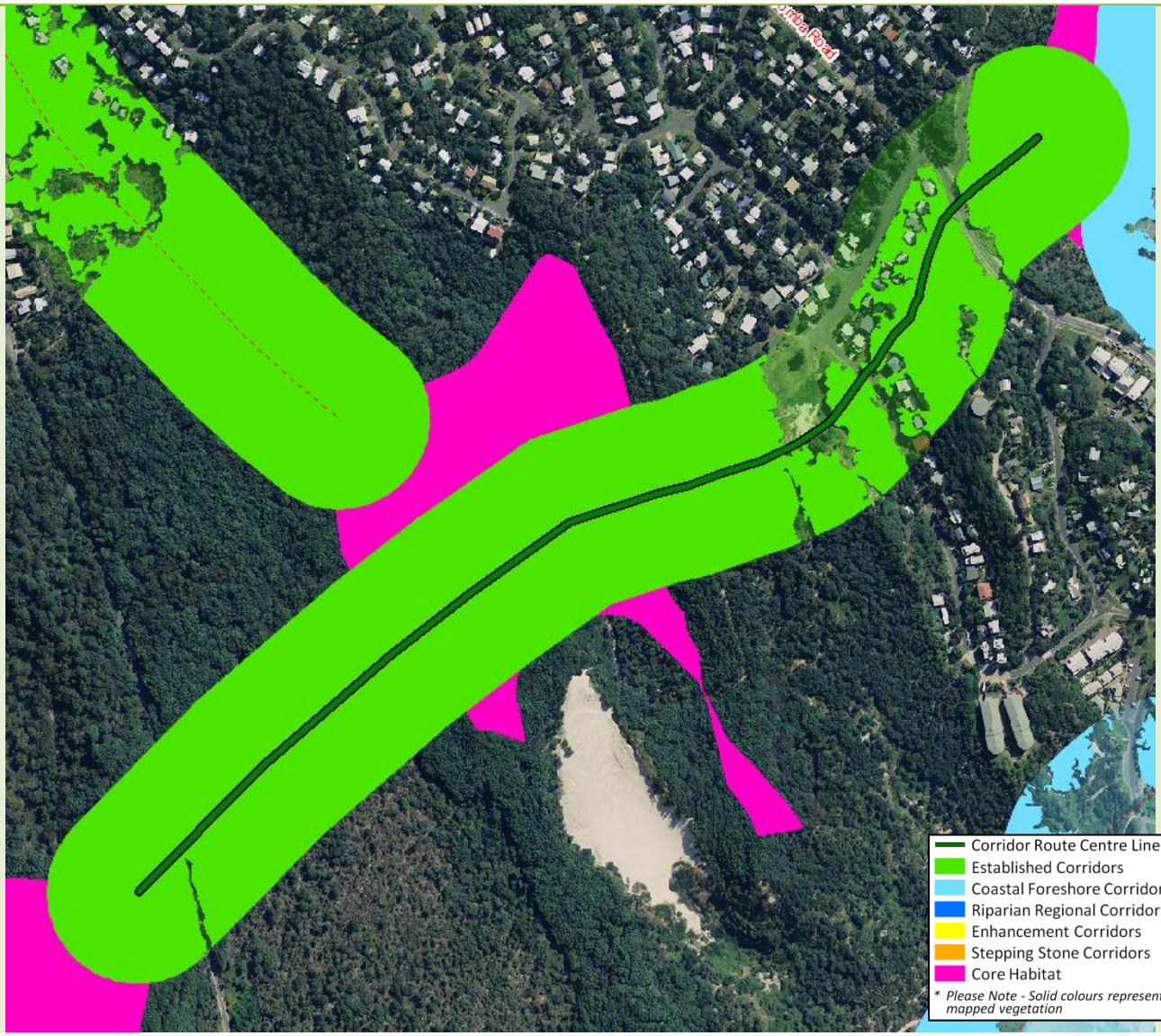


Description	North to south corridor linking Turtle Swamp Wetlands to Water Mouse Wetlands.
Environmental Values	Linking the open spotted gum dominated forest complex (12.11.5a) of Turtle Swamp Wetlands to that of Water Mouse Wetlands (12.11.5.a). Several records of Glossy Black-cockatoos on eastern side of Beacon Drive part of corridor.
Core Habitat Linkages	Links 5 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Predominantly Conservation zoned land, with approximately a third of northern half bound by SMBI Residential development.
Community Use	High value bushland reserve recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike along Centre Road.
Gaps & Pinch Points	No significant gaps greater than 106m or narrow points less than 100m.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Assessment for road strike at Centre Road crossing.

George Nothling Drive Conservation Area to Flinders Beach – North Stradbroke Island – Established Corridor

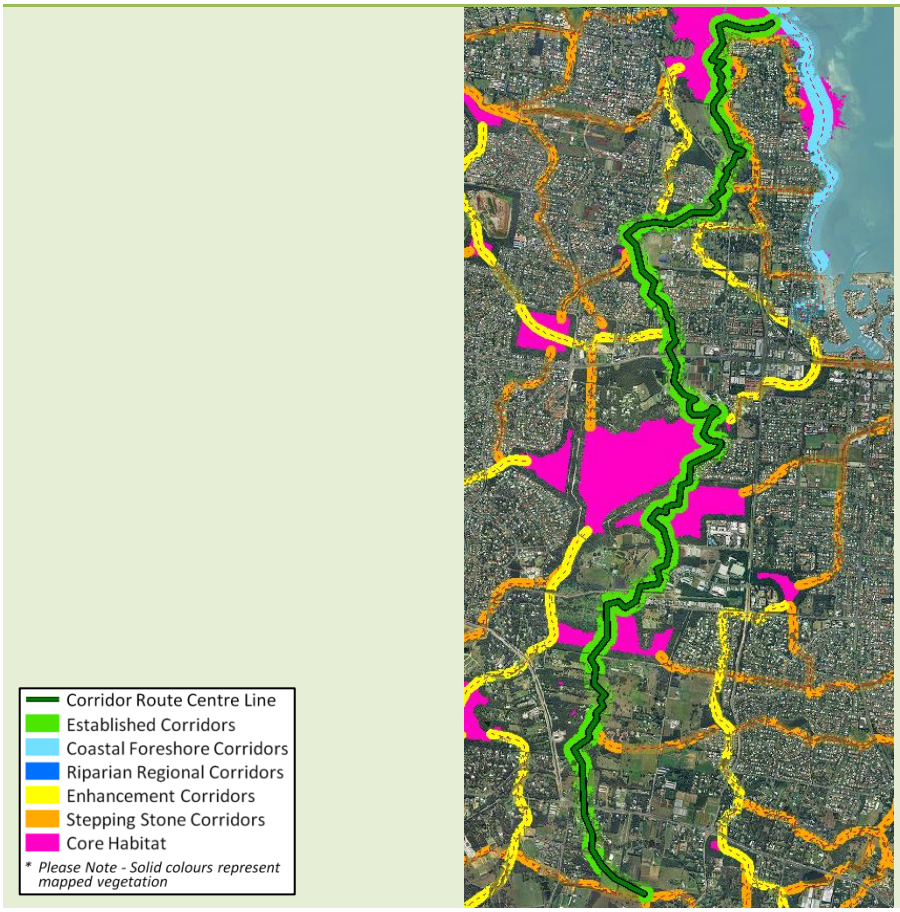
Description	East to west corridor connecting Flinders Beach Foreshore to George Nothling Drive Conservation Area, via East Coast Road Conservation Area.
Environmental Values	Linking the paperbark open forest on sand (12.2.7) of Flinders Beach Foreshore to the open-forest to low closed forest (12.2.5) of George Nothling Drive Conservation Area; via the scribbly gum, red bloodwood, pink bloodwood (etc.) shrubby or grassy woodland to open forest (12.2.6) of the East Coast Road Conservation Area. Records of corridor dependent species in along corridor (e.g. Swamp Wallaby, Tinkling Froglet, White-throated Nightjar, Little Wattlebird, etc.). Flying fox roost (Point Lookout) towards eastern end.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈850m.
Land Uses / Tenure	Entire trunk Conservation zoned land, with adjacent land zoned as Point Lookout Residential, Point Lookout Tourist, Community Purposes, Open Space, Emerging Urban Community and Island Industry.
Community Use	High value bushland reserve recreation area.
Threats & Barriers	Poor management of surrounding land uses and urban and peri urban areas (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and potential road strike at East Coast Road crossing and George Nothling Drive crossing.
Gaps & Pinch Points	Pinch point along corridor immediately north of Merinda Crescent.
Priority Outcomes	Management of impacts from urban and peri urban areas and other surrounding land uses (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across East Coast Road and George Nothling Drive crossings. Rehabilitation of pinch points immediately north of Merinda Crescent.

Frenchmans Bay Foreshore to George Nothling Drive – North Stradbroke Island – Established Corridor



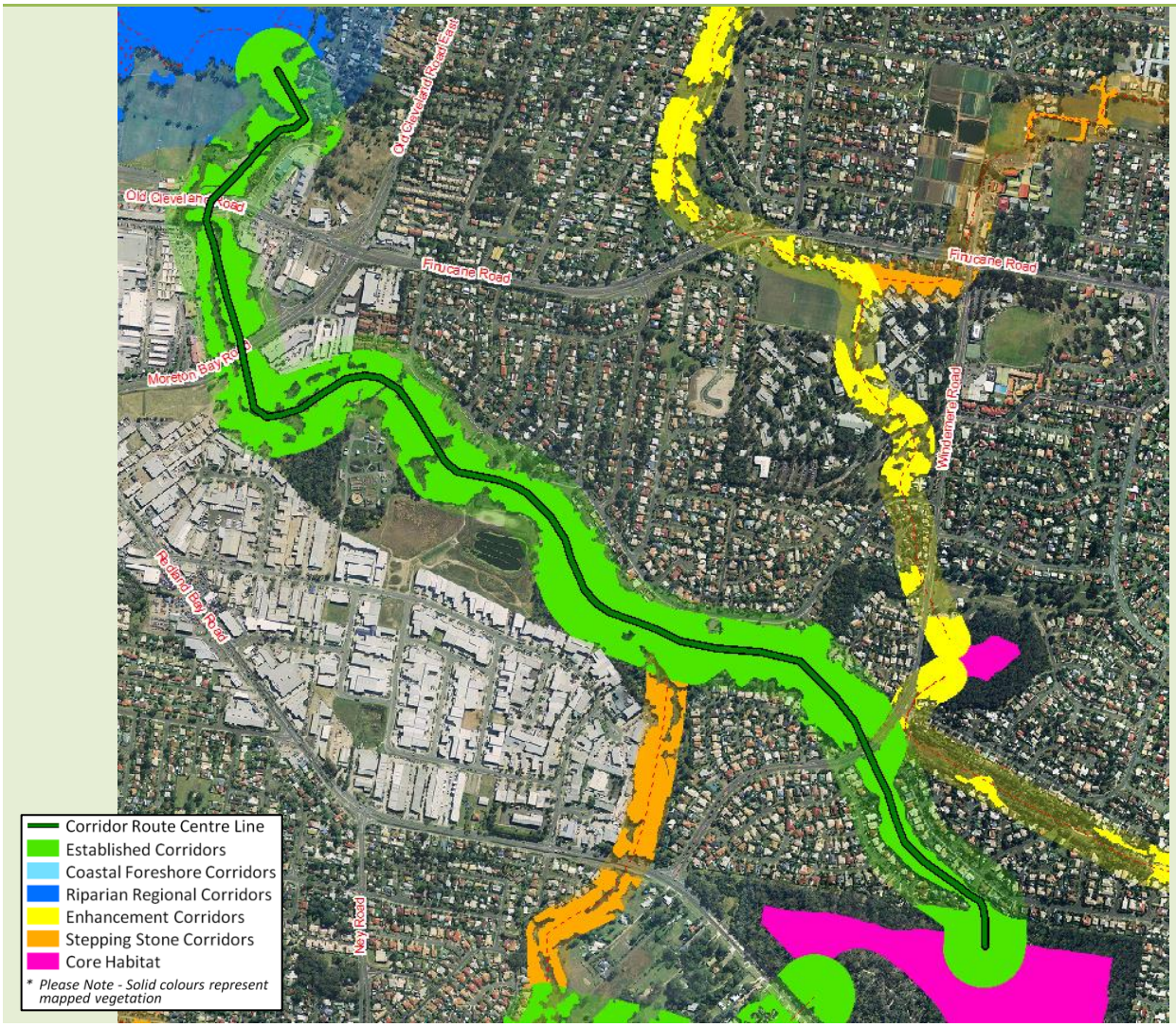
Description	North-east to south-west corridor connecting Frenchmans Bay Foreshore to George Nothling Drive Conservation Area, via Lucinda Crescent Nature Belt.
Environmental Values	Uniformity of open-forest to low closed forest (12.2.5) through entire corridor from Frenchmans Bay Foreshore to George Nothling Drive Conservation Area. Multiple corridor dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Trunk primarily Conservation and Community Purposes zoned land, with some Open Space and Point Lookout Residential zoned land towards Frenchmans Bay.
Community Use	High value peri urban and coastal recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at Moobomba Road crossing.
Gaps & Pinch Points	Pinch point immediately north-east of Samarinda Way.
Priority Outcomes	Management of impacts from urban and peri urban areas and other surrounding land uses (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Assessment for road strike at Moobomba Road crossing. Rehabilitation of pinch point immediately north-east of Samarinda Way.

Hilliards Creek Riparian Corridor – Established Corridor



Description	North to south riparian corridor running from the mouth of Hilliards Creek to Boundary Road.
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) in Ormiston to Scribbly gum forest (12.9-10.4) of Scribbly Gum Reserve and Boundary Road, via tracts of riparian vegetation (12.3.6). Multiple corridor and waterway dependent bird species recorded along corridor. Glossy Black-Cockatoo recorded mid-section of corridor. Scute-snouted Calyptotis recorded at mid-section of corridor. Aquatic species values throughout corridor. Numerous koala records along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~10 per cent of corridor length.
Core Habitat Linkages	Links ≈9 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Trunk of northern section of corridor made up of Hilliards Creek Corridor reserves, surrounded by urban residential development. Mid-section of corridor made up of Scribbly Gum and Weippin Street Conservation Areas reserves. South section of corridor Environmental Protection and Open Space zoned land bounded by Redland Bay Road and Kinross Development Estate.
Community Use	Conservation areas. Waterway recreation values. Coastal recreation.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). New urban development in Kinross Estate area. Impacts from sewage treatment plant and industry along South and Enterprise Streets. Fauna barrier at Finucane and Boundary Roads.
Gaps & Pinch Points	Gaps south of Boundary Road.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Management of impacts from rural land areas (e.g. vegetation management, weed control). Rehabilitation of gaps south of Boundary Road. Safe fauna passage across Finucane and Boundary Roads.

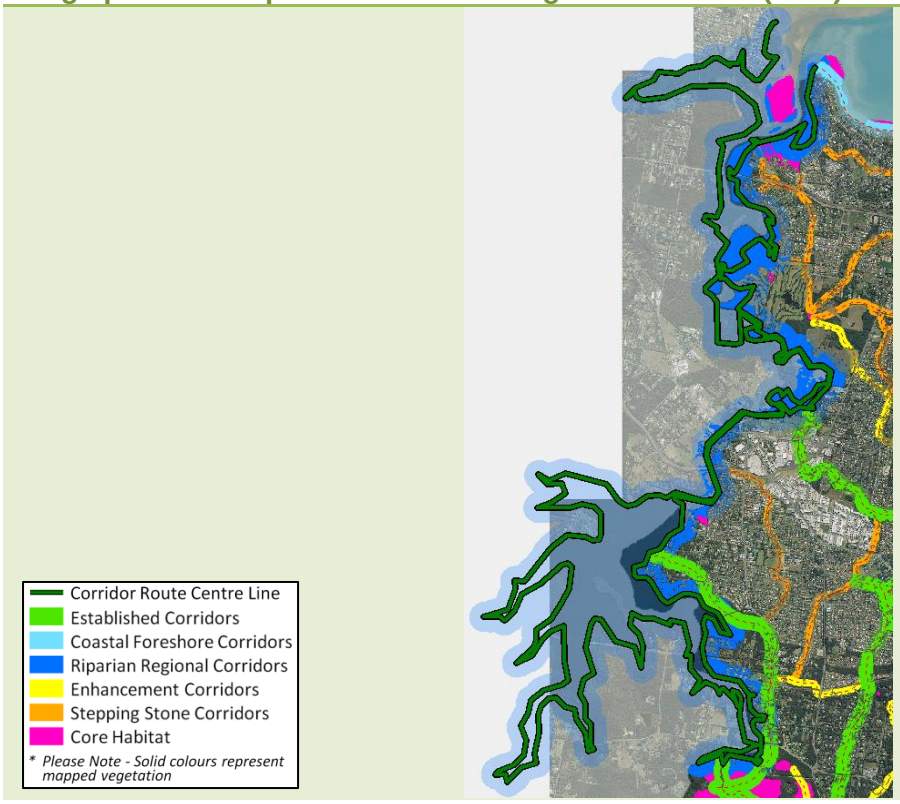
Coolnwynpin Creek Corridor to Great Glider Reserve - Established Corridor



Description	North west to south east corridor linking Coolnwynpin Creek Corridor to Greater Glider Conservation Area.
Environmental Values	Linking Casuarina and mangroves open forest (12.1.1) of lower reach of Coolnwynpin Creek to Scribbly Gum dominated open forest to woodland (12.9-10.4) and open Spotted gum forests (12.11.5a) of Greater Glider Conservation Area, via paperbark riparian vegetation (12.3.6). Aquatic species values throughout Coolnwynpin Creek section of corridor. Multiple corridor dependent bird species recorded at south end of corridor. Numerous koala records along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~100 per cent of corridor length.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Trunk of corridor predominantly Council land zoned Conservation and Open Space, bounded by Urban Residential and Commercial.
Community Use	Recreational uses in conservation reserves.
Threats & Barriers	Poor urban and commercial land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Development potential for Community Purposes zoned land between Crotona Road and Windemere Road. Crossings at Old Cleveland Road, Moreton Bay Road and Windemere Road.
Gaps & Pinch Points	Pinch point west of Anderson Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across at Old Cleveland Road, Moreton Bay Road and Windemere Road.

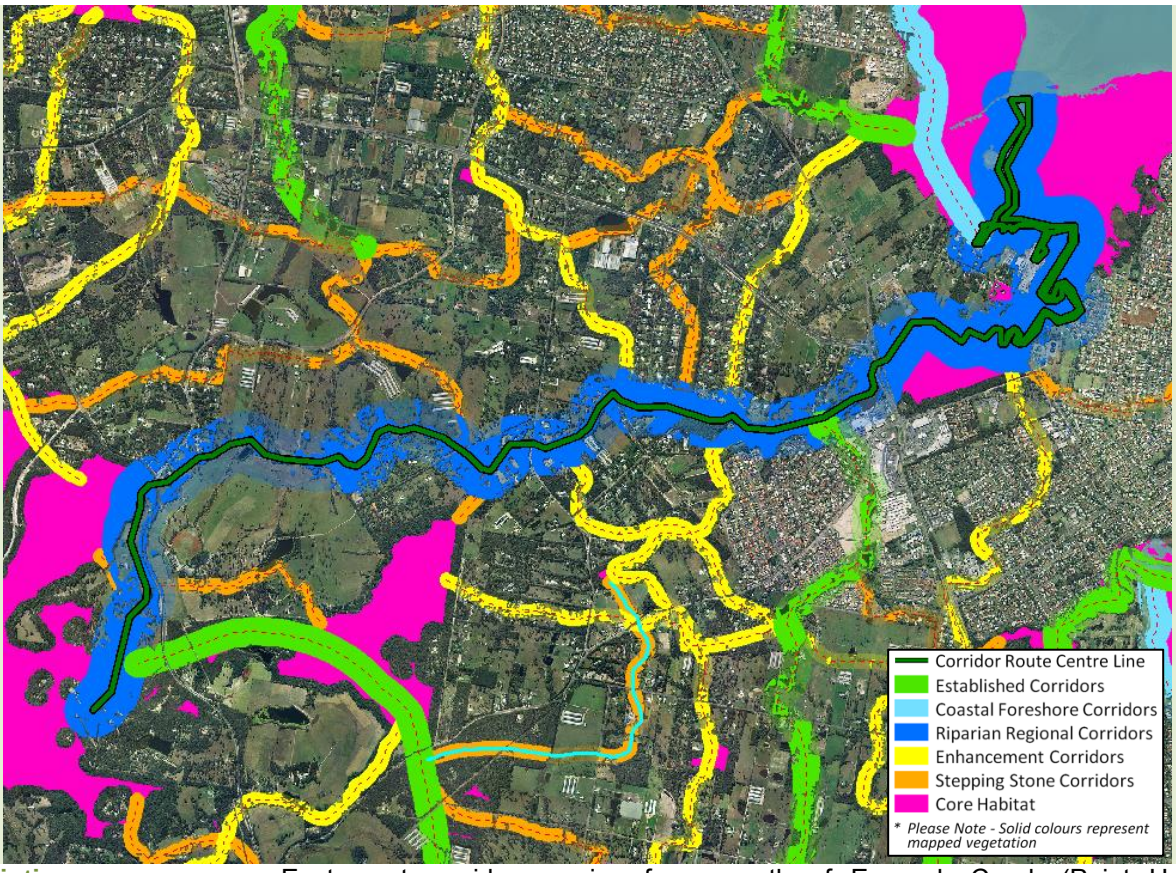
Appendix 5 – Regional Riparian Corridors (BPA)

Tingalpa Creek Riparian Corridor - Regional Corridor (BPA)



Description	North to south Tingalpa Creek corridor, linking Queens Esplanade Foreshore to Wallaby Creek Bushland Refuge, via Coolnwynpin Creek Corridor and Leslie Harrison Conservation Area.
Environmental Values	Linking mangrove closed forest/saltpan vegetation (12.1.3/12.1.2) of Queens Esplanade Foreshore to open spotted gum dominated forest complex (12.11.5k) of Wallaby Creek Bushland Refuge along Tingalpa Creek Catchment, via casuarina and mangroves open forest (12.1.1/12.1.2) of Coolnwynpin Creek Corridor and scribbly gum dominated open forest to woodland (12.9-10.4) of Leslie Harrison Conservation Area. Many koala records at each end of corridor. Many corridor and waterway dependent bird species recorded in along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~80 per cent of corridor length.
Core Habitat Linkages	Links ≈8 core habitat patches. Maximum distance between patches is ≈2100m.
Land Uses / Tenure	Urban Residential at northern end, Conservation and Environmental Protection at southern end. Southern half of trunk predominantly Conservation and Environmental Protection, with northern half primarily Open Space and Urban Residential. Eastern side of corridor boarded by primarily Urban Residential or Low Density Residential.
Community Use	Recreational uses in conservation reserves. Waterway recreation values. High value coastal recreation area.
Threats & Barriers	Poor urban and riparian land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, etc.). Barrier and road strike at Old Cleveland Road, Moreton Bay Road and Broadwater Road crossings. Sea level rise and/or flooding causing inundation of habitats.
Gaps & Pinch Points	Pinch points along corridor from Sam Sciacca Sports fields southwards to Killarney Crescent Park. Gaps and pinch points from end of Degen Road south to Broadwater Road (western side of Mount Cotton Road).
Priority Outcomes	Rehabilitation of pinch points along corridor from Sam Sciacca Sports fields southwards to Killarney Crescent Park, and gaps and pinch points from end of Degen Road south to Broadwater Road (western side of Mount Cotton Road). Assessment for road strike and safe fauna passages at Old Cleveland Road, Moreton Bay Road and Broadwater Road crossings.

Eprapah Creek Riparian Corridor - Regional Corridor (BPA)



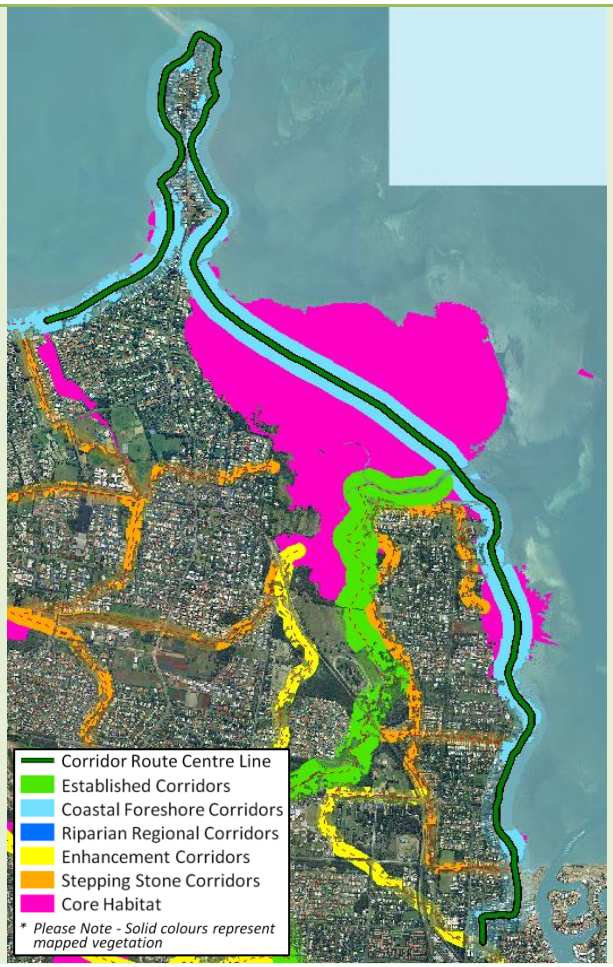
Description	East west corridor running from mouth of Eprapah Creek (Point Halloran Conservation Area) to the Eastern Escarpment Conservation Reserve (Mount Cotton Road).
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) at the mouth of Eprapah Creek to Spotted gum dominated forest (12.11.5a/12.11.5k) in the Mount Cotton area, via riparian vegetation (12.3.11 and 12.3.6). Multiple corridor and waterway dependent bird species recorded along corridor. Glossy Black-Cockatoo recorded mid-section of corridor. Scute-snouted Calyptotis recorded at mid-section of corridor. Aquatic species values throughout corridor. Numerous koala records along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~90 per cent of corridor length.
Core Habitat Linkages	Links 7 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Conservation reserves to east and west (Point Halloran Conservation Area and Eastern Escarpment Conservation Reserve) with predominately Rural land to the west and Urban Residential to the east. Trunk of corridor predominately council owned Conservation zoned land, surrounded by Low Density Residential and Urban Residential zoned land to the east and Rural zoned land to the west.
Community Use	Recreational uses in conservation reserves. Waterway recreation values. High value coastal recreation area.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Fauna barriers at Redland Bay Road, Springacre Road and Mount Cotton Road.
Gaps & Pinch Points	Pinch points to the east and west of Mount Cotton Road.
Priority Outcomes	Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Management of impacts from rural land areas (e.g. vegetation management, weed control). Rehabilitation of gaps south of Boundary Road. Safe fauna passage across Redland Bay Road, Springacre Road and Mount Cotton Road.

Appendix 6 – Coastal Foreshore Corridors

Sovereign Waters Foreshore to Mouth of Tingalpa Creek - Coastal Foreshore Corridor

Description	Foreshore corridor linking Sovereign Waters to mouth of Tingalpa Creek, via Beth Boyd Park, Queens Esplanade Foreshore, and Aquatic Paradise Park West and East.
Environmental Values	Linking coastal foreshore vegetation (12.1.2 saltpan and 12.1.3 mangrove). Seaward edge of corridor Ramsar listed. Extensive records of migratory shorebirds at foreshore and multiple records of waterway and some corridor dependent bird species recorded in along corridor. Numerous koala records along corridor, mainly at Beth Boyd Park. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~60 per cent of corridor length.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈450m.
Land Uses / Tenure	Trunk primarily comprised of Urban Residential, with some Open Space and Conservation zoned land at eastern end.
Community Use	Seaward edge of corridor Marine State Park. High recreational value of canal, foreshore walks.
Threats & Barriers	Poor coastal and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation or erosion of vegetation along foreshore and dunes.
Gaps & Pinch Points	Significant gap (≈500m) from Nora Street to Fisher Road. Significant gap (≈450m) from Commodore Drive to Dorsal Drive (across canal).
Priority Outcomes	Rehabilitation of vegetation across significant gaps from Nora Street to Fisher Road and Commodore Drive to Dorsal Drive (across canal). Management of coastal and urban area (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).

Wellington Point to Raby Bay – Coastal Foreshore Corridor

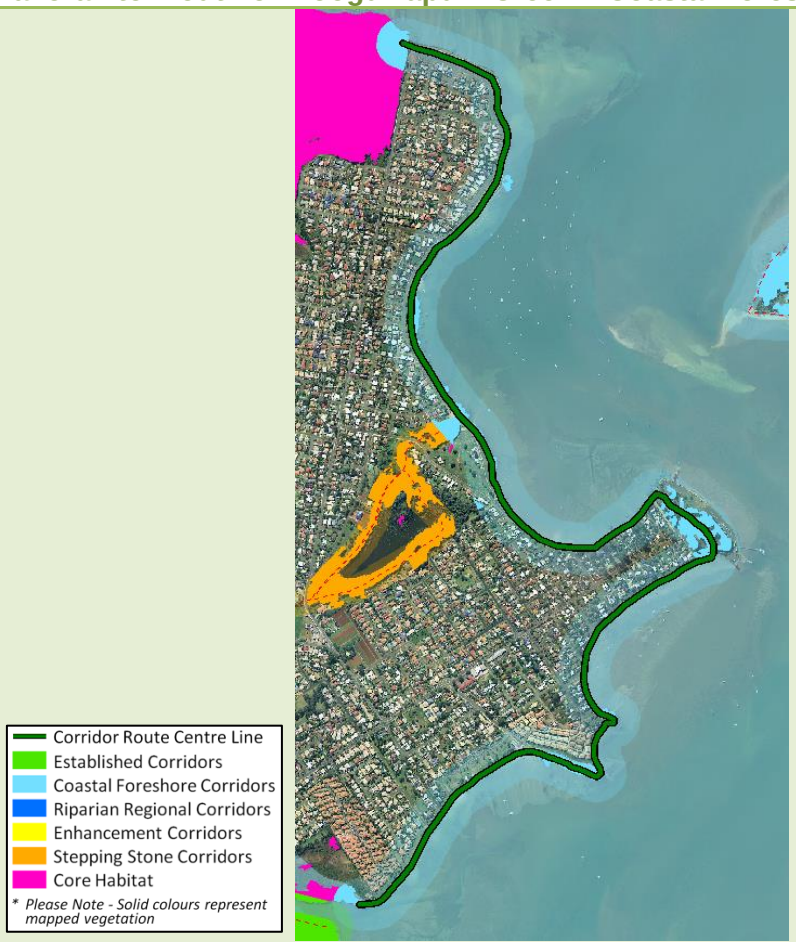


Description	Linking Sovereign Waters and Waterloo Bay Foreshores to Raby Esplanade Park, via Wellington Point Foreshore, Main Road Foreshore, Geoff Skinner Wetlands, Empire Point Foreshore.
Environmental Values	Linking coastal foreshore vegetation (12.1.2 saltpan and 12.1.3 mangrove). Some sections with adjacent bloodwood and blue gum open forest to woodland (12.5.2). Seaward edge of corridor Ramsar listed. Wader bird habitat throughout corridor. Multiple corridor dependent bird species recorded along corridor. Osprey nest pole towards northern tip of corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~80 per cent of corridor length.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Marine zone conservation zone bounded by urban development.
Community Use	Seaward edge of corridor Marine State Park. High value coastal recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats.
Gaps & Pinch Points	Gaps at northern tip of Wellington Point and at Raby Esplanade Park. Pinch points at eastern end of Sturgeon Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gap and pinch point at northern tip of Wellington Point and end of Sturgeon Street. Investigate options for protecting and extending saltpan and mangrove habitats to accommodate sea level rise.

Cleveland Point to Mouth of Eprapah Creek - Coastal Foreshore Corridor

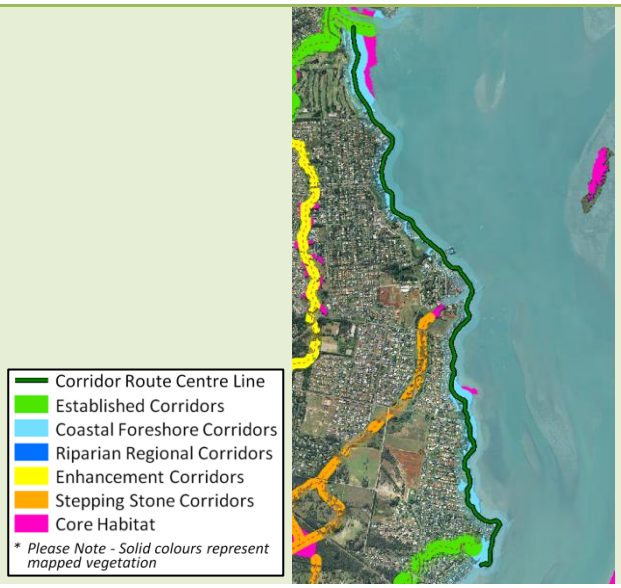
Description	North to south corridor linking Cleveland Point to mouth of Eprapah Creek, via Nandeebie Foreshore and Thornlands Foreshore.
Environmental Values	Linking coastal foreshore vegetation (12.1.2 saltpan and 12.1.3 mangrove). Multiple corridor and waterway dependent bird species recorded along north section of corridor. Wader bird habitat throughout corridor.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Marine zone bounded by Open Space and Urban Residential zoned land to the west.
Community Use	High value coastal recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats.
Gaps & Pinch Points	Gaps between Nandeebie Foreshore and Cleveland Point.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gaps between Nandeebie Foreshore and Cleveland Point.

Point O'Halloran to mouth of Moogurrapum Creek – Coastal Foreshore Corridor



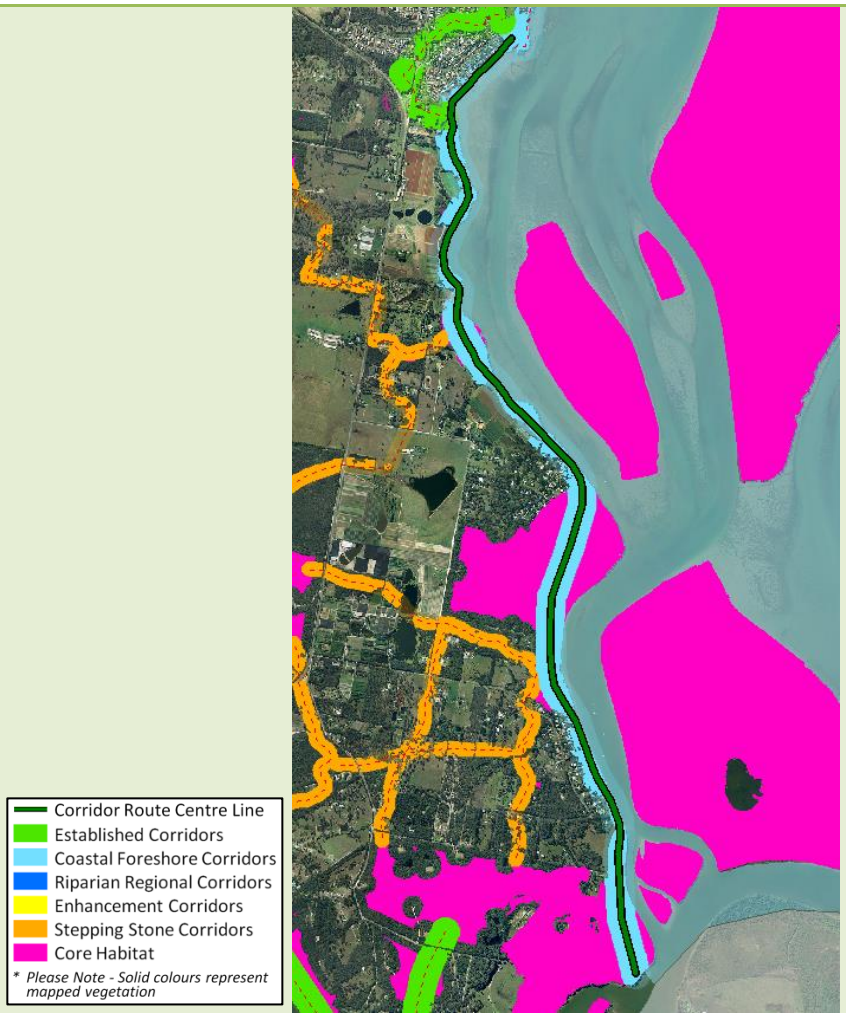
Description	North to south corridor linking Point O'Halloran to mouth of Moogurrapum Creek, via Orana Esplanade Foreshore park, Cupania Street Park, Rosebud Esplanade Park, Les Moore Park, Wilson Esplanade Foreshore, Victoria Point Recreation Reserve, Wilson Street Foreshore, Dr Noel Barber Park, Base Street Foreshore, W H Yeo Park, Salford Waters Park and Glen Road Wetlands.
Environmental Values	Linking saltpan vegetation/mangrove closed forest (12.1.2/12.1.3) of O'Halloran Conservation Area to mangrove closed forest (12.1.3) at the mouth of Moogurrapum Creek, via mangrove closed forest/paperbark open-forest to woodland (12.1.3/12.3.5) of Cupania Street Park; mangrove closed forest (12.1.3) of Rosebud Esplanade Park and Les Moore Park; and saltpan vegetation (12.1.2) of Base Street Foreshore. Multiple records of waterway and corridor dependent bird species in along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~5 per cent of corridor length.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈5750m.
Land Uses / Tenure	Almost entire western side of trunk across road zoned comprised of Urban Residential developments. Ends of trunk zoned as Conservation land, with trunk primarily open Space with Medium Density Residential development at Wilson Esplanade/Street Foreshore. Some of trunk Unzoned.
Community Use	High value coastal recreational and conservation areas. Popular viewpoint, foreshore walk and mooring area for locals.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation of saltpan and mangrove habitats.
Gaps & Pinch Points	Numerous pinch points and gaps in along parks and foreshore.
Priority Outcomes	Rehabilitation of vegetation at pinch points and gaps in along parks and foreshore.

Moogurrapum Creek to Point Talburpin – Coastal Foreshore Corridor



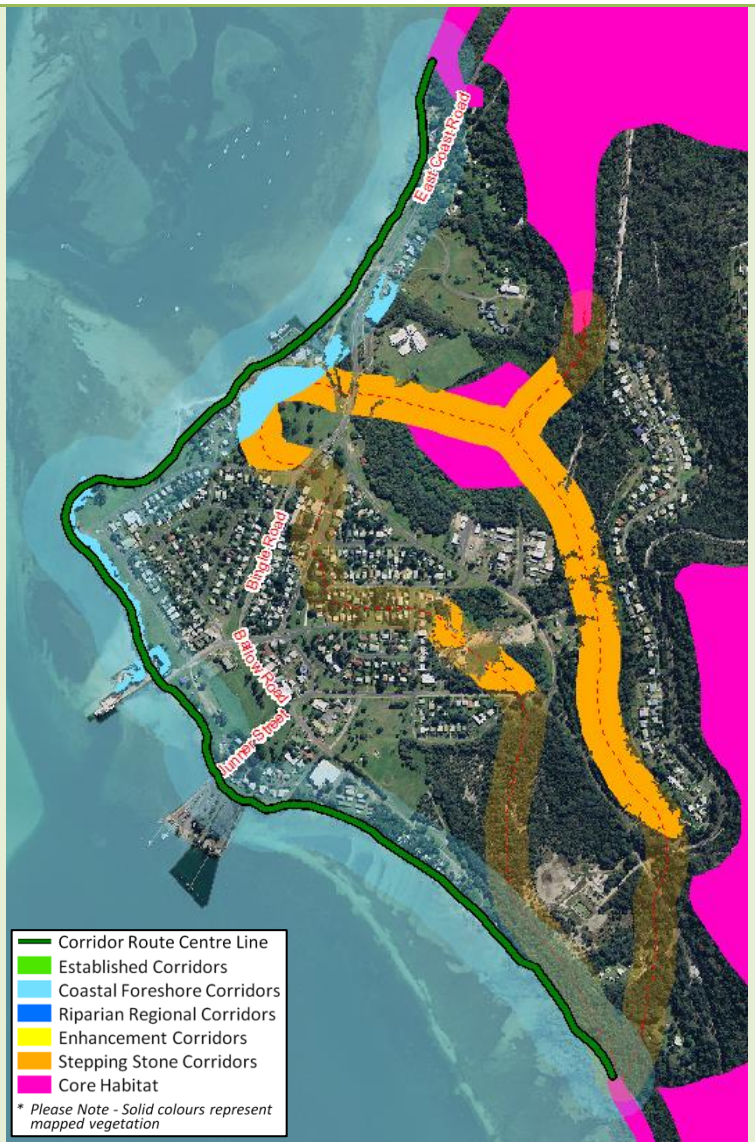
Description	Long coastal north to south corridor linking Moogurrapum Creek to Point Talburpin, via Jack Gordon Pathway (Esplanade), Sel Outridge Park, Nev Stafford Park, Weinam Creek Marine Commuter Facility, Toms Park, Rusters Reserve, Orchard Beach Foreshore (North and South), Wilson Park, Talburpin Esplanade Park, Tucker Reserve and Point Talburpin Park.
Environmental Values	Linking the saltpan vegetation (12.1.2) of Moogurrapum Creek to the mangrove closed forest (12.1.3) and paperbark riparian coastal vegetation/complex to simple notophyll vine forest (12.3.6/12.3.1) of Point Talburpin, via the bloodwood, blue gum grassy open forest to woodland/mangrove closed forest (12.5.2/12.1.3) of Jack Gordon Pathway and Rusters Reserve; mangrove closed forest (12.1.3) of Toms Park, Orchard Beach Foreshore (North), Tucker Reserve; bloodwood, blue gum grassy open forest to woodland/mangrove closed forest/saltpan vegetation (12.5.2/12.1.3/12.1.2) of Wilson Park and Orchard Beach Foreshore (South); bloodwood, blue gum grassy open forest to woodland (12.5.2) of Talburpin Esplanade Park; and paperbark riparian coastal vegetation/complex to simple notophyll vine forest (12.3.6/12.3.1) of Point Talburpin Park. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~30 per cent of corridor length.
Core Habitat Linkages	Links ≈12 core habitat patches. Maximum distance between patches is ≈750m.
Land Uses / Tenure	Adjacent land predominantly Urban Residential zoned development. Trunk of corridor primarily zoned as Open Space, with Orchard Beach Foreshore (North) part zoned as Conservation land. Trunk also comprises Marine Activity use at Weinam Creek Marine Commuter Facility.
Community Use	High value coastal, urban park recreation and commuter area. Foreshore and park walkway.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Impacts from poor management of mangrove and saltmarsh/saltpan. Sea level rise causing inundation of saltpan and mangrove habitats. Boat ramps and access tracks to bay through mangrove and saltpan vegetation. Barriers at Weinam Creek Marine Commuter Facility.
Gaps & Pinch Points	Pinch points along Esplanade (south of North Street), Sel Outridge Park, Nev Stafford Park, Rusters Reserve, Tucker Reserve and eastern side of Point Talburpin Park. Gap for terrestrial species across Weinam Creek Marine Commuter Facility.
Priority Outcomes	Rehabilitation of coastal pinch points along Esplanade (south of North Street), Sel Outridge Park, Nev Stafford Park, Rusters Reserve, Tucker Reserve and eastern side of Point Talburpin Park. Rehabilitation of terrestrial gap at Weinam Creek Marine Commuter Facility. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Point Talburpin to Logan River Mouth – Coastal Foreshore Corridor



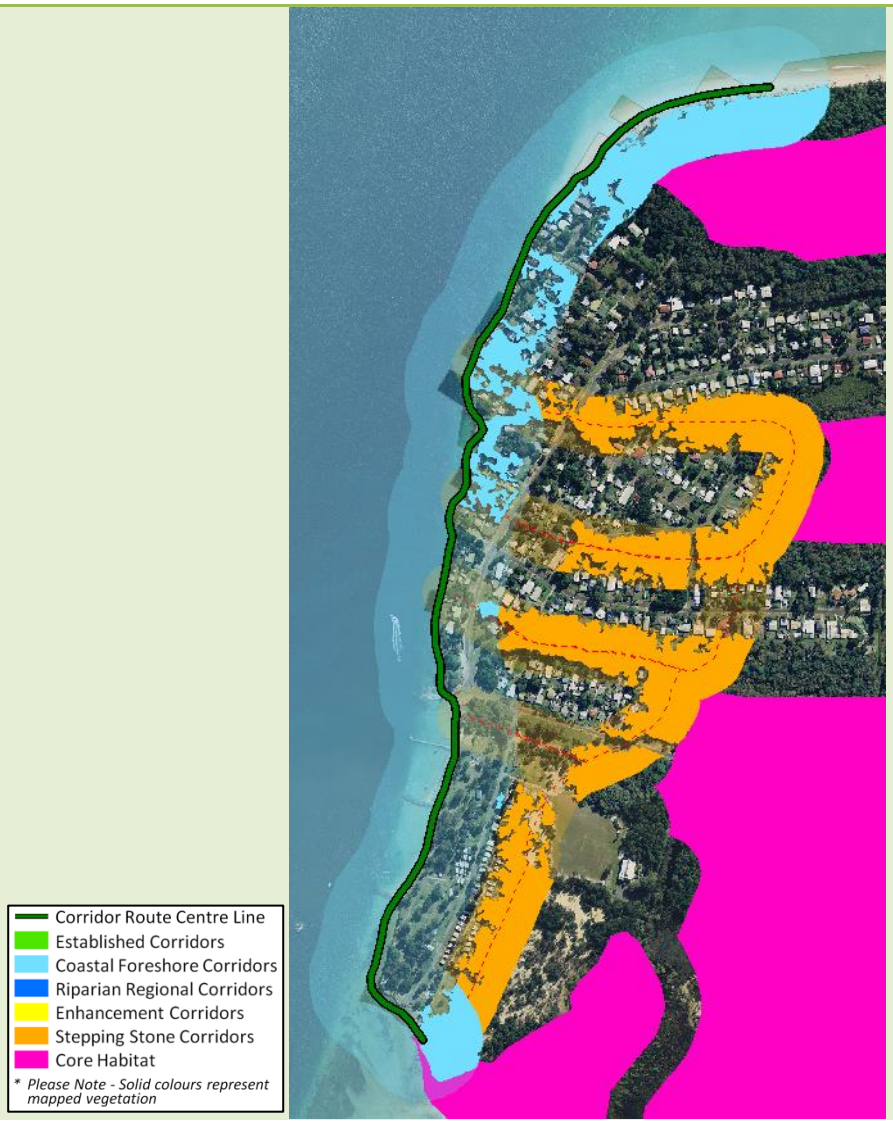
Description	North to south corridor linking Point Talburpin Park to mouth of Logan River, via coastal foreshore.
Environmental Values	Linking coastal foreshore vegetation (12.1.2 saltpan and 12.1.3 mangrove). Coastal riparian vegetation in Redland Bay area (12.3.6). Flying-fox roost at Junee Street wetlands. Wader bird habitat along coastal foreshore/intertidal zone. Areas of koala habitat. Multiple corridor dependent bird species recorded at north end of corridor.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Urban residential areas around Point Talburpin, Pear Street (end of Scenic Road) and Muriel Street. Large investigation area off northern section of Serpentine Creek Road. Remaining sections of corridor adjoin Environmental Protection, Conservation and Rural zoned land.
Community Use	High value coastal recreation area.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Urban development in Investigation area (Shoreline development). Sea level rise causing inundation of saltpan and mangrove habitats. Multiple access tracks to bay through mangrove and saltpan vegetation.
Gaps & Pinch Points	Pinch points along Waterfront Easement, east of Rusbrook Street and south of Seabrae Drive.
Priority Outcomes	Rehabilitation of pinch points along Waterfront Easement, east of Rusbrook Street and south of Seabrae Drive. Management of access tracks through mangrove and saltpan vegetation. Provide input for planning of proposed development.

Dunwich – North Stradbroke Island – Coastal Foreshore Corridor



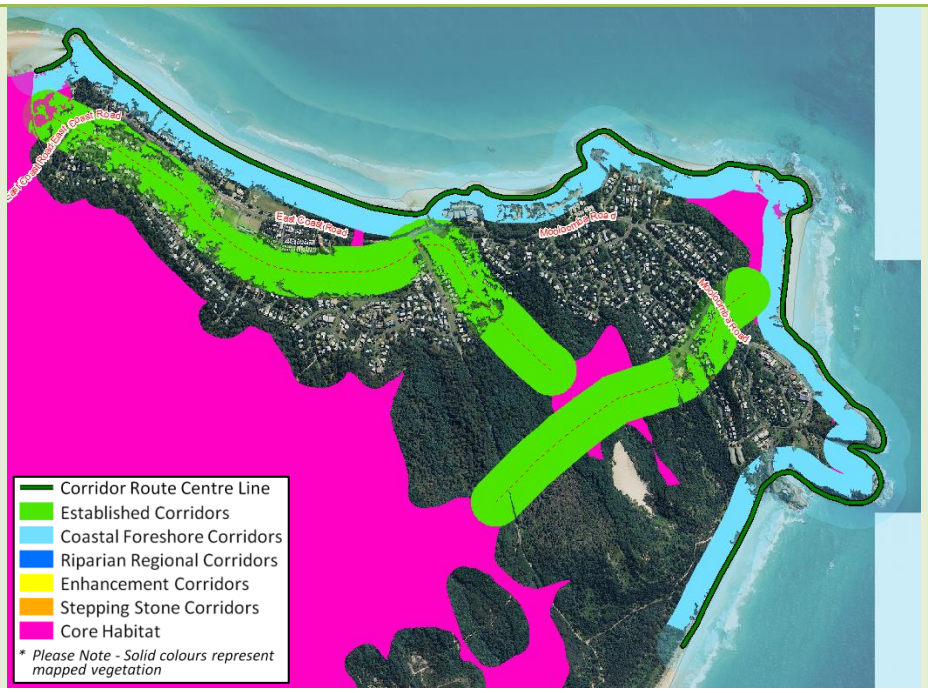
Description	North to south corridor linking Myora Scenic Flora Reserve with West Coast Foreshore-North, via Polka Point.
Environmental Values	Linking the mangrove closed forest (12.1.3) of Myora Scenic Flora Reserve and West Coast Foreshore-North, via the scribbly gum woodland (12.5.3) in township area. Seaward edge of corridor Ramsar listed. Multiple corridor and waterway dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈3500m.
Land Uses / Tenure	Seaward edge of corridor State Marine Park. Foreshore area predominately Open Space zoned land, boarded by Urban Residential zoned land. Crosses some Marine Activity zoned areas.
Community Use	High value coastal urban recreational area.
Threats & Barriers	Poor coastal and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation and erosion of saltpan and mangrove habitats.
Gaps & Pinch Points	Gaps at three Marine Activity zoned areas, adjacent to Flinders Avenue.
Priority Outcomes	Management of impacts from coastal and urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gap adjacent to Flinders Avenue.

Amity Point – North Stradbroke Island – Coastal Foreshore Corridor



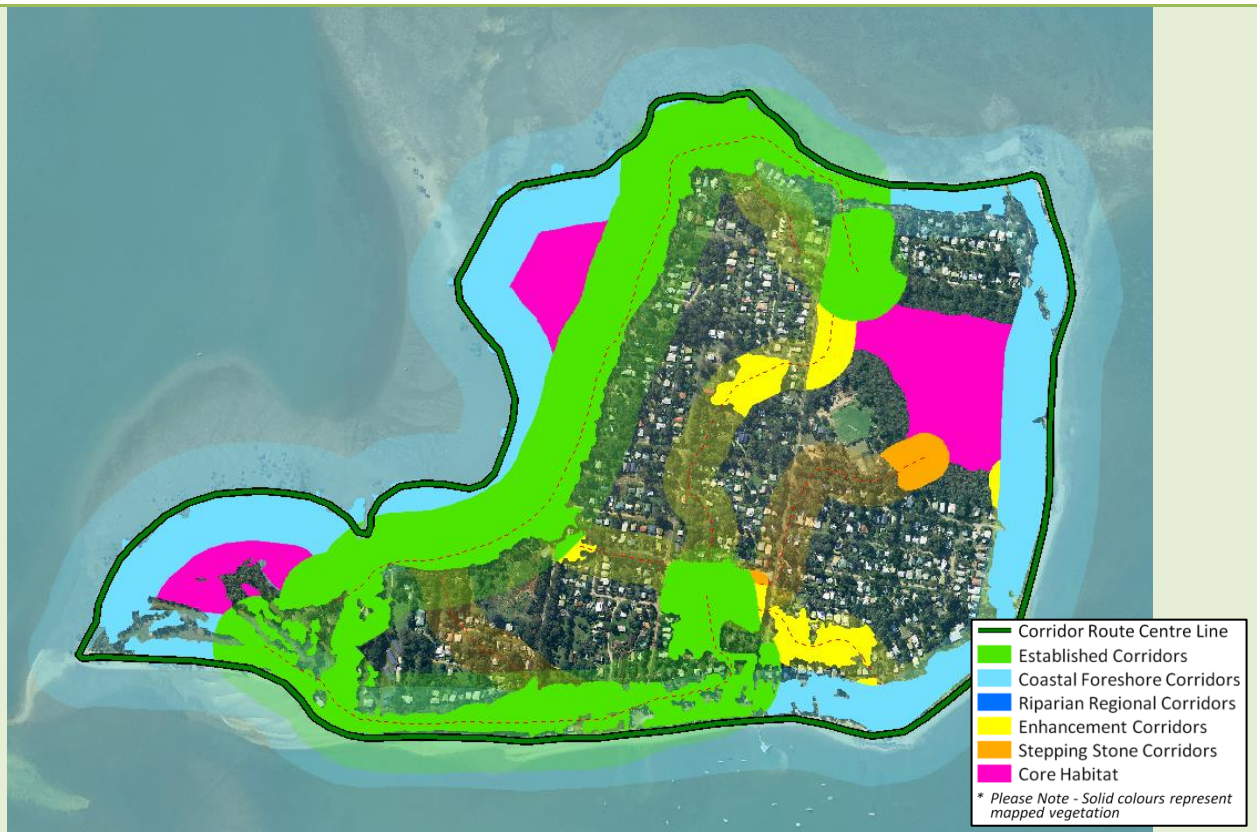
Description	North to south corridor linking Ballow Street Foreshore to West Stradbroke Foreshore-North, via Old Schoolhouse Park, Cabarita Park, Amity Point Picnic Park and Amity Point recreation Reserve.
Environmental Values	Linking open forest on coastal dunes (12.2.5) of Ballow Street Foreshore to the mangrove closed forest (12.1.3) of Amity Point Picnic reserve, via patches of paperbark open forest on sand (12.2.7) regrowth. Seaward edge of corridor Ramsar listed. Wader bird habitat.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Seaward edge of corridor State Marine Park. Foreshore area predominately Urban Residential and Open Space zoned land.
Community Use	Seaward edge of corridor Marine State Park. High value coastal urban recreational area.
Threats & Barriers	Poor coastal and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation and erosion of saltpan and mangrove habitats.
Gaps & Pinch Points	Gaps along north section of corridor (Millers Lane to Claytons Road) where Urban Residential zoned land adjoins marine zone.
Priority Outcomes	Management of impacts from coastal and urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gaps along north section of corridor (Millers Lane to Claytons Road) where Urban Residential zoned land adjoins marine zone.

Point Lookout – North Stradbroke Island – Coastal Foreshore Corridor



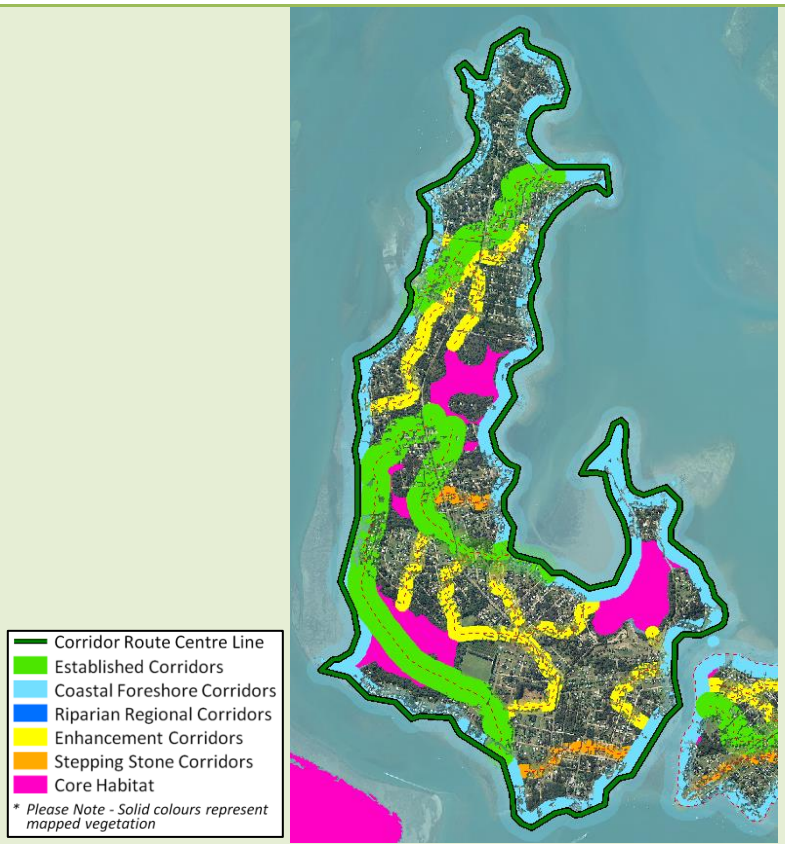
Description	East to west corridor linking Main Beach to Adder Rock, via Gorge Walk Foreshore, Frenchmans Bay Foreshore, Deadmans Beach Foreshore, Cylinder Headland Foreshore, Cylinder Beach Foreshore and Home Beach Foreshore.
Environmental Values	Linking the open-forest to low closed forest (12.2.5) of George Nothling Drive Conservation Area and spinifex grassland and casuarina woodland/open forest complex (12.2.14) of Main Beach to the coastal sedgeland (12.2.15) of Adder Rock; via the exposed kangaroo grass and wind-sheared shrubland and woodland rocky headland complex (12.12.19) comprising the Gorge Walk Foreshore, Deadmans Beach Foreshore, Cylinder Headland Foreshore; the microphyll/notophyll vine forest (12.2.2) of Frenchmans Bay Foreshore; and the strand and fore dune spinifex grassland and casuarina woodland/open forest complex (12.2.14) of the Cylinder Beach Foreshore. Seaward edge of corridor Ramsar listed. Extensive records of corridor dependent bird species recorded along corridor. Records of Tinkling Froglet near corridor at Cylinder Beach Foreshore and amongst Point Lookout Conservation Area immediately south-east of Deadmans Beach Foreshore. Record of Gould's Goanna and White-crowned Snake near corridor at Frenchmans Bay Foreshore.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1300m.
Land Uses / Tenure	Seaward edge of corridor State Marine Park. Entire trunk of corridor Conservation zoned land with relatively small patch of Open Space. Corridor adjoins zones including Point Lookout Centre, Point Lookout Tourist, Point Lookout Residential and Community Purposes.
Community Use	Seaward edge of corridor Marine State Park. High value coastal and bushland reserve recreation and tourism area. Camp ground.
Threats & Barriers	Poor coastal and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation or erosion of vegetation along foreshore and dunes. Potential disturbance from 4WDs on beach. Potential road strike at Kennedy Drive crossing, near Main Beach Foreshore (North).
Gaps & Pinch Points	No significant gaps or pinch points.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Coochiemudlo Island – Coastal Foreshore Corridor



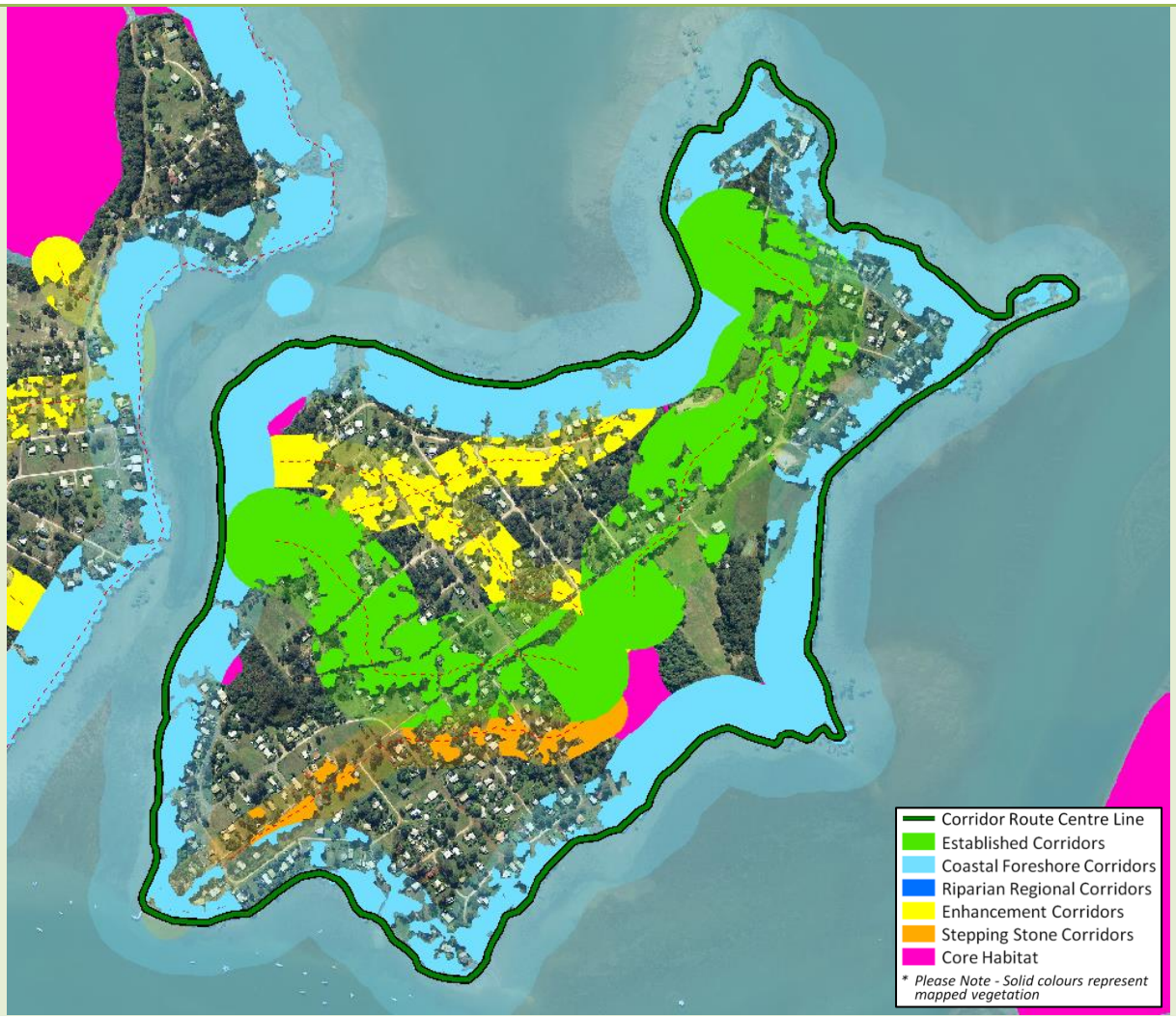
Description	Foreshore corridor linking entire coastline of Coochiemudlo Island, via Flinders Foreshore, Melaleuca Wetlands, Norfolk Beach Foreshore, Coochiemudlo Foreshore (West and East), Doug & Mary Morton Reserve and Doug & Mary Morton Foreshore.
Environmental Values	Linking mangrove closed forest (12.1.3) of Doug & Mary Morton Foreshore to mangrove closed forest (12.1.3) and bloodwood, blue gum grassy open forest to woodland (12.5.2) of Flinders Foreshore; to scribbly gum woodland (12.5.3) of Melaleuca Wetlands; to scribbly gum woodland/open-forest to low closed forest (12.5.3/12.2.5) of Norfolk Beach Foreshore and Coochiemudlo Foreshore (West and East); back to 12.1.3 of Doug & Mary Morton Foreshore. Seaward edge of corridor Ramsar listed. Multiple records of corridor dependent bird species throughout island. Brahminy Kite nest at Doug & Mary Morton Foreshore and White-bellied Sea Eagle and Brahminy Kite nests towards south-east corner of island. Flying fox roosts towards centre (George Street) and south (Tageruba Street) of island.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈1100m.
Land Uses / Tenure	Entire trunk of corridor zoned as Conservation land with some Open Space between Coochiemudlo Foreshore West and East.
Community Use	Seaward edge of corridor Marine State Park. High value for recreational use of island foreshore walk.
Threats & Barriers	Poor coastal, urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation or erosion of saltpan and mangrove habitats and vegetation along foreshore.
Gaps & Pinch Points	Potential pinch point along Victoria Parade South.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of potential pinch point along Victoria Parade South.

Macleay Island – Coastal Foreshore Corridor



Description	Foreshore corridor linking entire coastline of Macleay Island, via Pats Park, Cow Bay Conservation Foreshore, Koonwarra Parade Foreshore Park, Blue Vista Foreshore, Waterside Drive Foreshore, Macleay Island Commuter Facility, Thomas Street Wetlands, Paul Carter Wetlands and Attunga Street Foreshore.
Environmental Values	Almost entire coastline comprised primarily of mangrove closed forest (12.1.3) adjoined to dominating inner bloodwood, blue gum grassy open forest to woodland (12.5.2) with patches of scribbly gum woodland (12.5.2). Lesser isolated area of open-forest to low closed forest (12.2.5) at mid-to-upper west coast, just south of Coast Road Foreshore. Seaward edge of corridor Ramsar listed. Extensive records of Glossy Black-cockatoos landward side of corridor. Osprey nest centre of island. Three flying fox roosts through island (Balaka Street; Lake Street; Gordon Road – Golf Club).
Core Habitat Linkages	Links ≈40 core habitat patches. Maximum distance between patches is ≈900m.
Land Uses / Tenure	Mix of Conservation and SMBI Residential zoned land, primarily the latter with some Open Space and SMBI Centre (Macleay Island Commuter Facility).
Community Use	Seaward edge of corridor Marine State Park. High value recreational use of many parks, walkways and reserves.
Threats & Barriers	Poor coastal, urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation or erosion of saltpan and mangrove habitats and vegetation along foreshore. Potential barrier at Macleay Island Commuter Facility.
Gaps & Pinch Points	Pinch points from northern end of Coorong Street to eastern end of Wirralee Street. Pinches points from western end of Wharf Street to western end of Orana Street.
Priority Outcomes	Management of impacts from urban, peri urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points from northern end of Coorong Street to eastern end of Wirralee Street and from western end of Wharf Street to western end of Orana Street.

Lamb Island – Coastal Foreshore Corridor

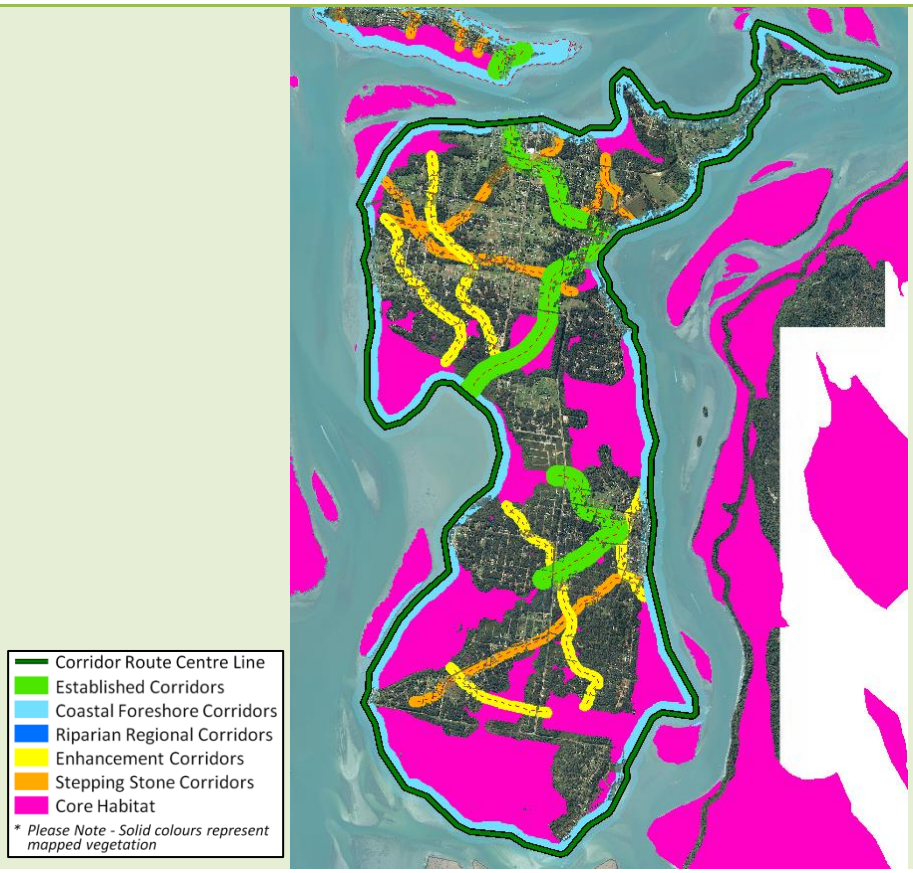


Description	Foreshore corridor linking entire coastline of Lamb Island, via Clarkes Point Foreshore, Tina Avenue Foreshore Park, Harry Brook Bushland Refuge and Perulpa Drive Foreshore.
Environmental Values	Almost entire coastline comprised of mangrove closed forest (12.1.3) adjoined to inner bloodwood, blue gum grassy open forest to woodland/paperbark open-forest to woodland (12.5.2/12.3.5). Seaward edge of corridor Ramsar listed. Multiple records of corridor dependent bird species recorded along corridor and inland.
Core Habitat Linkages	Links ≈11 core habitat patches. Maximum distance between patches is ≈300m.
Land Uses / Tenure	Eastern seaward edge of corridor State Marine Park. Trunk primarily SMBI Residential with some Rural Non Urban, Open Space, SMBI Centre and Conservation zoned land.
Community Use	Seaward edge of corridor State Marine Park. High value recreational use of coastal walkways, foreshores, parks, refuges and reserves.
Threats & Barriers	Poor coastal and peri-urban land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Sea level rise causing inundation or erosion of saltpan and mangrove habitats and vegetation along foreshore.
Gaps & Pinch Points	Pinch point from Basil Court westwards to end of Melaleuca Drive.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point from basil Court westwards to end of Melaleuca Drive.

Karragarra Island – Coastal Foreshore Corridor

Description	Foreshore corridor linking entire coastline of Karragarra Island, including Karragarrah Island Foreshore North and South.
Environmental Values	Almost entire coastline comprised of mangrove closed forest (12.1.3), with inner area of southern corridor comprising saltpan vegetation/mangrove closed forest (12.1.2/12.1.3). Approximately half of island comprised of core habitat, with much of southern half under high tide mark. Majority of seaward edge of corridor Ramsar listed.
Core Habitat Linkages	Links ≈10 core habitat patches. Maximum distance between patches is ≈250m.
Land Uses / Tenure	Trunk primarily Open Space with some Conservation zoned land. Eastern seaward edge of corridor Marine State Park.
Community Use	Seaward edge of corridor State Marine Park. High value recreational use of foreshore.
Threats & Barriers	Poor coastal and peri-urban land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Sea level rise causing inundation or erosion of saltpan and mangrove habitats and vegetation along foreshore.
Gaps & Pinch Points	Pinch point at from north-west end of island (along Karragarra Island Foreshore – North). Pinch point from northern end of Maryanne Street to northern end of Sunset Strip.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points from north-west end of island (along Karragarra Island Foreshore – North) and from northern end of Maryanne Street to northern end of Sunset Strip.

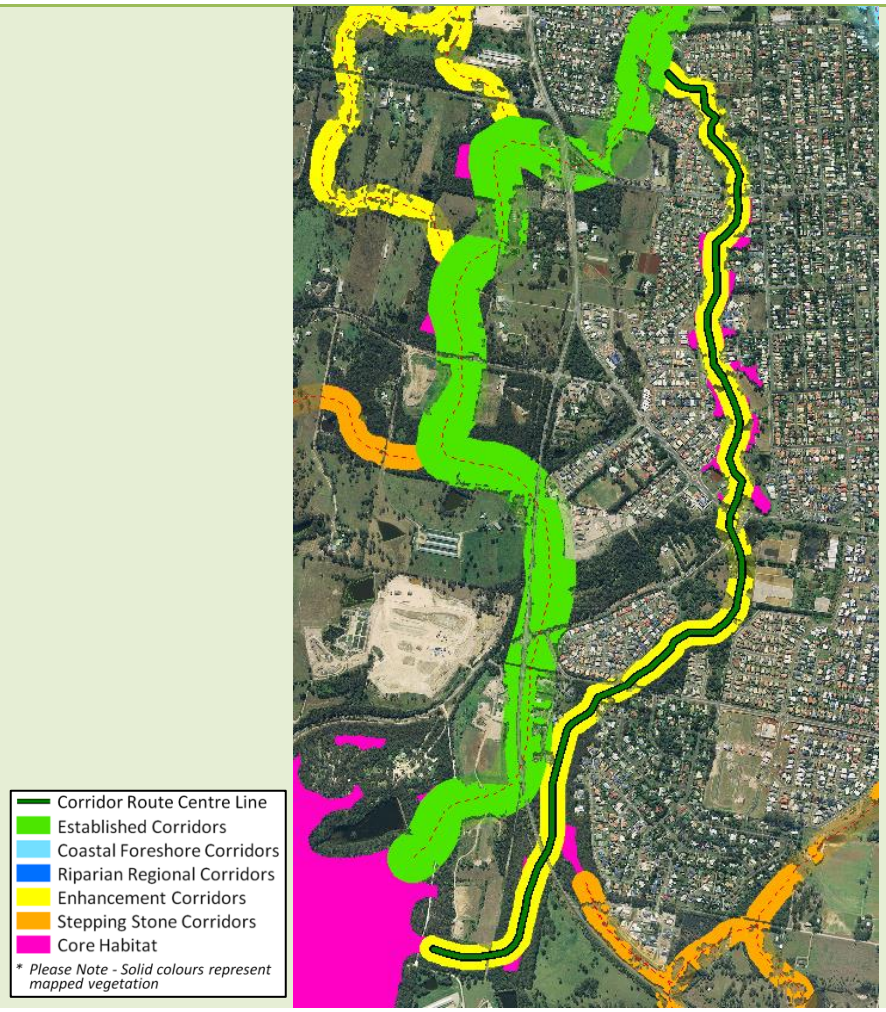
Russell Island – Coastal Foreshore Corridor



Description	Foreshore corridor linking entire coastline of Russell Island, via Turtle Swamp Wetlands, Melomys Wetland and Whistling Kite Wetlands.
Environmental Values	Almost entire coastline comprised of mangrove closed forest (12.1.3) adjoined to inner bloodwood, blue gum grassy open forest to woodland/paperbark open-forest to woodland (12.5.2/12.3.5) and/or closed or wet heathland (12.3.13). Western half of seaward edge Ramsar listed. Many corridor dependent bird species recorded in along corridor. Many records of Glossy Black-cockatoos. Flying fox roost (Oxford Road) adjacent to central northern part of corridor, through Bayview Road Urban Habitat to Whistling Kite Wetland corridor.
Core Habitat Linkages	Links ≈15 core habitat patches. Maximum distance between patches is ≈800m.
Land Uses / Tenure	Mix of SMBI Residential and Conservation zoned land, primarily latter with some SMBI Centre in north.
Community Use	Seaward edge of entire eastern half zoned Marine State Park. High value recreational use of conservation area and community hall and commuter facility in north.
Threats & Barriers	Poor coastal, urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Sea level rise causing inundation or erosion of saltpan and mangrove habitats and vegetation along foreshore.
Gaps & Pinch Points	Gaps from Bayview Road to northern end of High Street. Gap (≈650m) from northern end of Hill Street to Player Court. Gap (≈320m) from eastern end of Canaipa Point Drive to western end of Browning Street. Gap (≈1000m) from eastern end of Emerson Street westwards along coast to Oasis Drive. Gap (≈600m) along seaward edge of Wahine Drive. Pinch-gap (≈450m) western end of Channel Street northwards to west end of Jackson Road.
Priority Outcomes	Management of impacts from urban and coastal area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points and gaps as above.

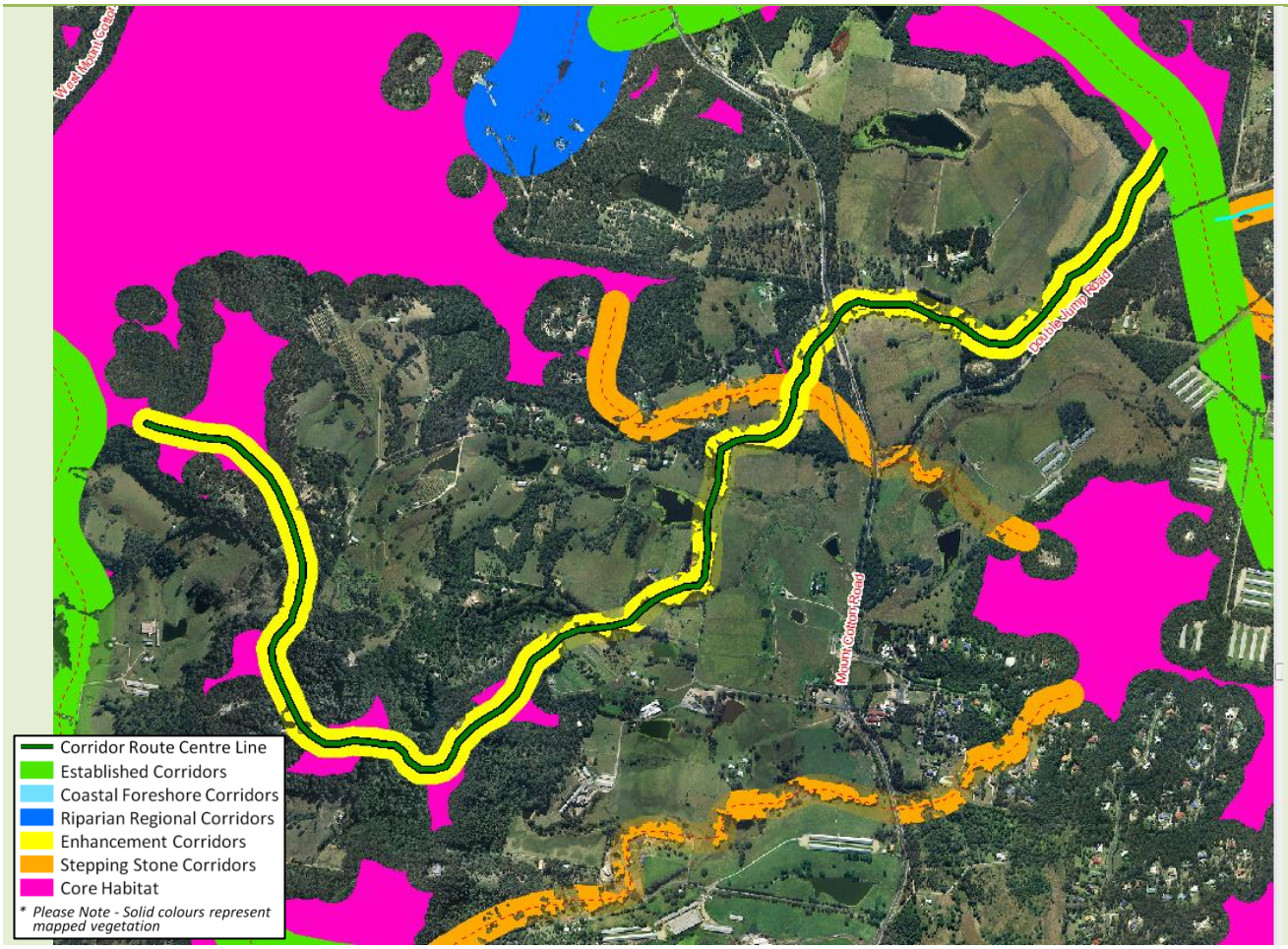
Appendix 7 – Priority Enhancement Corridors

Upper Moogurrapum Creek Corridor - Enhancement Corridor



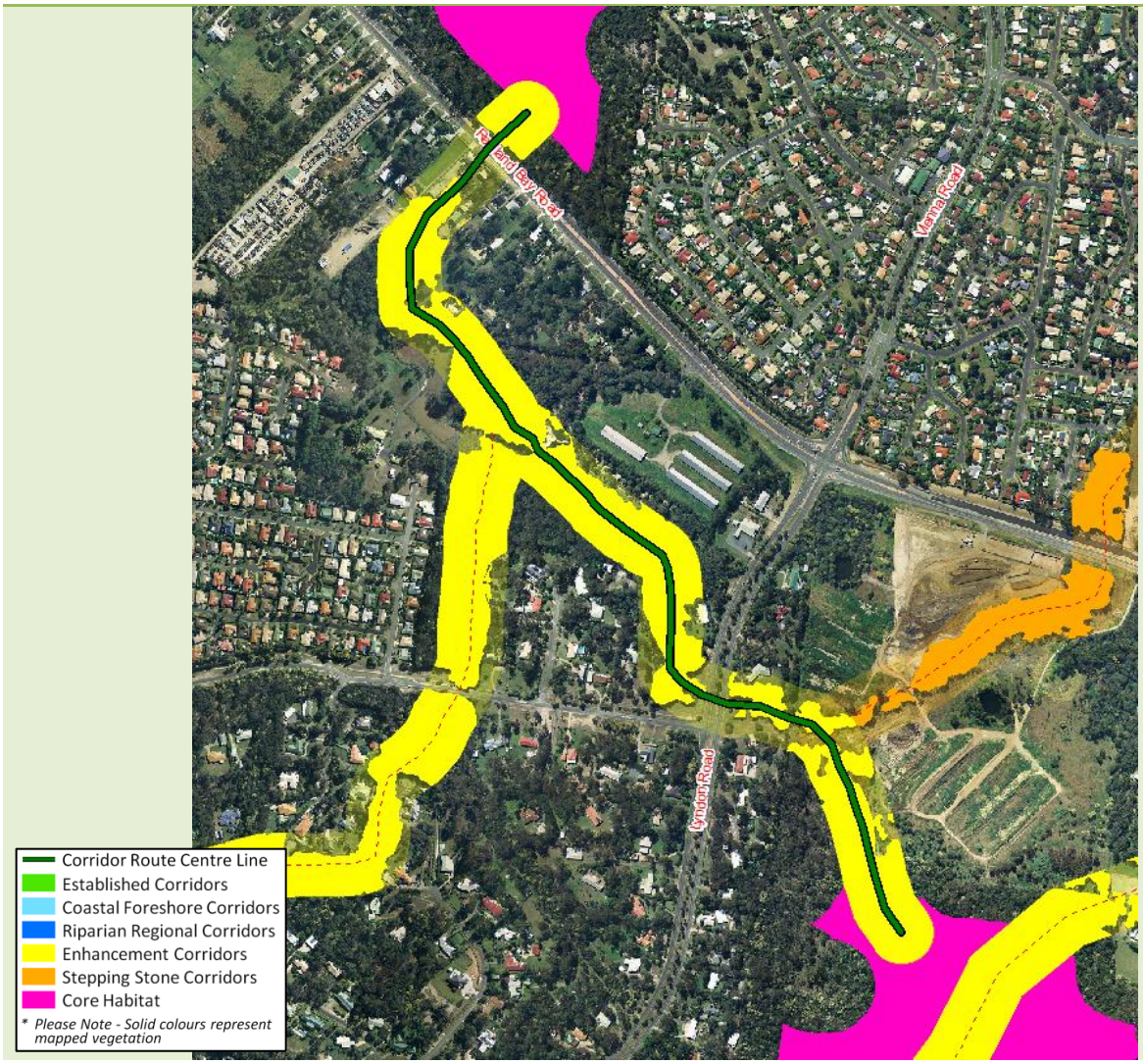
Description	Linking Moogurrapum Creek Corridor from Pinelands Circuit to Days Road Conservation Area.
Environmental Values	Linking paperbark riparian vegetation (12.3.6) of Moogurrapum Creek Corridor to blackbutt open forest (12.11.23) and spotted gum open forest (12.11.5j) of Days Road Conservation Area. Aquatic species values in upper Moogurrapum Creek. Numerous koala records along entire corridor. Multiple corridor and waterway dependent bird species recorded at south end of corridor (including Glossy Black-Cockatoo). Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~90 per cent of corridor length.
Core Habitat Linkages	Links ≈6 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Council owned Conservation and Open Space zoned land bounded by Urban Residential zoned development.
Community Use	Recreational waterway and reserve values
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Boundary Street, Government, School of Arts, German Church and Redland Bay Roads.
Gaps & Pinch Points	Pinch points north of Boundary Street, south of German Church Road.
Priority Outcomes	Safe fauna passage across Boundary Street, Government, School of Arts, German Church and Redland Bay Roads. Management of impacts from urban and peri urban reas (e.g. garden escapee weeds, domestic animal control, etc). Rehabilitation of landfill site.

Eastern Escarpment Conservation Area to Sandy Creek Conservation Area – Enhancement Corridor



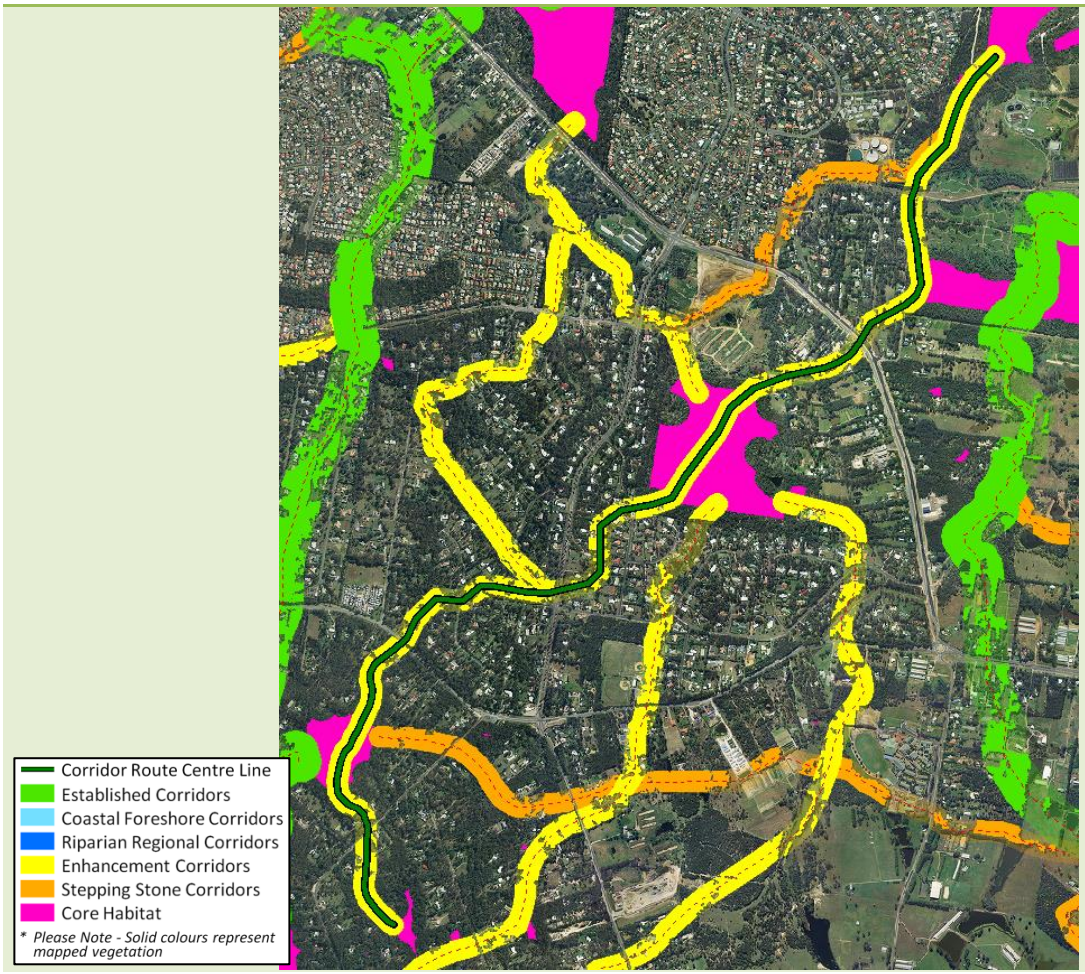
Description	Linking Eastern Escarpment Conservation Area to Sandy Creek Conservation Area.
Environmental Values	Linking spotted gum core habitat (12.11.5a and 12.11.5k) with some tracts of open grey iron bark and grey gum forest (12.11.3). Multiple corridor dependent bird species recorded in wester section of corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~30 per cent of corridor length.
Core Habitat Linkages	Links ≈8 core habitat patches. Maximum distance between patches is ≈1300m.
Land Uses / Tenure	Trunk of corridor is Conservation zoned freehold land surrounded by Rural zoned land.
Community Use	Recreational use of conservation areas.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Serpentine Creek Road. Mount Cotton Road.
Gaps & Pinch Points	Pinch point between Krause Road and Seaview Road.
Priority Outcomes	Safe fauna passage across Mount Cotton Road. Management of impacts from rural land areas (e.g. vegetation management, weed control). Rehabilitation of pinch point between Krause Road and Seaview Road (to create core habitat patch and reduce ≈1300m gap distance between patches).

Greater Glider Conservation Area to Swamp Box Conservation Area - Enhancement Corridor



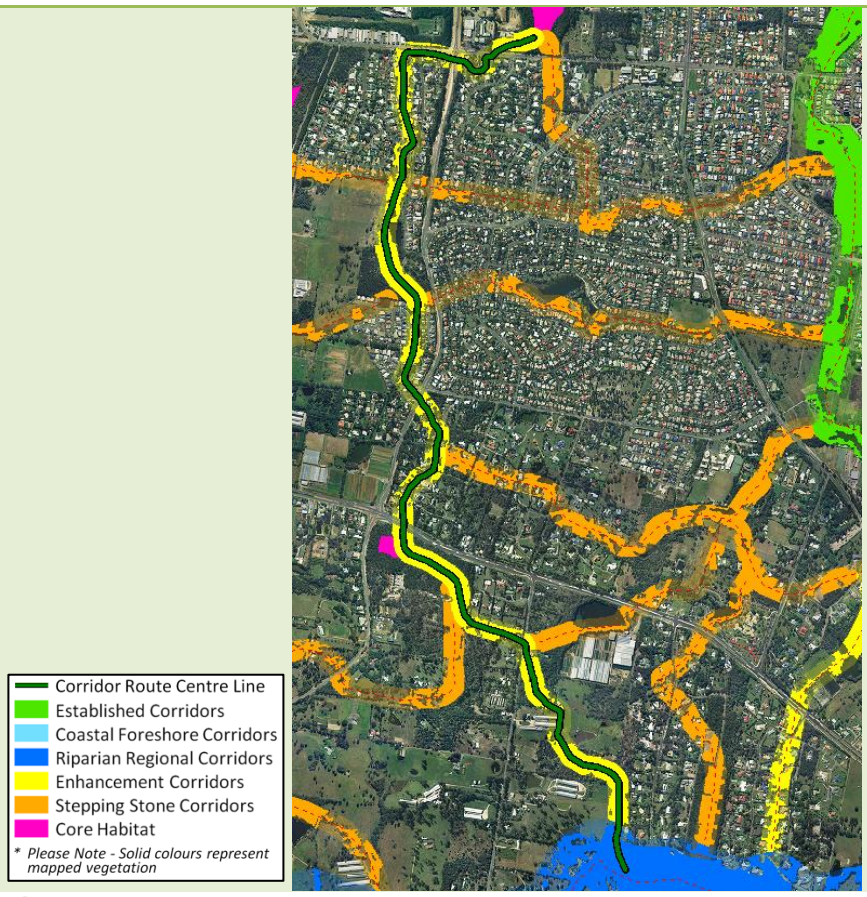
Description	North to south corridor linking Greater Glider Conservation Area to Swamp Box Conservation Area, via Redlands IndigiScapes Centre and Lyndon Road Park.
Environmental Values	Linking the scribbly gum dominated open forest to woodland (12.9-10.4) of Greater Glider and Swamp Box Conservation Reserves, via Scribbly gum woodland (12.5.3) and riparian vegetation (12.3.6). Multiple corridor and waterway dependent bird species recorded along north section of corridor. Wallum sedge (Olongburra) Frog recorded in north or corridor.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈900m.
Land Uses / Tenure	Trunk of corridor predominately Council owned Conservation zoned land bounded by Urban Residential and Park Residential zoned land. Rural zoned land opposite Greater Glider Conservation Area.
Community Use	Recreational values of reserves. Tourist Information Centre (IndigiScapes).
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Redland Bay and Lyndon Road crossings.
Gaps & Pinch Points	Pinch points immediately south-west of Redland Bay Road, and immediately east and west of Lyndon Road.
Priority Outcomes	Safe fauna passage across Redland Bay and Lyndon Road. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points immediately south-west of Redland Bay Road, and immediately east and west of Lyndon Road.

Scribbly Gum Conservation Reserve to Henderson Road Bushland - Enhancement Corridor



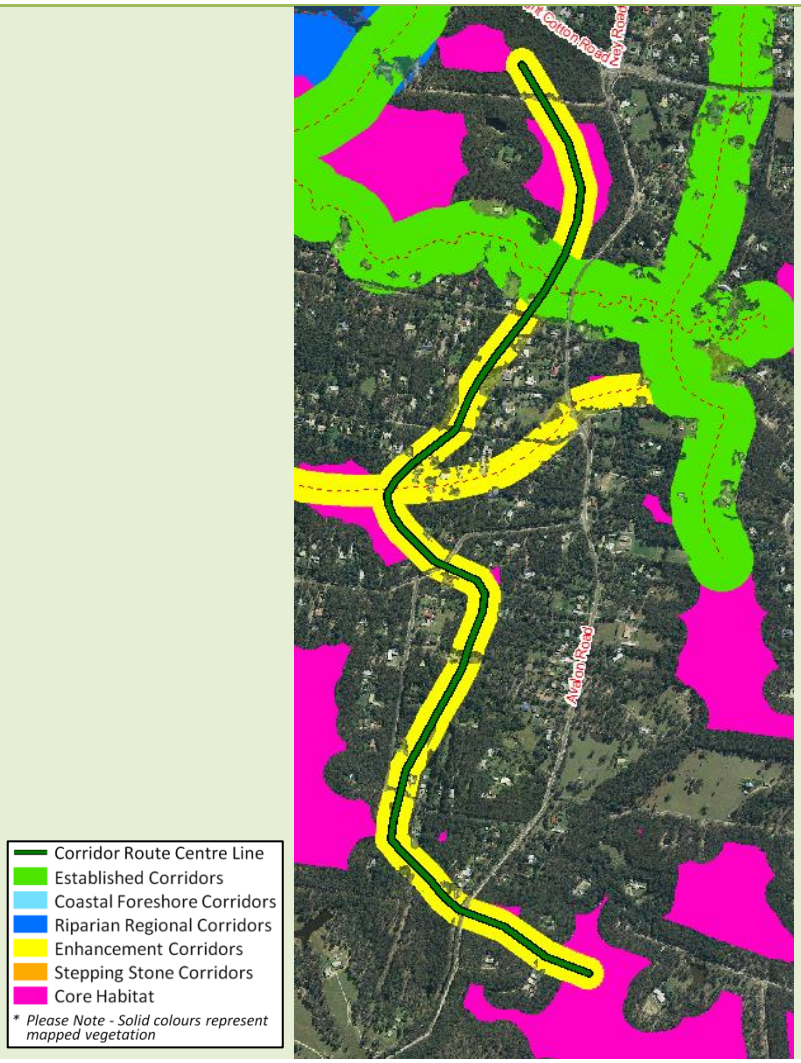
Description	Linking Scribbly Gum Conservation Reserve to freehold bushland on Henderson Road, via Weippin Street Conservation Area and Swamp Box Conservation Area.
Environmental Values	Linking the scribbly gum dominated open forest to woodland (12.9-10.4) of the Scribbly Gum Conservation Reserve, Weippin Street Conservation Area and Swamp Box Conservation Area, to open spotted gum dominated forests (12.11.5a and 12.11.5k) of the freehold land along Henderson Road. Glossy Black-cockatoo recorded in north section of corridor. Numerous koala records along corridor.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1600m.
Land Uses / Tenure	Patches of Council bushland reserves zoned Conservation, interspaced with freehold land zoned Park Residential, Rural and Environmental Protection.
Community Use	Recreational values of reserves.
Threats & Barriers	Major road crossing at Mount Cotton Road, Lyndon Road, and Redland Bay Road. Many local road crossings. Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).
Gaps & Pinch Points	Pinch points immediately either side of Redland Bay Road and to the east of Lyndon Road.
Priority Outcomes	Safe fauna passage across Mount Cotton Road, Lyndon Road, and Redland Bay Road. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points immediately either side of Redland Bay Road and to the east of Lyndon Road (to create core habitat patch and reduce ≈1600m gap distance between patches).

South Street Conservation Area to Eprapah Creek Corridor (Luke Street) - Enhancement Corridor



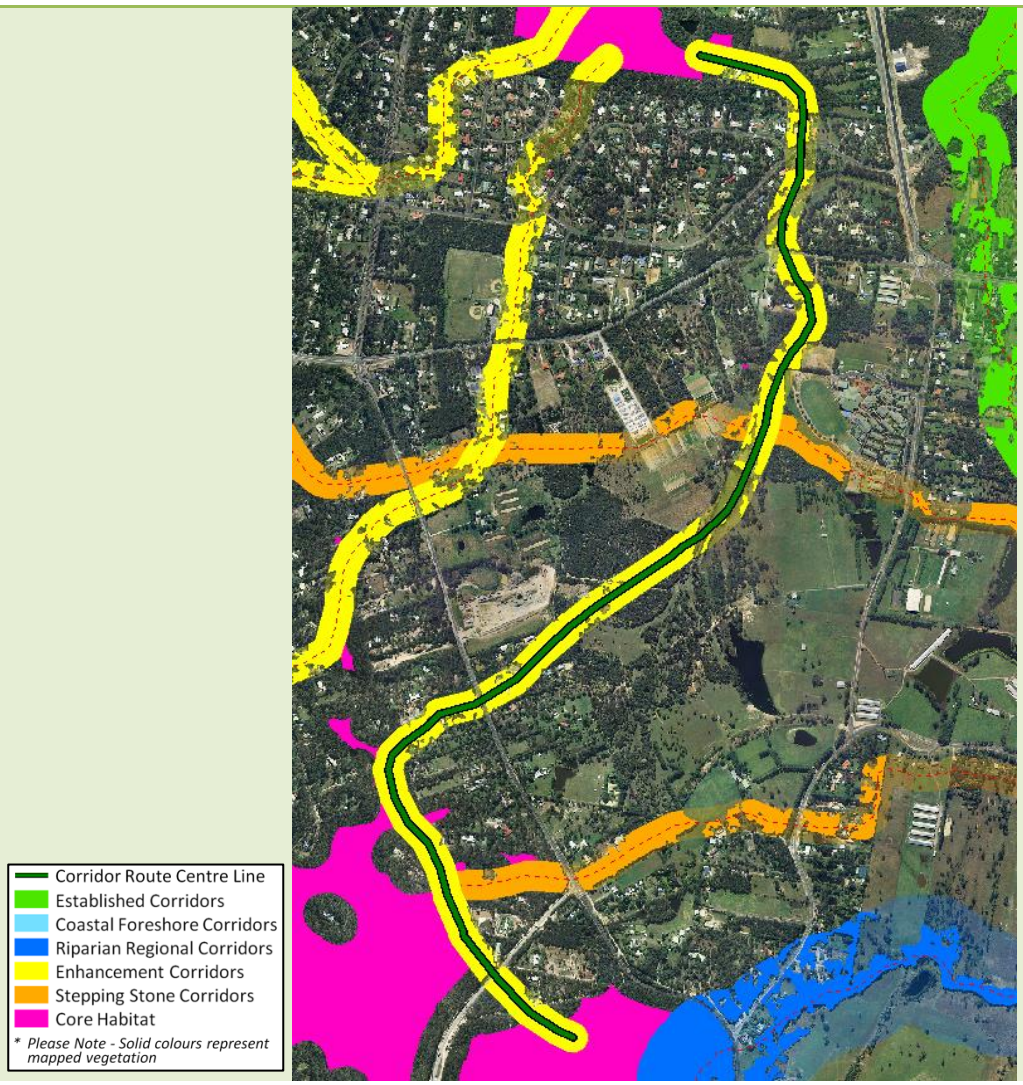
Description	North to south corridor linking South Street Conservation Area to Eprapah Creek Corridor - Luke St, via Lorikeet Drive Nature Belt and Rushwood Creek Corridor.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of South Street Conservation Area to riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11), via paperbark riparian vegetation (12.3.6) adjacent to Panorama Drive. Multiple corridor and waterway dependent bird species recorded along corridor. Glossy Black-cockatoo recorded in north and south section of corridor. Links to High Ecological Values waters under State Environmental Protection (Water) Policy 2009 at southern end.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈2600m.
Land Uses / Tenure	North section of corridor is Conservation zoned Council bushland reserves, surrounded by Low Density Residential and Urban Residential zoned land. South section of corridor runs through freehold Park Residential, Rural and Environmental Protection zoned land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban, peri-urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Main road crossings (Boundary Road and Panorama Drive). Many local road crossings.
Gaps & Pinch Points	Pinch Points immediately east and west of Wellington Street, north and south of Carlingford Drive and between Willett Court and Yasmin Court.
Priority Outcomes	Safe fauna passage across Boundary Road and Panorama Drive. Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points immediately east and west of Wellington Street, north and south of Carlingford Drive and between Willett Court and Yasmin Court (to create core habitat patch and reduce ≈2600m gap distance between patches).

Wallaby Creek to Avalon Road Corridor - Enhancement Corridor



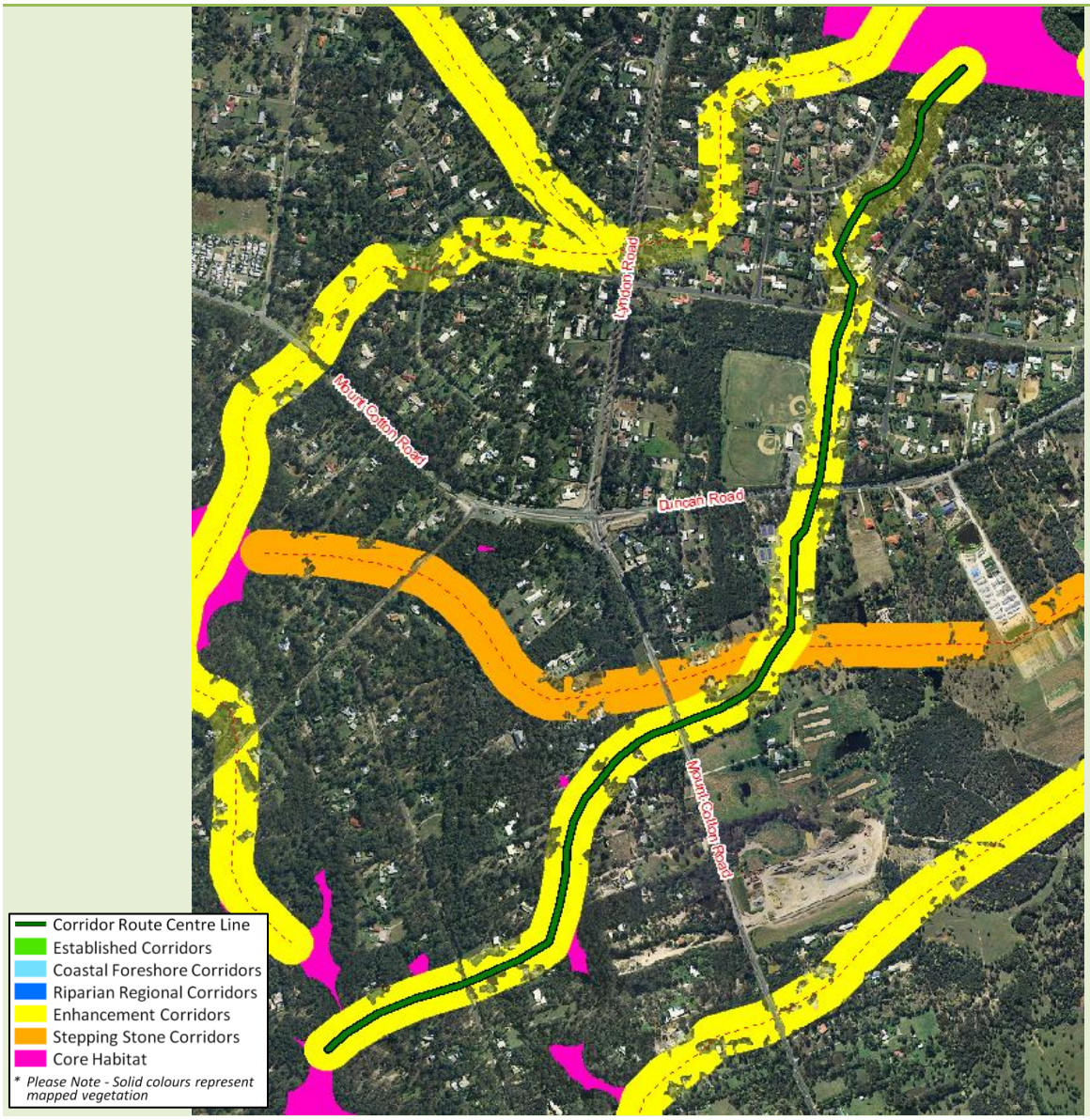
Description	North to south corridor linking Wallaby Creek Corridor to Avalon Road bushland, via Emu Street Bushland Refuge.
Environmental Values	Linking the open spotted gum forests (12.11.5a and 12.115k) of Wallaby Creek area to open spotted gum forests (12.11.5a) east of Avalon Road, via riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) east of Kiwi Street.
Core Habitat Linkages	Links ≈9 core habitat patches. Maximum distance between patches is ≈850m.
Land Uses / Tenure	Predominately freehold land zoned and Environmental Protection and Conservation.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings at Avalon Road (and other local road crossings).
Gaps & Pinch Points	No significant pinch points less than 100m wide. No significant gaps greater than 106m.
Priority Outcomes	Safe fauna passage across Avalon Road. Management of impacts from poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).

Swamp Box Conservation Area to Eastern Escarpment Conservation Area - Enhancement Corridor



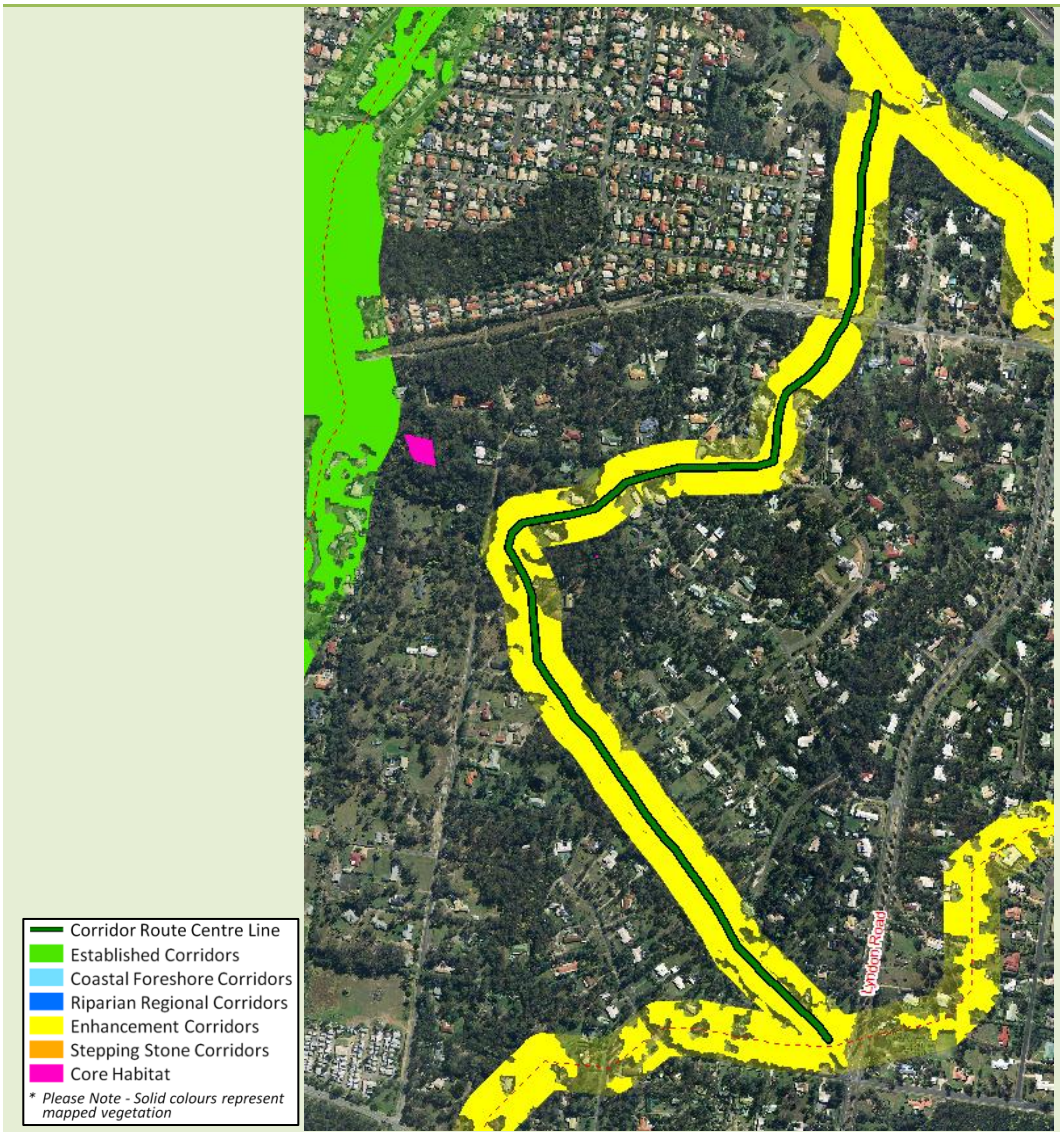
Description	North to south corridor linking Swamp Box Conservation Area to Eastern Escarpment Conservation Area.
Environmental Values	Linking the scribbly gum dominated open forest to woodland (12.9-10.4) in Swamp Box Conservation Area to the open spotted gum forests (12.11.5a and 12.11.5k) of the Eastern Escarpment Conservation Area. Multiple corridor dependent bird species recorded at south section of corridor.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Predominately freehold land zoned Park Residential, Environmental Protection, Rural Non-Urban and Conservation.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Main road crossings on Duncan, Mount Cotton and West Mount Cotton Roads.
Gaps & Pinch Points	Pinch points west of Mount Cotton Road and north and south of Parkwood Drive.
Priority Outcomes	Safe fauna passage across Duncan, Mount Cotton and West Mount Cotton Roads. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points west of Mount Cotton Road and north and south of Parkwood Drive (to create core habitat patch and reduce ≈2000m gap distance between patches).

Swamp Box Conservation Area to Henderson Road - Enhancement Corridor



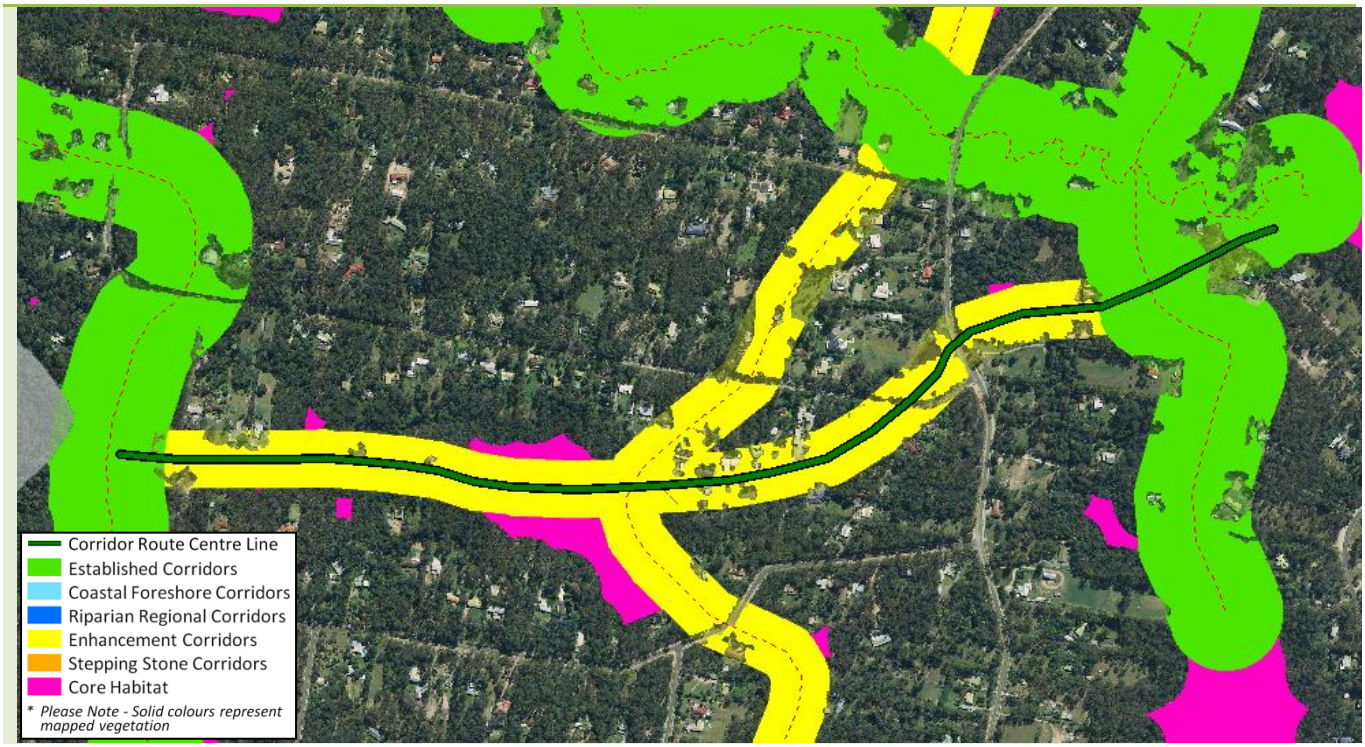
Description	North to south corridor linking Swamp Box Conservation Area to bushland at end of Henderson Road, via Mahogany Street Bushland Refuge.
Environmental Values	Linking the scribbly gum dominated open forest to woodland (12.9-10.4) in Swamp Box Conservation Area to the open spotted gum forests (12.11.5a and 12. 115k) of the bushland at end of Henderson Road.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1850m.
Land Uses / Tenure	Predominately freehold land zoned Park Residential and Environmental Protection.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Main road crossings on Duncan and Mount Cotton Roads.
Gaps & Pinch Points	Pinch points between Duncan and Mount Cotton Roads.
Priority Outcomes	Safe fauna passage across Duncan and Mount Cotton Roads. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points between Duncan and Mount Cotton Roads (to create core habitat patch and reduce ≈1850m gap distance between patches).

IndigiScapes Centre to Firtree Street Bushland Refuge - Enhancement Corridor



Description	North to south corridor linking the bushland at the Redlands IndigiScapes Centre with the Firtree Street Bushland Refuge, via Mahogany Street Bushland Refuge.
Environmental Values	Linking the scribbly gum woodland (12.5.3) in the IndigiScapes reserve to the paperbark riparian vegetation (12.3.6) of the Firtree Street Bushland Refuge, via scribbly gum dominated open forest to woodland (12.9-10.4).
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1800m.
Land Uses / Tenure	Trunk of corridor predominately Conservation and opens Space zoned land surrounded by Park Residential zoned land.
Community Use	Recreational values of reserves and IndigiScapes Centre.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Road crossing at Korawal Street.
Gaps & Pinch Points	Pinch point between Elton Crescent and Kurrajong Street.
Priority Outcomes	Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point Elton Crescent and Kurrajong Street (to create core habitat patch and reduce ≈1800m gap distance between patches). Safe fauna passage across Korawal Street.

Henderson Road to Pioneer Street Nature Belt - Enhancement Corridor

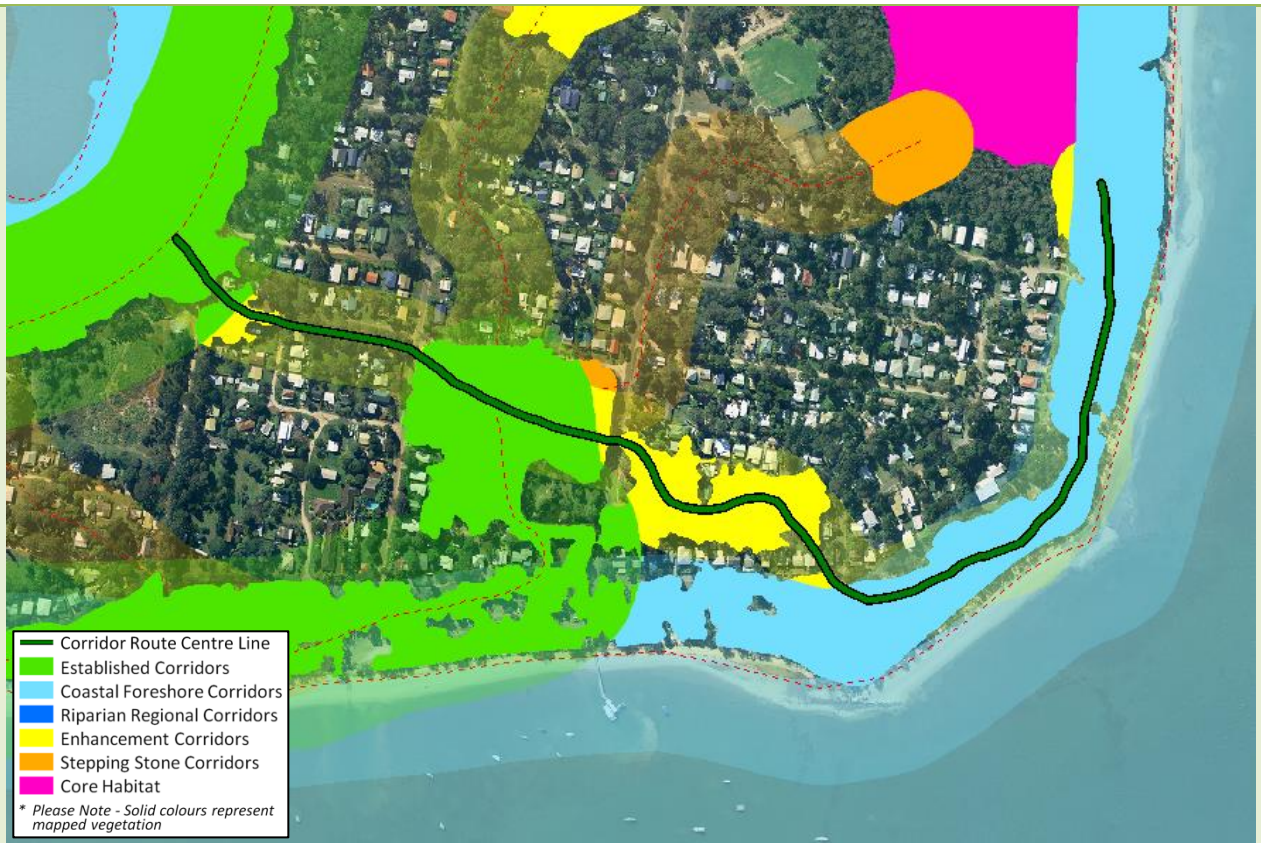


Description	East to west corridor linking Henderson Road to Pioneer Street Nature Belt.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5k/12.11.5a) of Henderson Road to open spotted gum dominated forest complex/riparian open-forest woodland of blue gum, iron bark, bloodwood (12.11.5k/12.3.11/12.11.5a).
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Primarily zoned as Environmental Protection, with some Conservation zoned land at each end.
Community Use	No identified community use.
Threats & Barriers	Potential road strike and barrier at Avalon Road. Poor peri-urban and urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points south of eastern end of Pioneer Road; at Avalon Road/Pioneer Road crossing; east of Avalon Road/Pioneer Road crossing; and at eastern end of corridor.
Priority Outcomes	Safe fauna passage and assessment for road strike across Avalon Road and potentially Pioneer Road. Rehabilitation of pinch points south of eastern end of Pioneer Road; at Avalon Road/Pioneer Road crossing; east of Avalon Road/Pioneer Road crossing; and at eastern end of corridor. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Coolnwynpin Nature Refuge to Tingalpa Reservoir - Enhancement Corridor

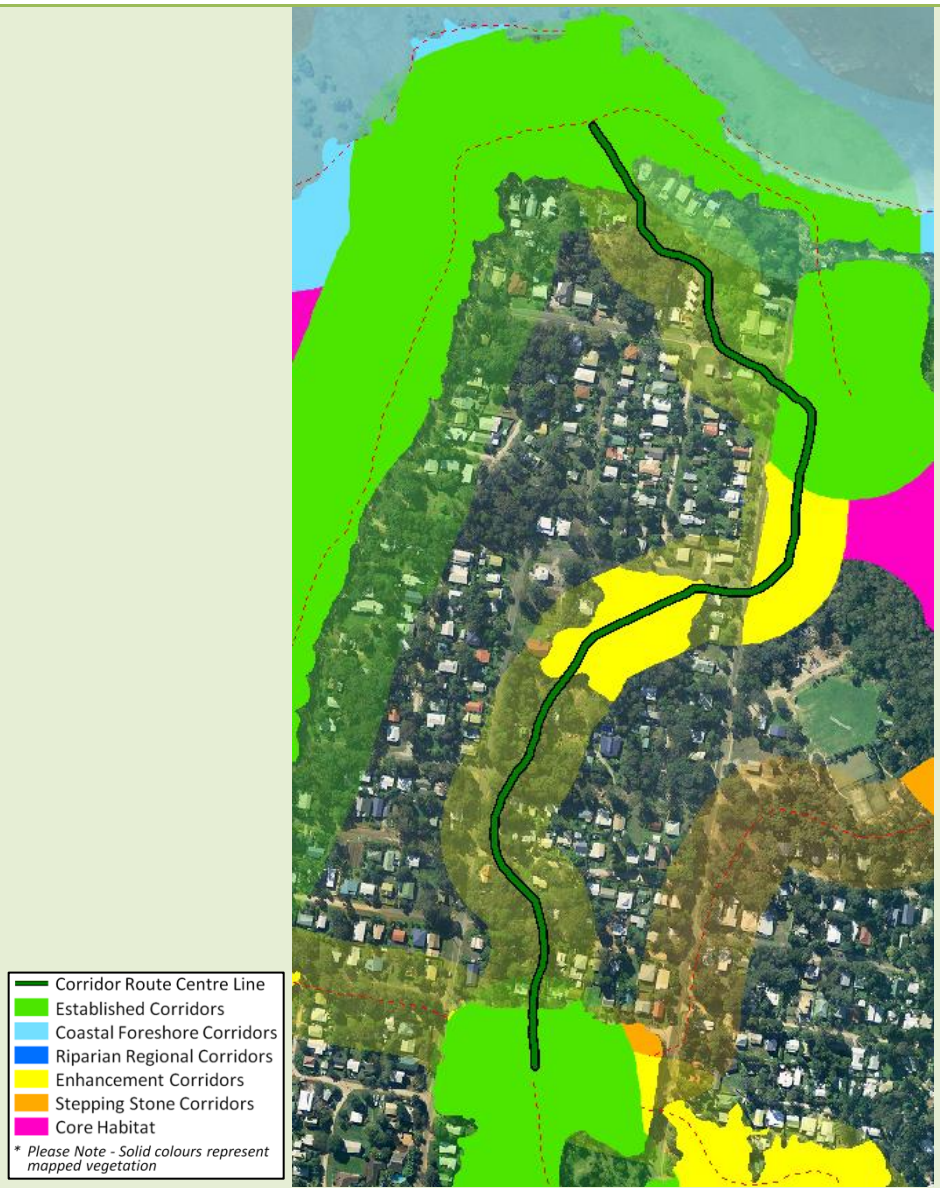
Description	East to west corridor linking Coolnwynpin Nature Refuge to Tingalpa Reservoir, via Korawal Street Nature Belt and Koala Place Nature Belt.
Environmental Values	Linking scribbly gum woodland (12.5.3) of Coolnwyinpin Nature Refuge, Korawal Street Nature Belt and Koala Place Nature Belt to scribbly gum dominated open forest to woodland (12.9-10.4) of Tingalpa Reservoir. Multiple corridor dependent bird species recorded along corridor, especially at eastern end.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1100m.
Land Uses / Tenure	Conservation and Environmental Protection zoned land at western third of corridor, with middle third zoned as Park Residential and eastern third a mix of Conservation and Environmental Protection for trunk surrounded by Urban Residential and Park Residential.
Community Use	High value recreational use of reserves.
Threats & Barriers	Road strike and barrier at Mount Cotton Road and Ney Road crossings. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Minor pinch along Tingalpa Reservoir. Pinch point along corridor between Mount Cotton Road and Tingalpa Reservoir and immediately east and west of Mount Cotton Road. Minor gap (≈50m) across cleared land immediately west of Ney Road/Koala Place crossing.
Priority Outcomes	Rehabilitation of corridor buffer along Tingalpa Reservoir. Rehabilitation of pinch points between Mount Cotton Road and Tingalpa Reservoir and immediately east and west of Mount Cotton Road. Rehabilitation of minor gap across cleared land immediately west of Ney Road/Koala Place crossing. Safe fauna passage and assessment for road strike across Mount Cotton Road and Ney Road. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Melaleuca Wetlands to Doug & Mary Morton Foreshore – Coochiemudlo Island – Enhancement Corridor



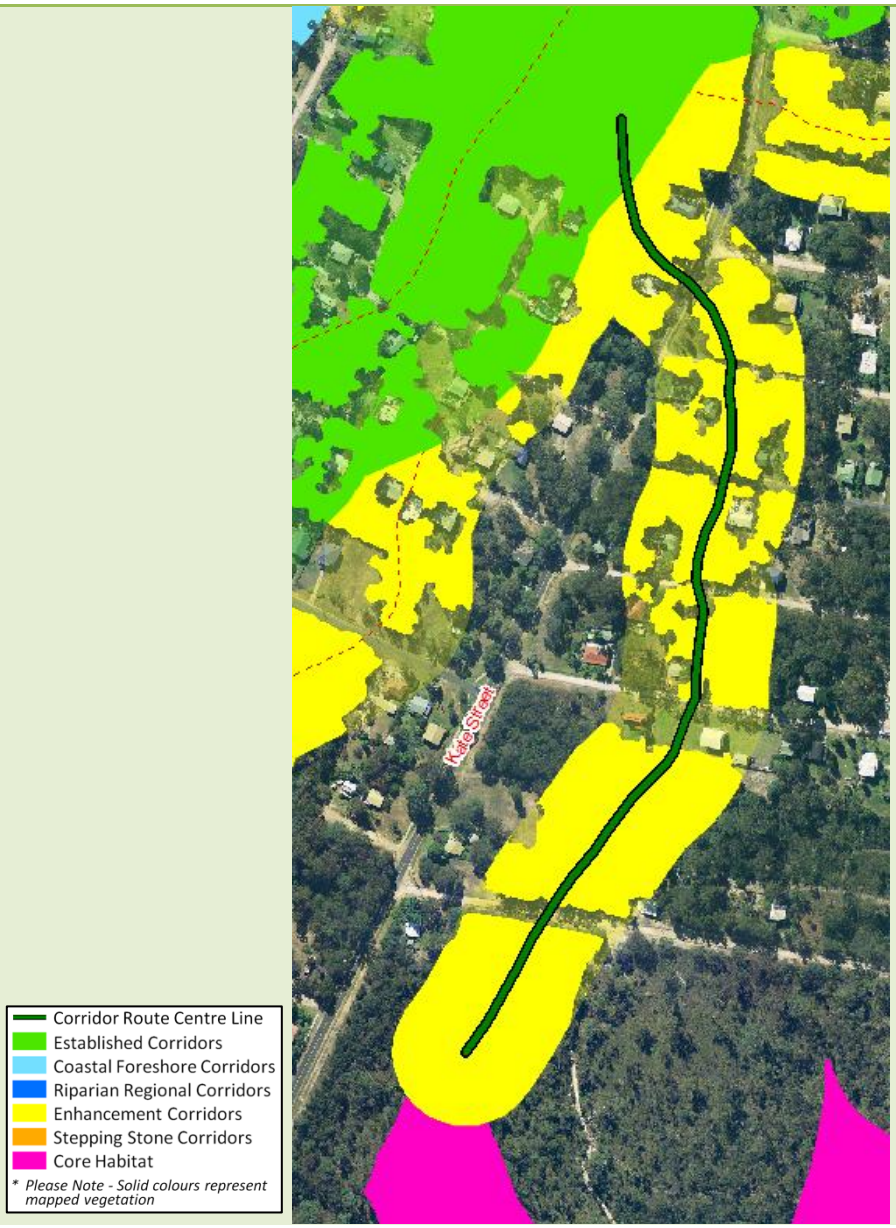
Description	East to west corridor linking the Melaleuca Wetlands to Doug & Mary Morton Foreshore, via Norfolk Beach Foreshore and Coochiemudlo Foreshore East.
Environmental Values	Linking paperbark open forest on sand (12.2.7) and scribbly gum woodland (12.5.3) of the Melaleuca Wetlands to the mangrove closed forest (12.1.3) and bloodwood, blue gum grassy open forest to woodland (12.5.2) of Doug & Mary Morton Foreshore, via areas of paperbark riparian coastal vegetation (12.3.6). Passes through flying fox roost (Tageruba Street) near Perulpa Street. Brahminy Kite (Shirley Street) and White-bellied Sea Eagle (James Street) nests west of eastern trunk. Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 along foreshore.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Trunk of corridor predominately Conservation zoned land bounded by Urban Residential zoned development.
Community Use	High value coastal recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points at Phillips Street and west of Tegeruba Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points at Phillips Street and west of Tegeruba Street.

Flinders Foreshore to Perulpa Street – Coochiemudlo Island – Enhancement Corridor



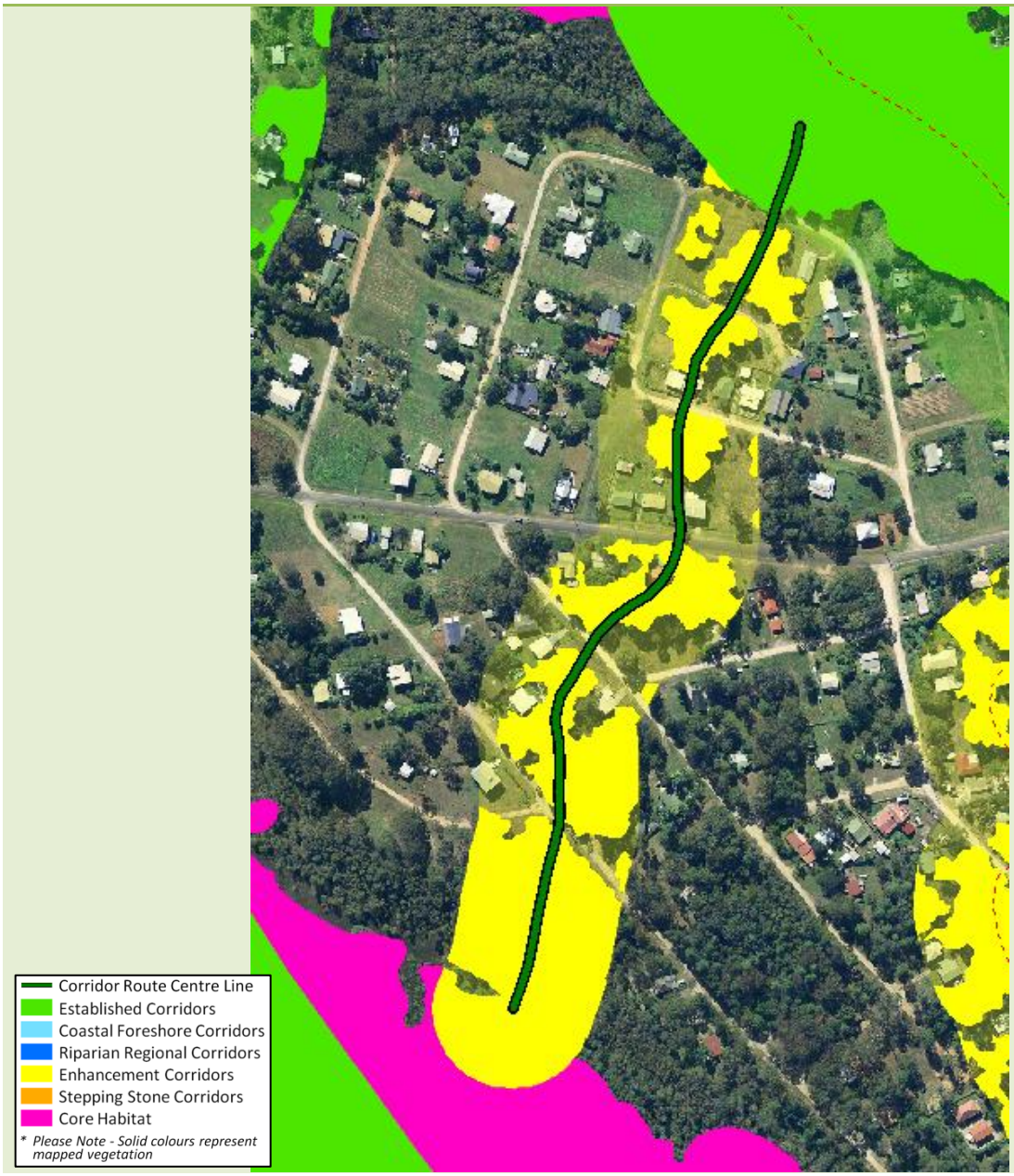
Description	Linking the Flinders Foreshore to Perulpa Street, via the Melaleuca Wetlands.
Environmental Values	bloodwood, blue gum grassy open forest to woodland (12.5.2) of Flinders Foreshore to the paperbark riparian coastal vegetation (12.3.6) and scribbly gum woodland (12.5.3) of Perulpa Street, via the paperbark open forest on sand (12.2.7) and scribbly gum woodland (12.5.3) of the Melaleuca Wetlands. Multiple corridor and waterway dependent bird species recorded in along corridor. Passes next to two flying fox roosts (Tageruba Street and George Street). Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 at northern end.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Mix of Conservation and Urban Residential zoned freehold and Council land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points between Orange Grove Street and Elisabeth Street, and Capembah Street and Marana Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points between Orange Grove Street and Elisabeth Street, and Capembah Street and Marana Street.

Balaka Street Urban Habitat to Wirralee Street – Macleay Island – Enhancement Corridor



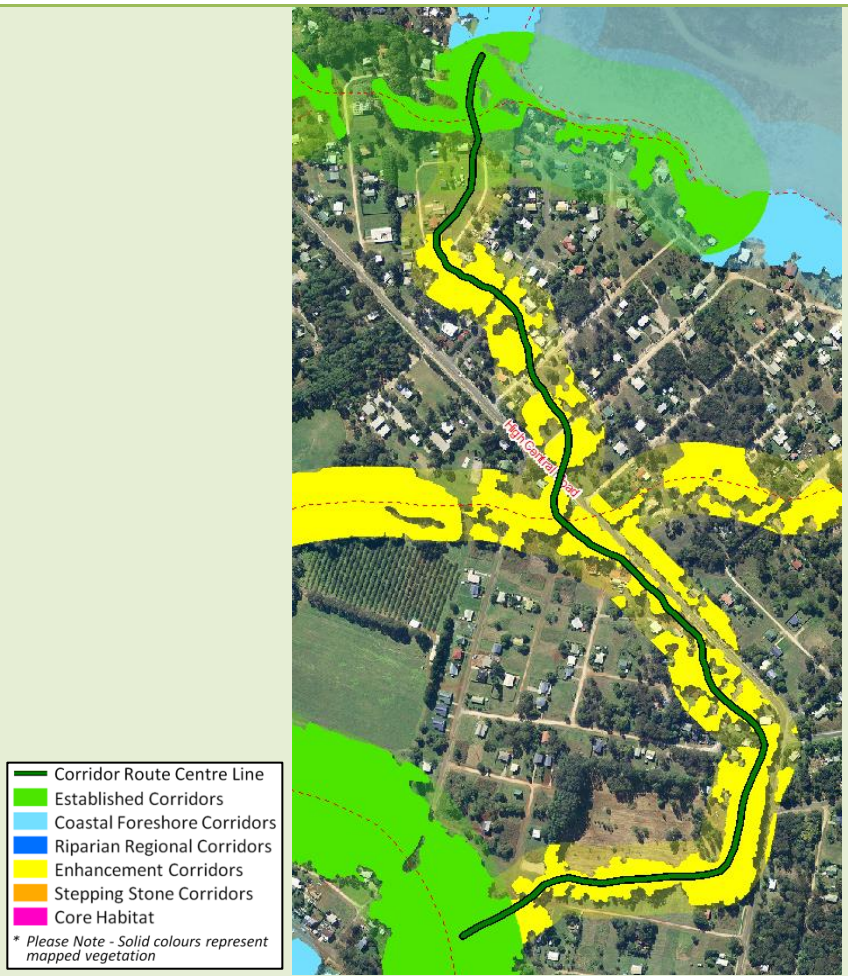
Description	North to south corridor connecting Balaka Street Urban Habitat to Wirralee Street.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) from Balaka Street Urban Habitat to Wirralee Street. Extensive records of Glossy Black-cockatoos along corridor, especially at southern end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈700m.
Land Uses / Tenure	Each end and some of trunk zoned as Conservation land, otherwise SMBI Residential development.
Community Use	Low to moderate recreational value, use of southern bushland.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points from Warama Street to Barramundi Street. Minor gap (≈50m) immediately south of Barramundi Street.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points from Warama Street to Barramundi Street and minor gap immediately south of Barramundi Street.

Tim Shea's Wetlands to Paul Carter Wetlands – Macleay Island – Enhancement Corridor



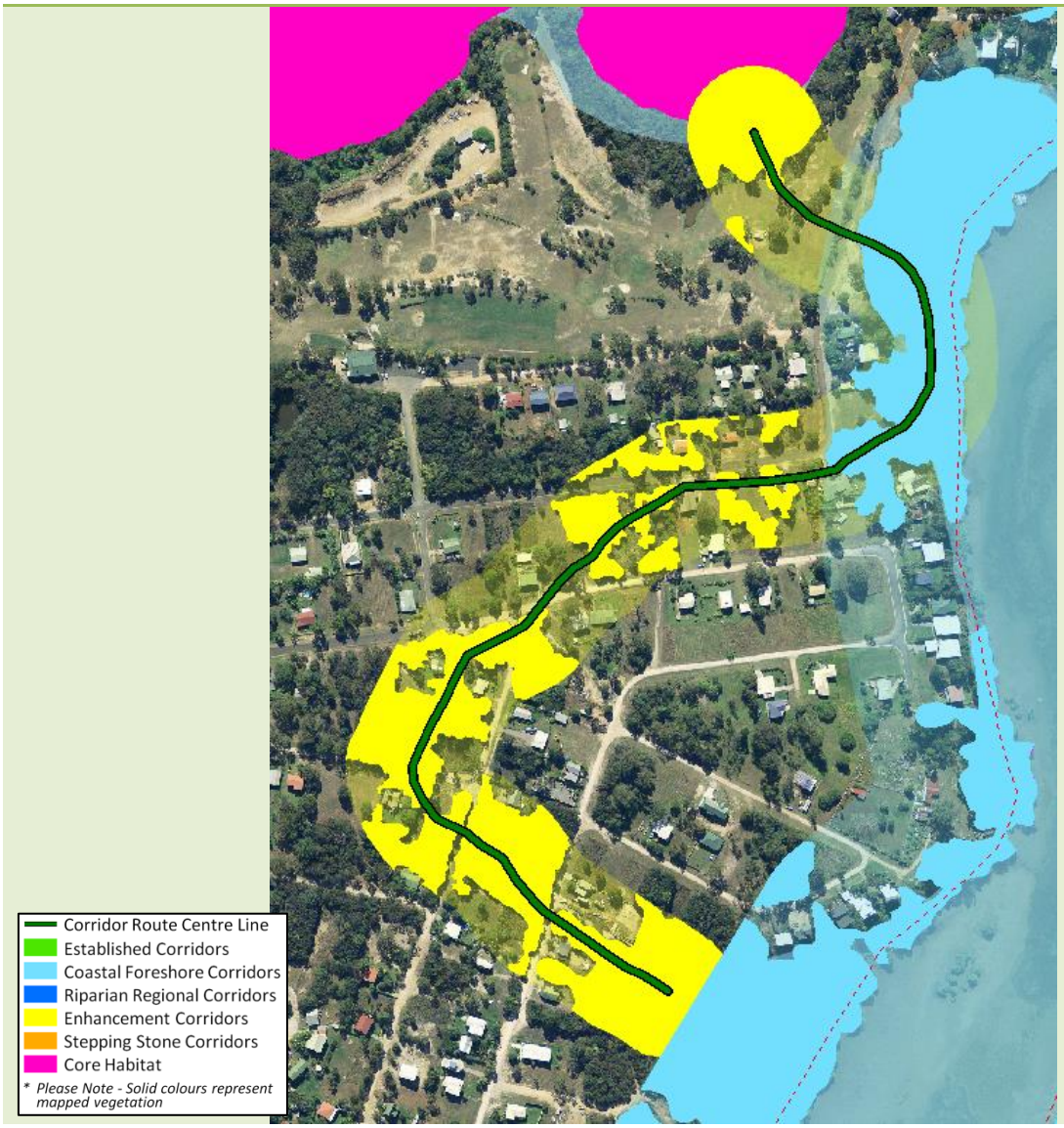
Description	North to south corridor connecting Tim Shea's Wetlands to Paul Carter Wetlands.
Environmental Values	Linking paperbark open forest on sand (12.2.7) at Tim Shea's Wetlands to mangrove closed forest (12.1.3) at Paul Carter Wetlands. Northern end adjacent to flying fox roost (Lake Street).
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Each end is zoned as Conservation land, with SMBI Residential along trunk.
Community Use	Moderate value for local recreational use of wetland reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point from Lemontree Drive southwards across Orange Court, Vine Street, and Hamilton Parade to Arthur Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point from Lemontree Drive southwards across Orange Court, Vine Street, and Hamilton Parade to Arthur Street.

Pecan Street Park to Thomas Street Wetlands – Macleay Island – Enhancement Corridor



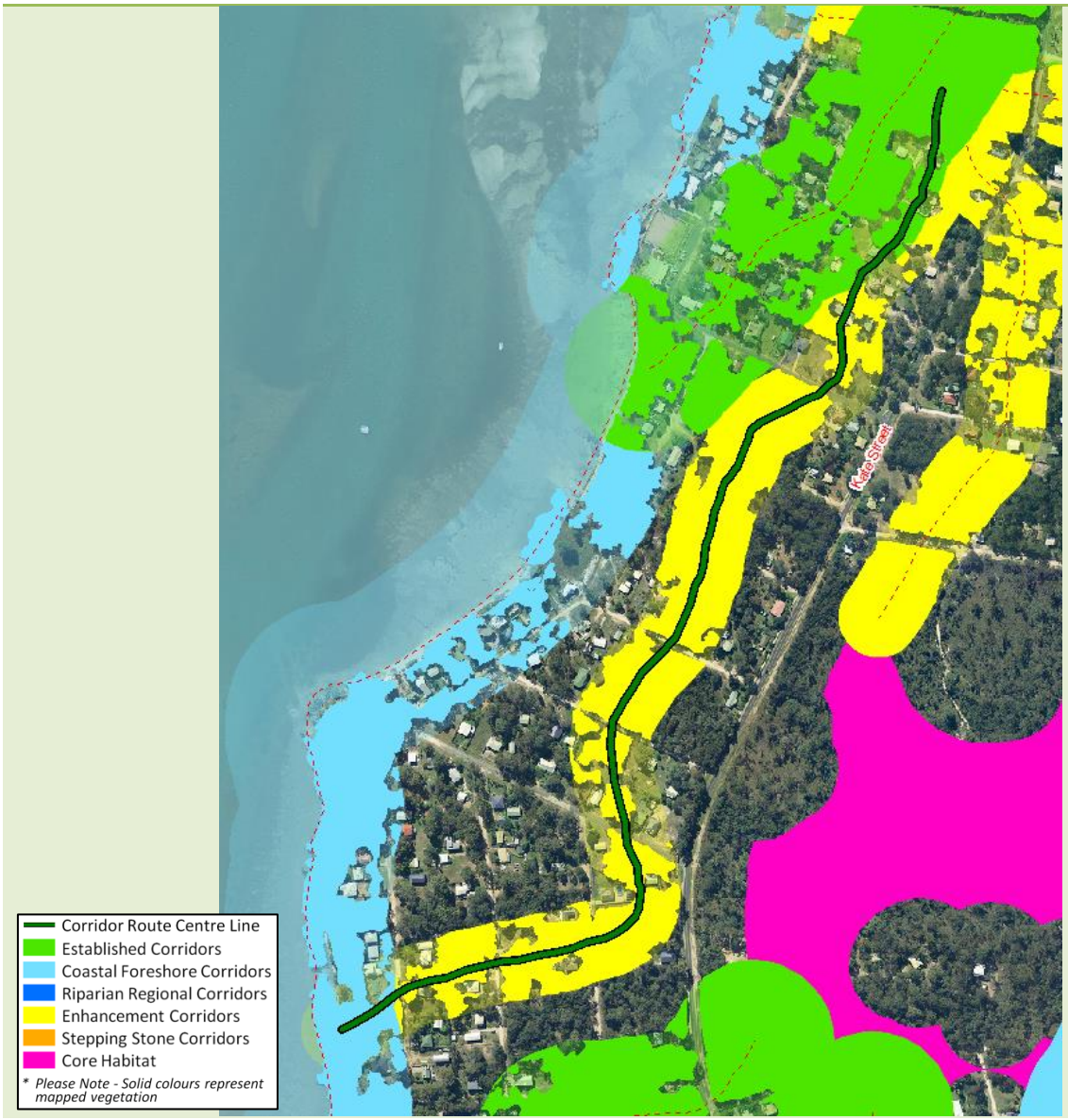
Description	North to south corridor connecting Pecan Street Park to Thomas Street Wetlands, via High Central Road Sportsfield.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) and mangrove closed forest (12.1.3) of Pecan Street Park to paperbark open-forest to woodland (12.3.5) and bloodwood, blue gum grassy open forest to woodland (12.5.2) of Thomas Street Wetlands; via complex of scribbly gum woodland, bloodwood, blue gum grassy open forest to woodland and paperbark open-forest to woodland (12.5.3/12.5.2/12.3.5) along High Central Road Sportsfield.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Predominantly SMBI Residential development, with each end featuring patches of Open Space. Thomas Street Wetlands end zoned as Conservation land.
Community Use	Moderate to high value for recreational use.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at High Central Road crossing and where corridor runs for ≈700m along High Central Road. Disturbance from High Central Road Sportsfield.
Gaps & Pinch Points	Gap (≈170m) immediately east of Betty Street southwards towards Mel Street. Pinch point (≈500m) along High Central Road from immediately east of Avocado Street continuing southwards along High Central Road to west end of Francis Road.
Priority Outcomes	Management of impacts from urban areas (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Rehabilitation of vegetation where corridor runs for ≈700m along High Central Road. Rehabilitation of gaps and points point as above.

Waterside Drive Foreshore to Cluan Street Wetlands – Macleay Island – Enhancement Corridor



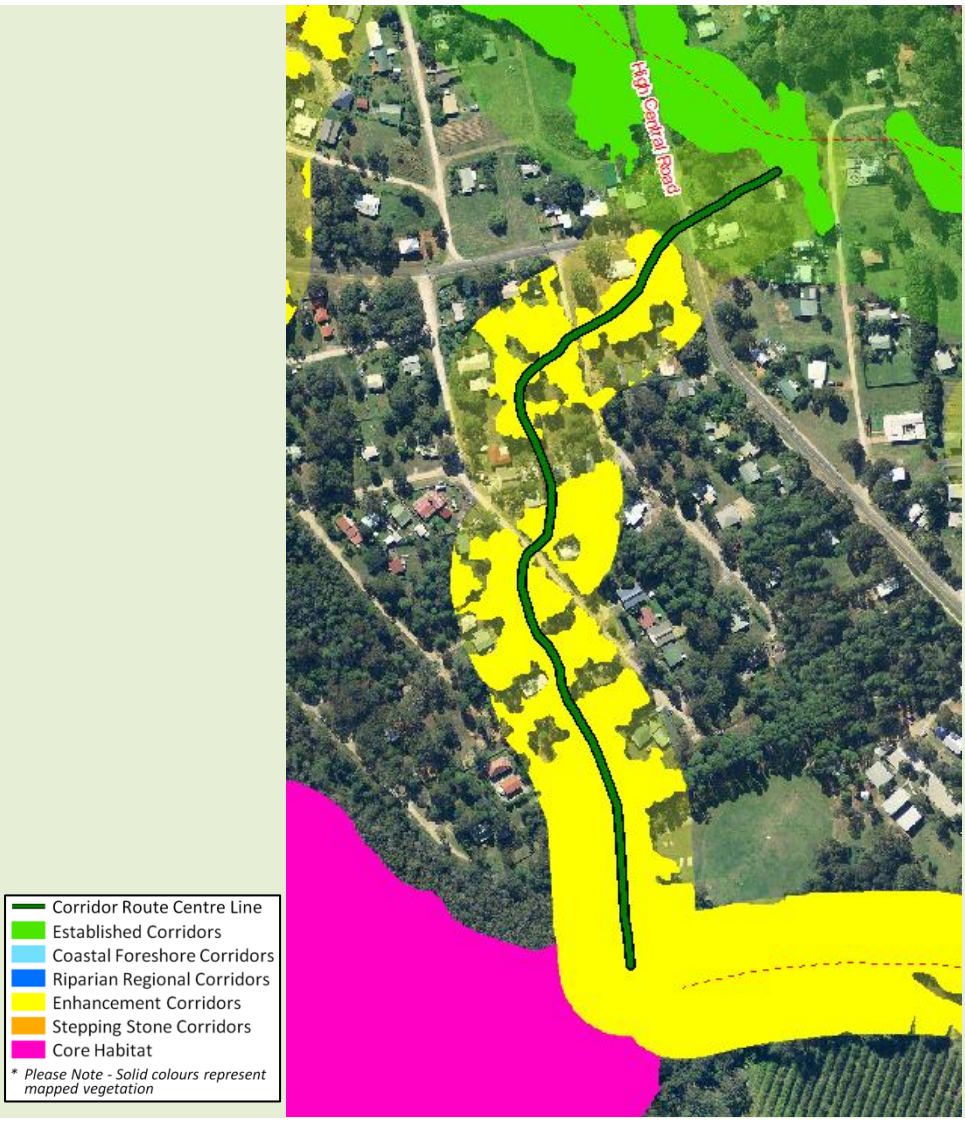
Description	North to south corridor linking Waterside Drive Foreshore to Cluan Street Wetlands, via Francis Road Park.
Environmental Values	Linking mangrove closed forest (12.1.3) and bloodwood, blue gum grassy open forest to woodland (12.5.2) of Waterside Drive Foreshore to the bloodwood, blue gum grassy open forest to woodland (12.5.2) and saltpan vegetation and mangrove closed forest complex (12.1.2/12.1.3) of Cluan Street Wetlands. Records of Glossy Black-cockatoos in along corridor. Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 along foreshore.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈750m.
Land Uses / Tenure	Mix of primarily SMBI Residential zoned land, with northern end zoned as Open Space. Minimal Conservation zoned land present.
Community Use	Moderate to high value for recreational use.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point (≈80m) immediately west of Waterside Drive. Pinch points from Keith Street to Scotts Road.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation pinch points immediately west of Waterside Drive and from Keith Street to Scotts Road.

Balaka Street Urban Habitat to Coast Road – Macleay Island – Enhancement Corridor



Description	North to south corridor linking Balaka Street Urban Habitat to Coast Road.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of Balaka Street Urban Habitat to the bloodwood, blue gum grassy open forest (12.5.2) and mangrove closed forest (12.1.3) of Coast Road. Many records of Glossy Black-cockatoo in along corridor. Flying fox roost (Balaka Street) at northern end. Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 along foreshore.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Approximately half SMBI Residential and half Conservation zoned land.
Community Use	High value coastal recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points (≈350m) across residential properties from Eumina Street to Benowa Street and from Wanda Street to Wharf Street.
Priority Outcomes	Rehabilitation of pinch points (≈350m) across residential properties from Eumina Street to Benowa Street and from Wanda Street to Wharf Street. Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Citron Street Park to Paul Carter Wetlands – Macleay Island – Enhancement Corridor



Description	North to south corridor linking Citron Street Park to Paul Carter Wetlands.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of Citron Street Park to paperbark open-forest to woodland (12.3.5) of Paul Carter Wetlands. Flying fox roost (Lake Street) near northern end of corridor.
Land Uses / Tenure	Primarily SMBI Residential, with small patch of Open Space at Citron Street Park end and Conservation zoned land at Paul Carter Wetlands end, adjoining relatively large block of Community Purposes land.
Community Use	High value recreation area.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at High Central Road crossing.
Gaps & Pinch Points	Minor gap (≈65m) immediately east of High Central Road crossing, immediately south of Pecan Street. Pinch point running south of Hamilton Parade between Kevin Street and Nugent Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of minor gap immediately east of High Central Road crossing, immediately south of Pecan Street. Rehabilitation of pinch point running south of Hamilton Parade between Kevin Street and Nugent Street. Assessment for road strike at High Central Road crossing.

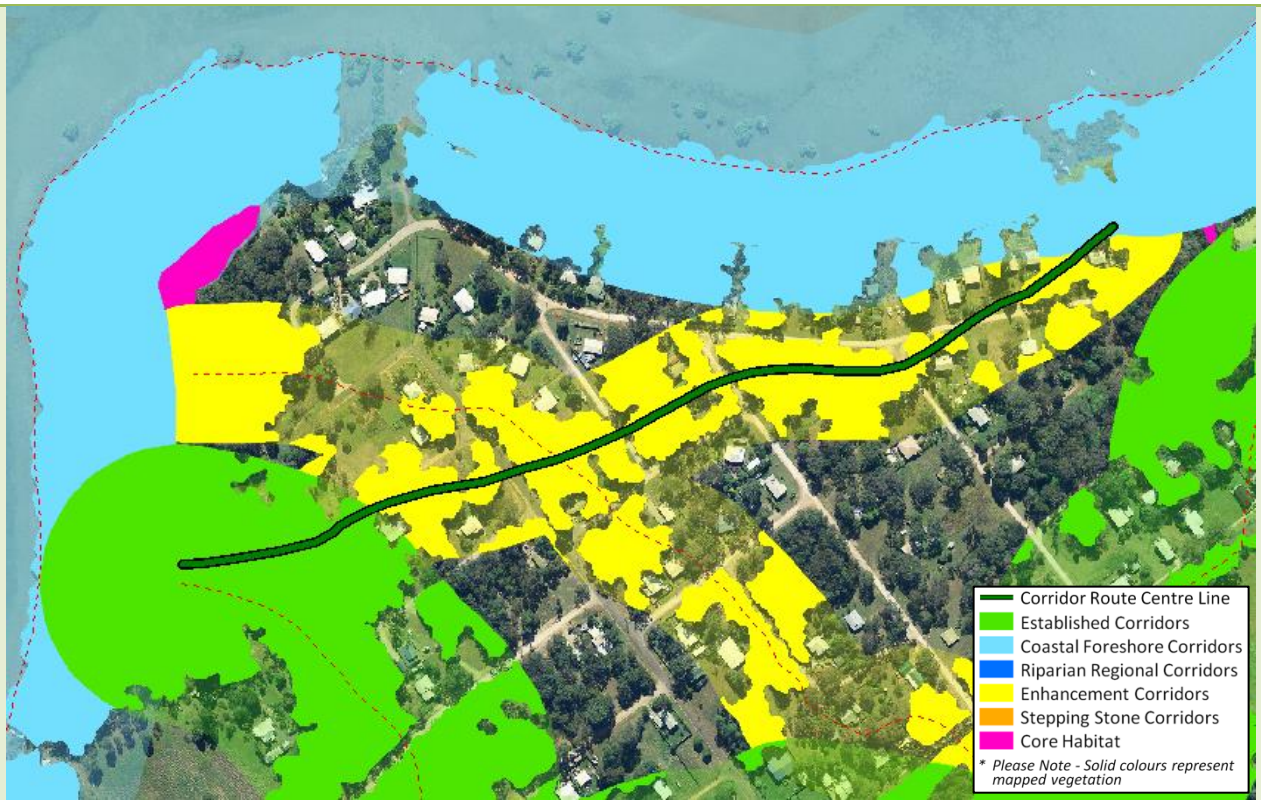
Timothy Street Urban Habitat to Paul Carter Wetlands – Macleay Island – Enhancement Corridor

Description	East to west corridor linking the Timothy Street Urban Habitat to Paul Carter Wetlands.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of the Timothy Street Urban Habitat to paperbark open-forest to woodland (12.3.5) of Paul Carter Wetlands. Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 along foreshore.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Ends bound by Conservation zoned land, with SMBI Residential primarily on eastern side of High Central Road. Relatively large block of Community Purposes adjoining western end.
Community Use	Moderate to high value recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at High Central Road crossing.
Gaps & Pinch Points	Minor gap (≈75m) immediately east of Lakeside Avenue/Matthew Street crossing. Minor pinch (≈60m) immediately north of Lakeside Avenue/Rainbow Avenue crossing. Minor gap (≈60m) immediately east of High Central Road/Florence Street crossing. Minor pinch immediately east of High Central Road/George Street crossing.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of minor gaps immediately east of Lakeside Avenue/Matthew Street crossing and immediately east of High Central Road/Florence Street crossing. Rehabilitation of minor pinch immediately north of Lakeside Avenue/Rainbow Avenue crossing and immediately east of High Central Road/George Street crossing. Assessment for road strike at High Central Road crossing.

Golden Sands Boulevard to Balaka Street Urban Habitat – Macleay Island – Enhancement Corridor

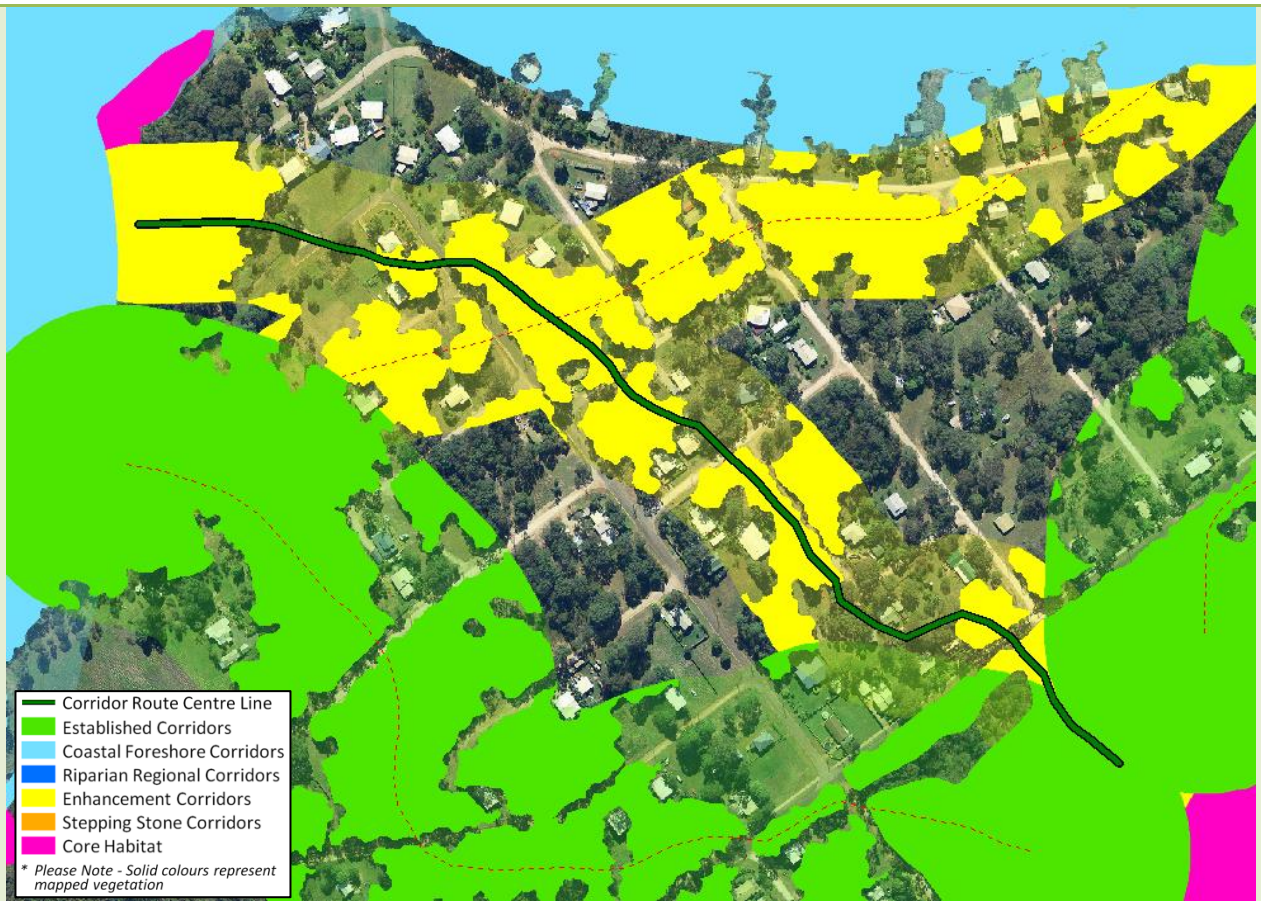
Description	North to south-west corridor linking Golden Sands Boulevard to Balaka Street Urban Habitat
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland and mangrove closed forest (12.5.2/12.1.3) of Golden Sands Boulevard to mangrove closed forest (12.1.3.) of Balaka Street Urban Habitat. Flying fox roost (Balaka Street) along trunk in western half of corridor. Links High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 from western end to eastern end.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈600m.
Land Uses / Tenure	Western half of trunk zoned as Conservation land, eastern half zoned as SMBI Residential.
Community Use	High value peri-urban recreational area.
Threats & Barriers	Poor urban and peri land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at Kate Street crossing.
Gaps & Pinch Points	Pinch point immediately west of Golden Sands Boulevard across and adjacent to Leanne Street. Pinch immediately south of Macs Central Street.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinches immediately west of Golden Sands Boulevard across and adjacent to Leanne Street and immediately south of Macs Central Street. Assessment for road strike at Kate Street crossing.

Perulpa Drive Foreshore to Harry Brook Bushland Refuge – Lamb Island – Enhancement Corridor



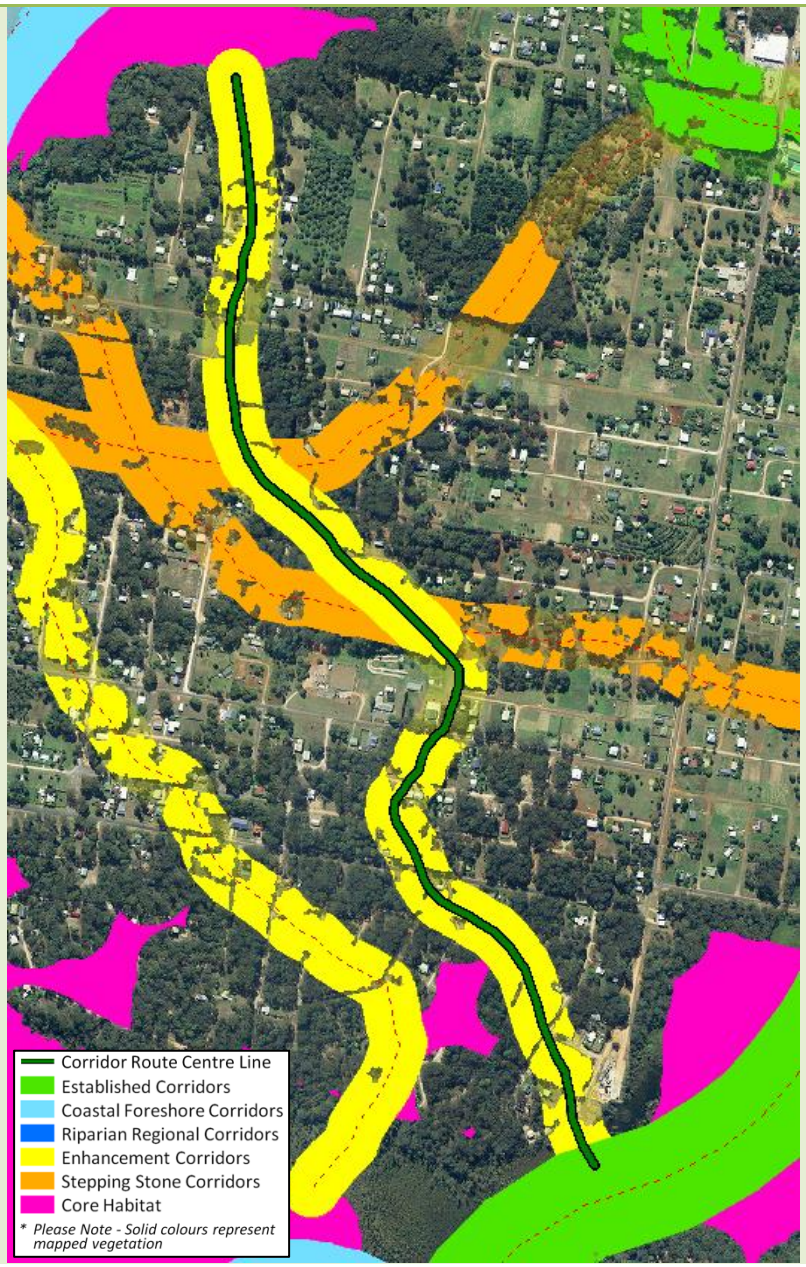
Description	East to west corridor linking Perulpa Drive Foreshore to Harry Brook Bushland Refuge.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland and paperbark open-forest to woodland (12.5.2/12.3.5) of Perulpa Drive Foreshore to that of Harry Brook Bushland Refuge. Links High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 from western end to eastern end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈725m.
Land Uses / Tenure	Each end of corridor zoned as Conservation land, with trunk primarily zoned as SMBI Residential.
Community Use	High value coastal recreation area, featuring five nearby walkways.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point (≈95m) immediately east of Perulpa Drive/Wyena Avenue crossing.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch point immediately east of Perulpa Drive/Wyena Avenue crossing.

Lucas Drive to Harry Brook Bushland Refuge – Lamb Island - Enhancement Corridor



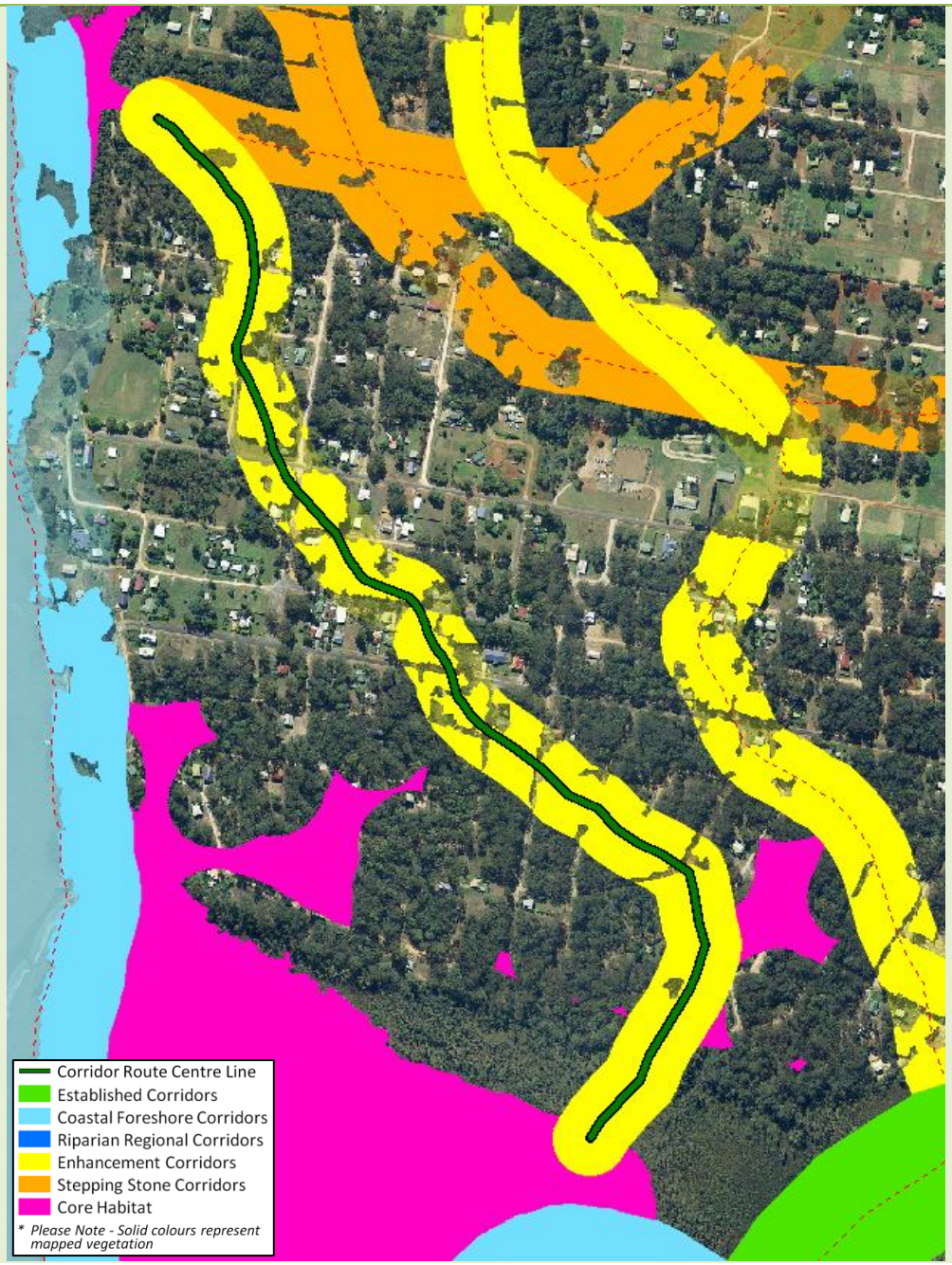
Description	North to south-east corridor linking Harry Brook Bushland Refuge to Lucas Drive.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland and paperbark open-forest to woodland (12.5.2/12.3.5) of Harry Brook Bushland Refuge to bloodwood, blue gum grassy open forest to woodland (12.5.2) of Lucas Drive.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈750m.
Land Uses / Tenure	Each end of corridor zoned as Conservation land, with trunk primarily zoned as SMBI Residential. Contains High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 at northern end.
Community Use	High value coastal recreation area, featuring nearby walkways.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap (≈130m) between Link Street and Halcyon Street. Pinch point between Pease Street and Lucas Drive.
Priority Outcomes	Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gap between Link Street and Halcyon Street, and pinch point between Pease Street and Lucas Drive.

Meadstone Street to Whistling Kite Wetlands – Russell Island – Enhancement Corridor



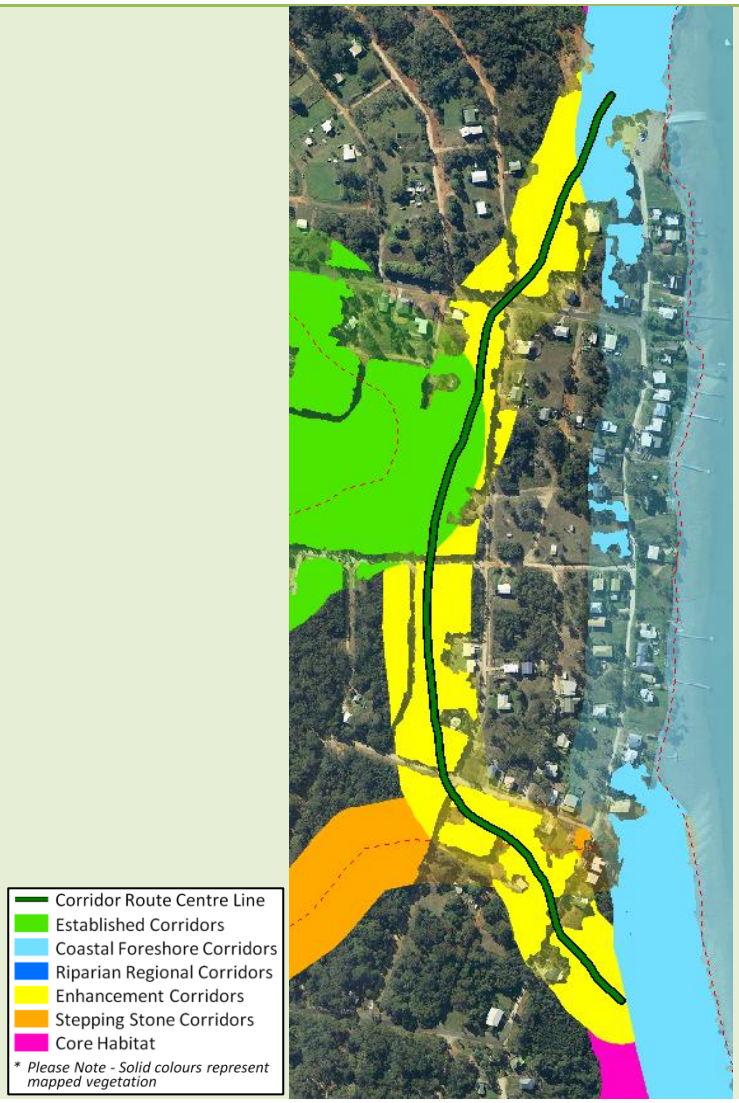
Description	North to south corridor linking Meadstone Street to Whistling Kite Wetlands, via Jackson Road Park.
Environmental Values	Linking paperbark open-forest to woodland (12.3.5) and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.6c) of Meadstone Street to Coastal sedgeland (12.2.15) of Whistling Kite Wetlands.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Each end of corridor zoned as Conservation land. Trunk primarily SMBI Residential, with some Conservation zoned land.
Community Use	Recreational values of bushland reserves.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap from Mountain View Crescent to Jackson Road. Pinch point from Kings Road to Taylor Street.
Priority Outcomes	Management of impacts from urban and peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of gap from Mountain View Crescent to Jackson Road and pinch point from Kings Road to Taylor Street.

Jenelle Grove to Whistling Kite Wetlands – Russell Island – Enhancement Corridor



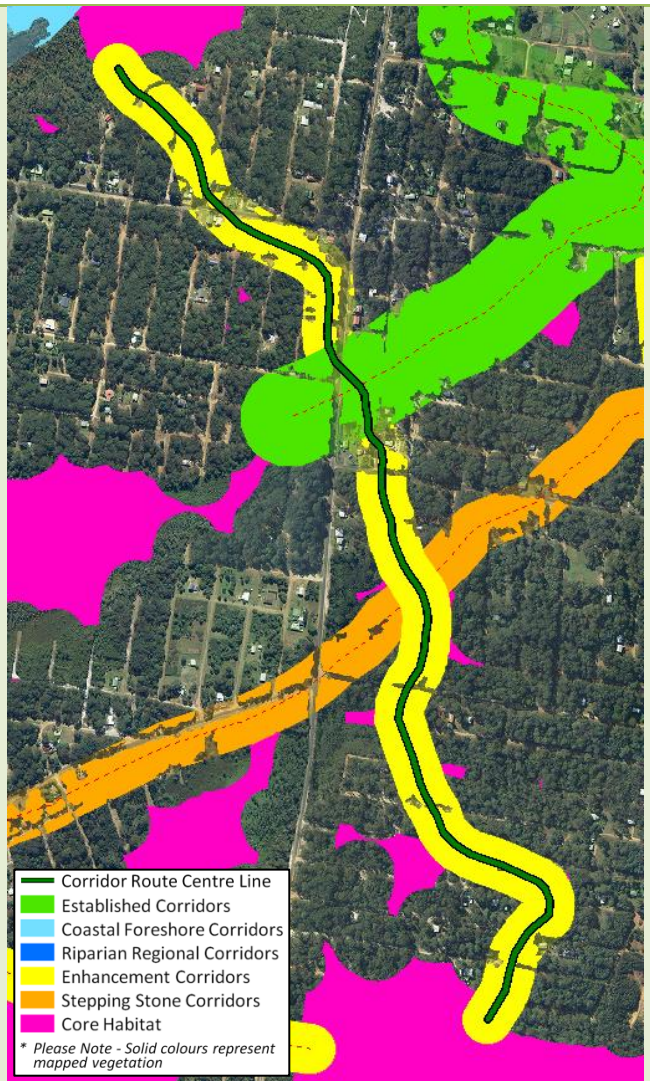
Description	North to south-east corridor linking Jenelle Grove to Whistling Kite Wetlands.
Environmental Values	Linking paperbark open-forest to woodland and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.3.5/12.5.6c) of Jenelle Grove to saltpan vegetation (12.1.2) and mangrove closed forest (12.1.3) of Whistling Kite Wetlands.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈1300m.
Land Uses / Tenure	Each end of corridor zoned as Conservation land, with trunk primarily zoned as SMBI Residential.
Community Use	Low to moderate value recreation use.
Threats & Barriers	Poor urban and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	No significant gaps greater than 106m or narrow points.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).

Turtle Swamp Wetlands to The Esplanade – Russell Island – Enhancement Corridor



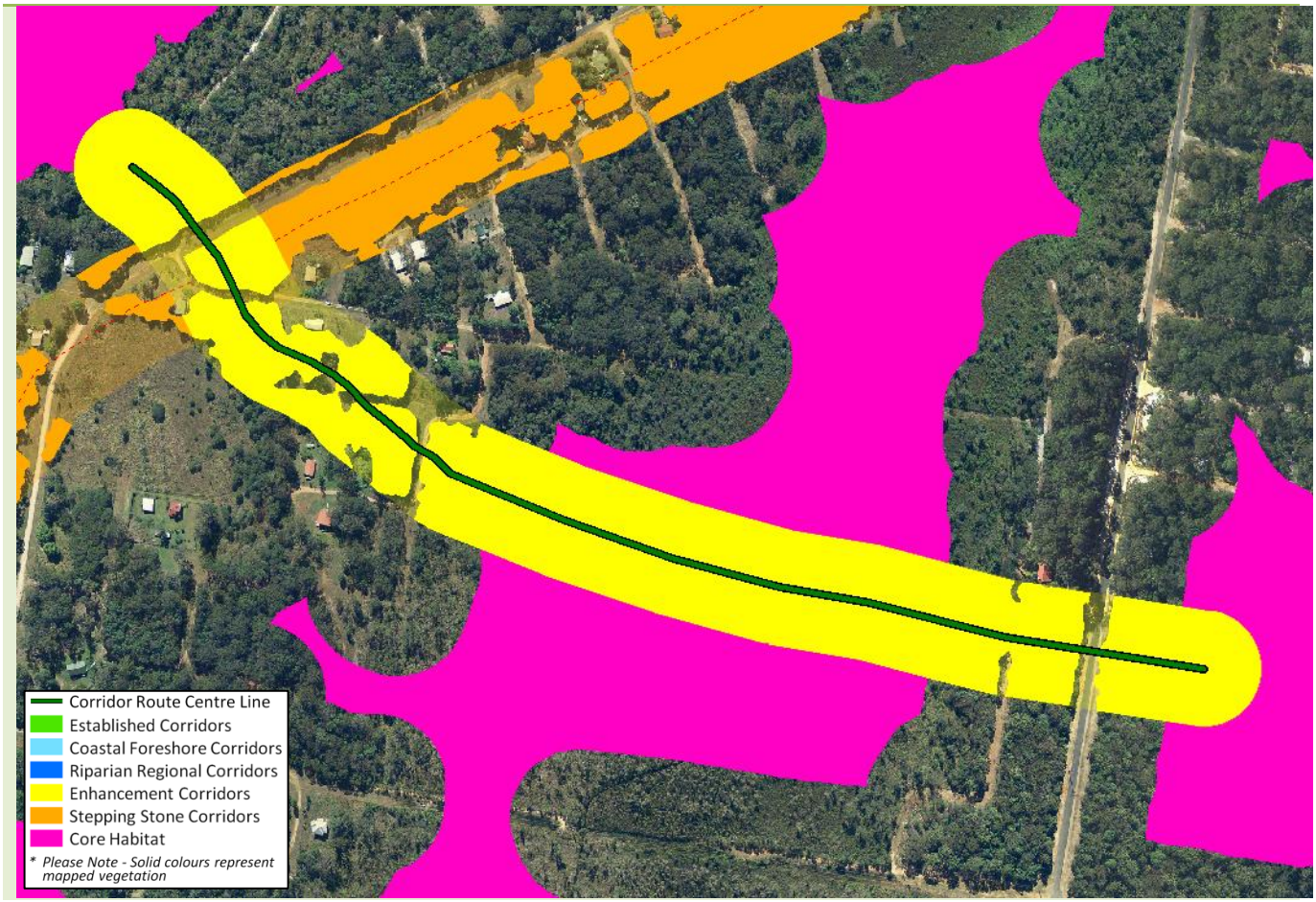
Description	North to south corridor linking Turtle Swamp Wetlands to The Esplanade, just east of Water Mouse Wetlands.
Environmental Values	Linking scribbly gum woodland and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.3/12.5.6c) of Turtle Swamp Wetlands to mangrove closed forest and saltpan vegetation (12.1.3/12.1.2) of The Esplanade. Records of Glossy Black-cockatoos in along corridor. White-bellied Sea Eagle nest at corner of Rampart Drive and Wahine Drive, just east of Rampart Drive crossing. Links High Ecological Values waters (i.e. Ramsar) under State Environmental Protection (Water) Policy 2009 along foreshore.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1200m.
Land Uses / Tenure	Primarily SMBI Residential, with some small patches of Conservation.
Community Use	High value peri-urban to coastal recreation area.
Threats & Barriers	Poor urban and peri land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Some potential inundation of saltpan and mangrove habitats from sea level rise.
Gaps & Pinch Points	Pinch points south-west of Seaward Drive/Wahine Drive crossing and between Main View Drive and Highland Ridge Road, immediately east of Little Cove Road.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of minor pinch south-west of Seaward Drive/Wahine Drive crossing and between Main View Drive and Highland Ridge Road, immediately east of Little Cove Road.

Turtle Swamp Wetlands to Cunningham Avenue Urban Habitat – Russell Island – Enhancement Corridor



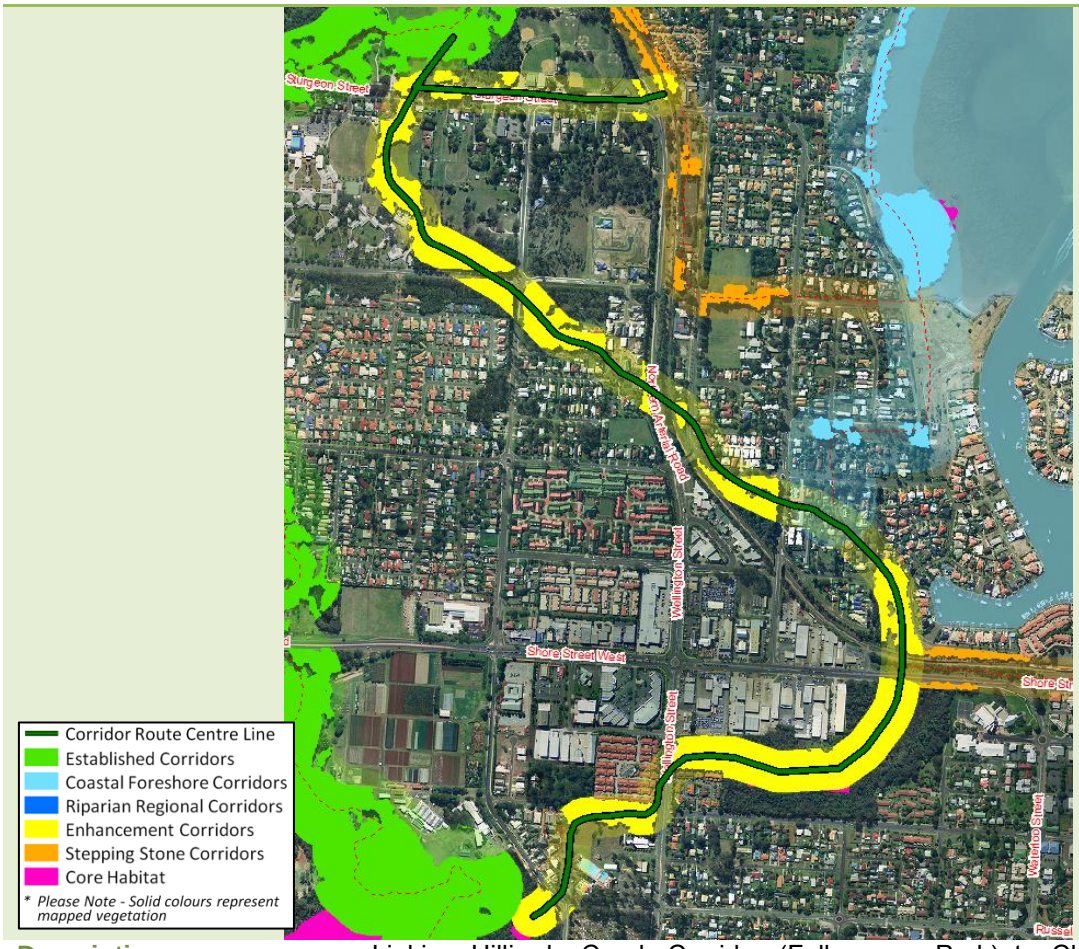
Description	North to south corridor linking Turtle Swamp Wetlands to Cunningham Avenue Urban Habitat, via Tooloona Avenue Park and Centre Road Park.
Environmental Values	Linking closed or wet heathland (12.3.13) of Turtle Swamp Wetlands to scribbly gum woodland and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.3/12.5.6c) of Cunningham Avenue Urban Habitat, via the scribbly gum woodland and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.3/12.5.6c) of Tooloona Avenue Park and Centre Road Park. Many records of Glossy Black-cockatoos in along southern part of corridor. Osprey nest in south-east region of corridor.
Core Habitat Linkages	Links 6 core habitat patches. Maximum distance between patches is ≈1200m.
Land Uses / Tenure	Each end of corridor is Conservation zoned land. Trunk zoned approximately half SMBI Residential development, half Conservation.
Community Use	High value peri urban recreational area.
Threats & Barriers	Poor urban and peri urban land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).
Gaps & Pinch Points	Minor gap (≈50m) at southern end of Cowderoy Drive and pinch point between Falconhurst Road and Shore Street.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of minor gap south-east across southern end of Cowderoy Drive and pinch point between Falconhurst Road and Shore Street..

Water Mouse Wetlands to Melomys Wetland – Russell Island – Enhancement Corridor



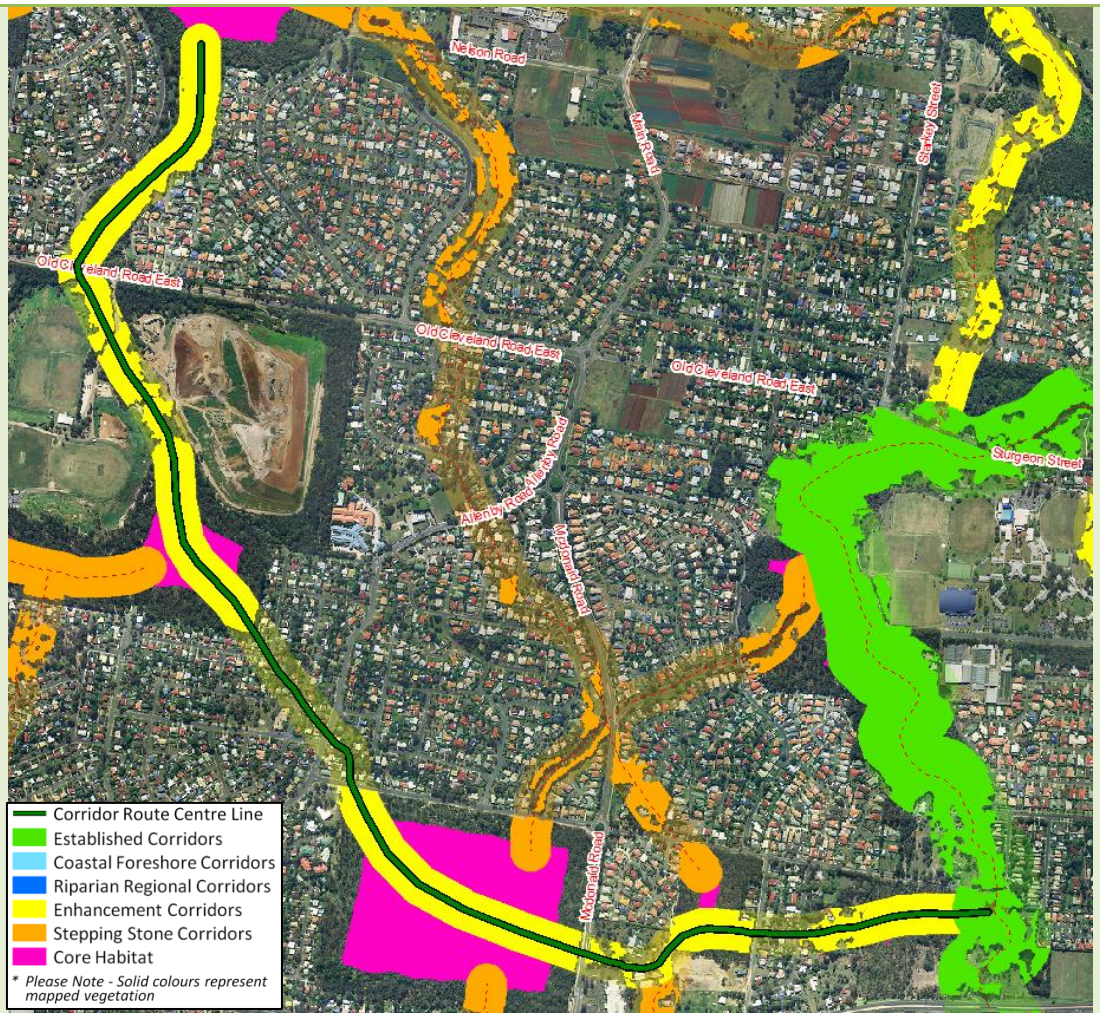
Description	West to east corridor linking Water Mouse Wetlands to Melomys Wetland.
Environmental Values	Linking scribbly gum woodland and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.3/12.5.6c) of Water Mouse Wetlands to that of Melomys Wetland.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈450m.
Land Uses / Tenure	Entire corridor Conservation zoned land, with slight crossing through Rural Non Urban land.
Community Use	High value peri urban recreation area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at Stradbroke Drive crossing and Centre Road crossing.
Gaps & Pinch Points	No significant gaps greater than 106m or narrow points.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Assessment for road strike at Stradbroke Drive crossing and Centre Road crossing.

Fellmonger Park to Raby Esplande to Clark Street Bushland Reserve - Enhancement Corridor



Description	Linking Hilliards Creek Corridor (Fellmonger Park) to Clarke Street Bushland Refuge, via Dundas Street and Skinner Urban Habitat, Raby Bay Esplanade Park, Black Swamp Wetlands and Wellington Street Urban Habitat.
Environmental Values	Linking blue gum, iron bark, bloodwood riparian vegetation (12.3.11 and 12.5.2), bloodwood and blue gum grassy open forest/woodland (12.5.2), paperbark open forest to woodland and (12.3.5) and paperbark riparian vegetation (12.3.6), and scribbly gum woodland (12.5.3). Multiple corridor dependent bird species recorded in south section of corridor. Numerous koala records along corridor. Passes through flying fox roost (Black Swamp Wetlands) towards southern end. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~5 per cent of corridor at Black Swamp Wetlands.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2200m.
Land Uses / Tenure	Trunk of corridor predominantly Council bushland reserves zoned Opens Space, Environmental Protection and Conservation, surrounded by Urban Residential, and Commercial development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban and commercial land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Main road crossings (Wellington Street, Shore Street and Northern Arterial Road). Many local road crossings.
Gaps & Pinch Points	Gaps immediately east and west of Northern Arterial Road, between Gordon Street and Nelson Street, and Clarke Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Assessment for road strike and safe fauna passage across Wellington Street, Shore Street and Northern Arterial Road. Rehabilitation of gaps immediately east and west of Northern Arterial Road, between Gordon Street and Nelson Street, and Clarke Street.

Tarradarrapin Creek Wetlands to Hilliards Creek Corridor- Enhancement Corridor

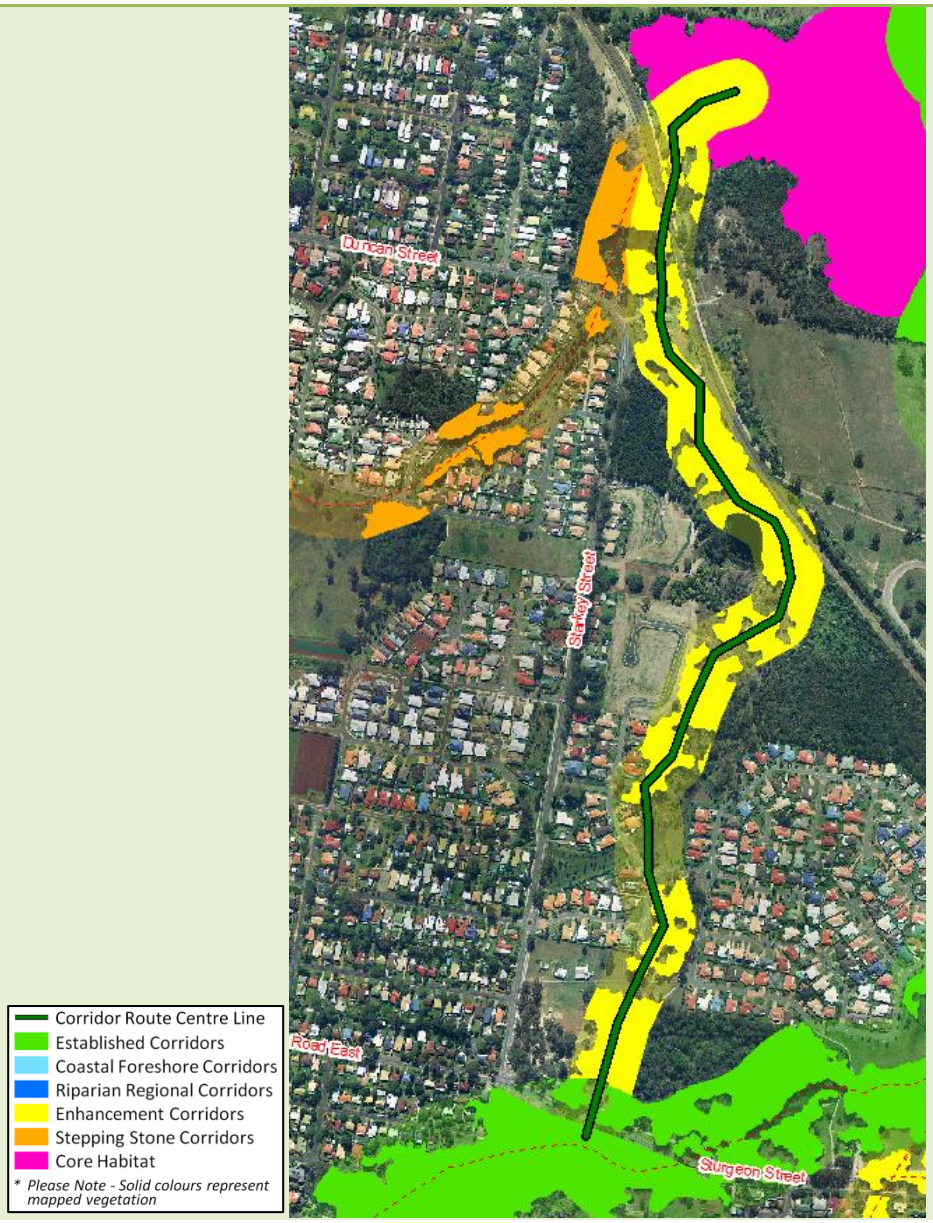


Description	Linking Tarradarrapin Creek wetlands in the north to Hilliards Creek Park Corridor in the south, via Judy Holt Bushland Reserve, Squirrel Glider Conservation Reserve and Dawson Road Nature Refuge.
Environmental Values	Linking the paperbark open forest to woodland and (12.3.5) and paperbark riparian vegetation (12.3.6) of Tarradarrapin to Scribbly Gum dominated open forest to woodland (12.9-10.4) of the Judy Holt Bushland Reserve, Squirrel Glider Conservation Reserve, Dawson Road Nature Refuge and Hilliards Creek Corridor. Multiple corridor dependent bird species recorded in mid-section of corridor. Numerous koala records along corridor. Passes through largest flying fox roost in Redlands (Judy Holt) at Judy Holt Bushland Reserve. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~40 per cent of corridor length.
Core Habitat Linkages	Links 4 core habitat patches. Maximum distance between patches is ≈1300m.
Land Uses / Tenure	Trunk of corridor predominantly Council bushland reserves zoned Open Space and Conservation, surrounded by Urban Residential development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Main road crossing at Old Cleveland Road East. Crossings of many local roads.
Gaps & Pinch Points	Gap between Judy Holt Bushland Reserve and Squirrel Glider Conservation Reserve.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across Old Cleveland Road East. Rehabilitation of gap between Judy Holt Bushland Reserve and Squirrel Glider Conservation Reserve.

Windemere Road Reserve - Enhancement Corridor

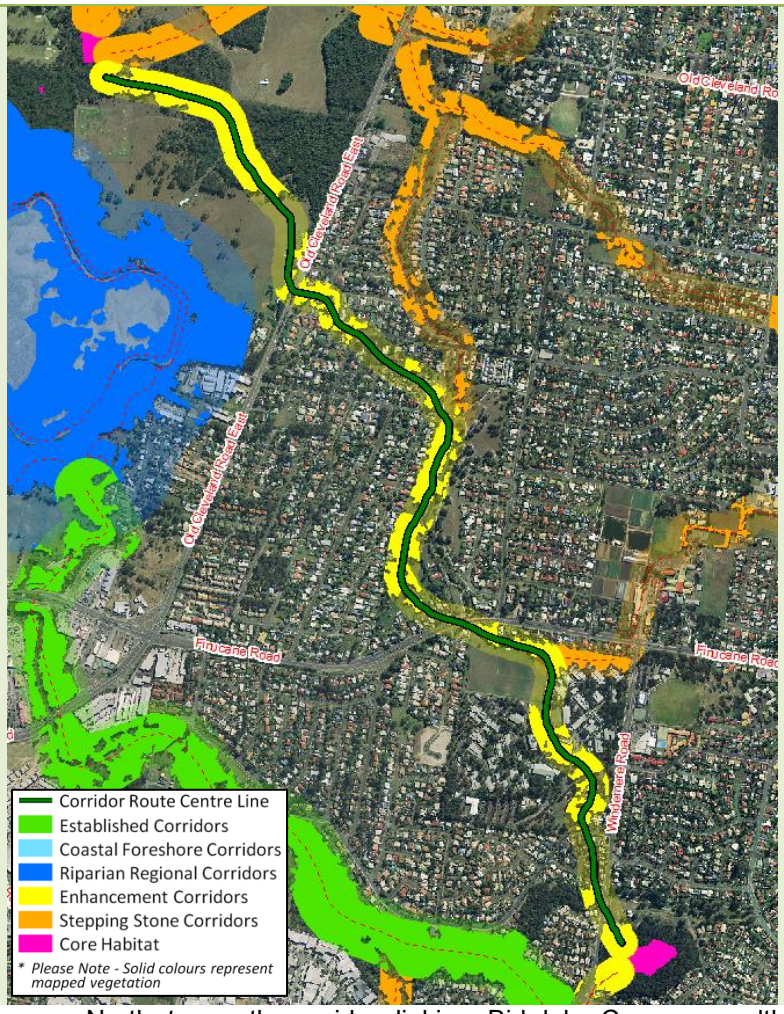
Description	East to west corridor linking Windemere Road Bushland Refuge to Scribbly Gum Conservation Area, via Windemere Road Reserve.
Environmental Values	Linking the Scribbly gum woodland (12.5.3) and stringybarks, grey gums, ironbarks open-forest complex (12.9-10.17d) of Windemere Road Bushland to the Scribbly Gum dominated open forest to woodland (12.9-10.4) of Scribbly Gum Conservation Area, via regrowth of Scribbly Gum dominated open forest to woodland (12.9-10.4). Numerous koala records along corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~5 per cent of corridor covering ~5 per cent at western end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1600m.
Land Uses / Tenure	Council owned Community Purposes zoned land bounded by Urban Residential zoned development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential development of the Community Purposes zoned land of Windemere Road Reserve. Brompton and Vienna Road crossings.
Gaps & Pinch Points	Gaps south of Brompton Street.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across Brompton and Vienna Road crossings. Rehabilitation of gaps south of Brompton Street. Input into planning considerations for the Community Purposes zoned land of Windemere Road Reserve.

Station Street Wetlands to Hilliards Creek Park Creek Corridor - Enhancement Corridor



Description	North to south corridor linking Station Street Wetlands to Hilliards Park Creek Corridor, via Wellington Point Constructed Wetlands and Poloni Place Wetlands.
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) of Station Street Wetlands to riparian vegetation regrowth (12.3.6) of Hilliards Creek, via riparian vegetation regrowth (12.3.6). Multiple waterway dependent bird species recorded in north-section of corridor. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~20 per cent of corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Trunk of predominantly Council owned Conservation and Open Space zoned land bounded by Urban Residential zoned development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Railway crossing at north end of corridor.
Gaps & Pinch Points	Pinch points east of Poloni Place and west of Hilliards Park Drive.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across railway crossing. Rehabilitation of pinch points east of Poloni Place and west of Hilliards Park Drive.

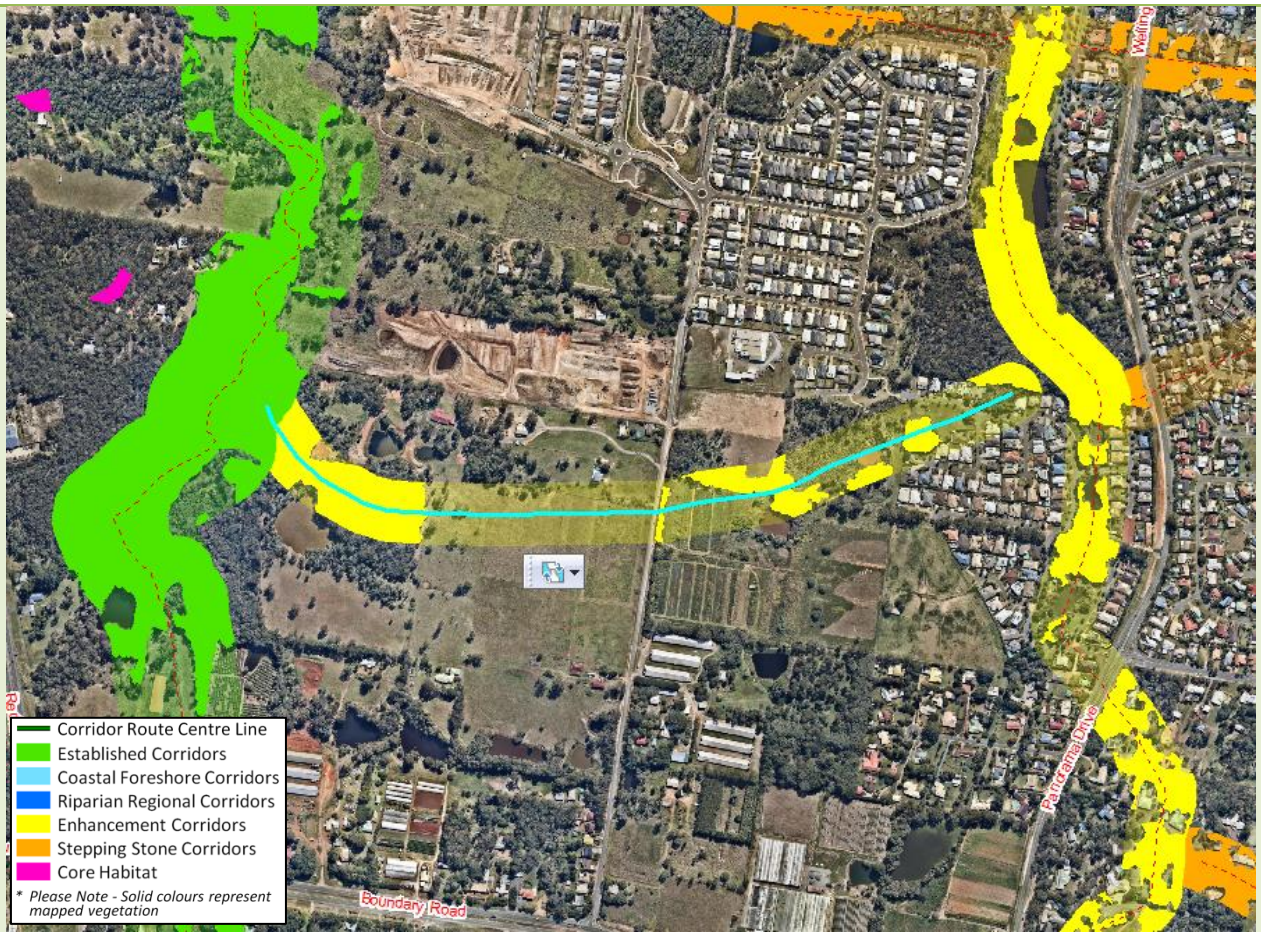
Birkdale Commonwealth Land to Windemere Bushland Refuge - Enhancement Corridor



Description	North to south corridor linking Birkdale Commonwealth Land to Windemere Bushland Refuge, via Valantine Park.
Environmental Values	blue gum grassy open forest to woodland (12.5.2) and Scribbly gum woodland (12.5.3) of the Birkdale Commonwealth Land to the Scribbly gum woodland (12.5.3) and stringybarks, grey gums, ironbarks open-forest complex (12.9-10.17d) of Windemere Road Bushland. Numerous koala records along corridor. Passes through flying fox roost (Lawn Terrace) around halfway of trunk. Links High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering from northern end to southern end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈3500m.
Land Uses / Tenure	Trunk of predominantly Conservation, Open Space and Community Purposes zoned land bounded by Urban Residential zoned development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Major road crossings at Old Cleveland Road East, Finucane Road and Windemere Road.
Gaps & Pinch Points	Gaps between Valantine and Daveson Roads, immediately north and south of Finucane Road and south of Crotona Road East.
Priority Outcomes	Management of impacts from urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Safe fauna passage across railway crossing. Rehabilitation of gaps between Valantine and Daveson Roads, immediately north and south of Finucane Road and south of Crotona Road East. Safe fauna crossing at Old Cleveland Road East, Finucane Road and Windemere Road.

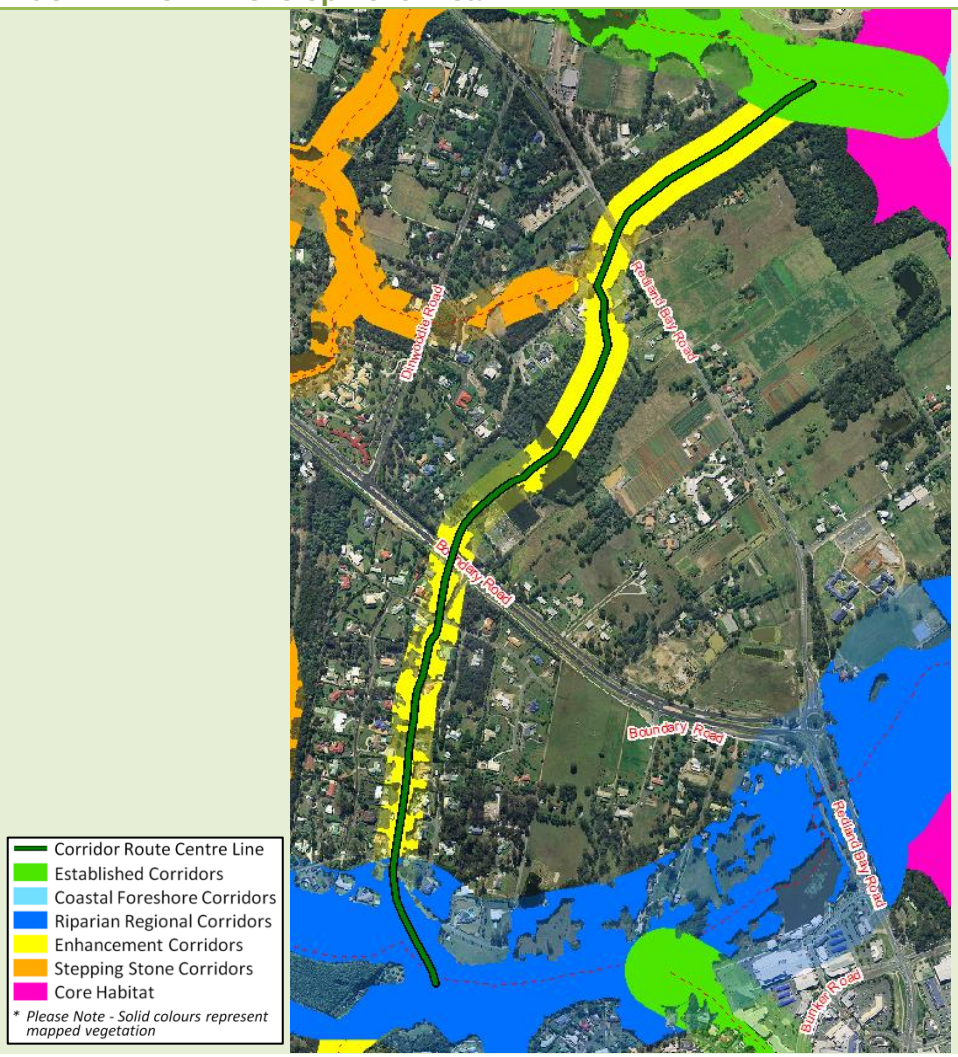
Appendix 7a – Priority Enhancement Corridors in Known Development Areas

Rushwood Creek Corridor to Hilliards Creek – Enhancement Corridor in Known Development Area



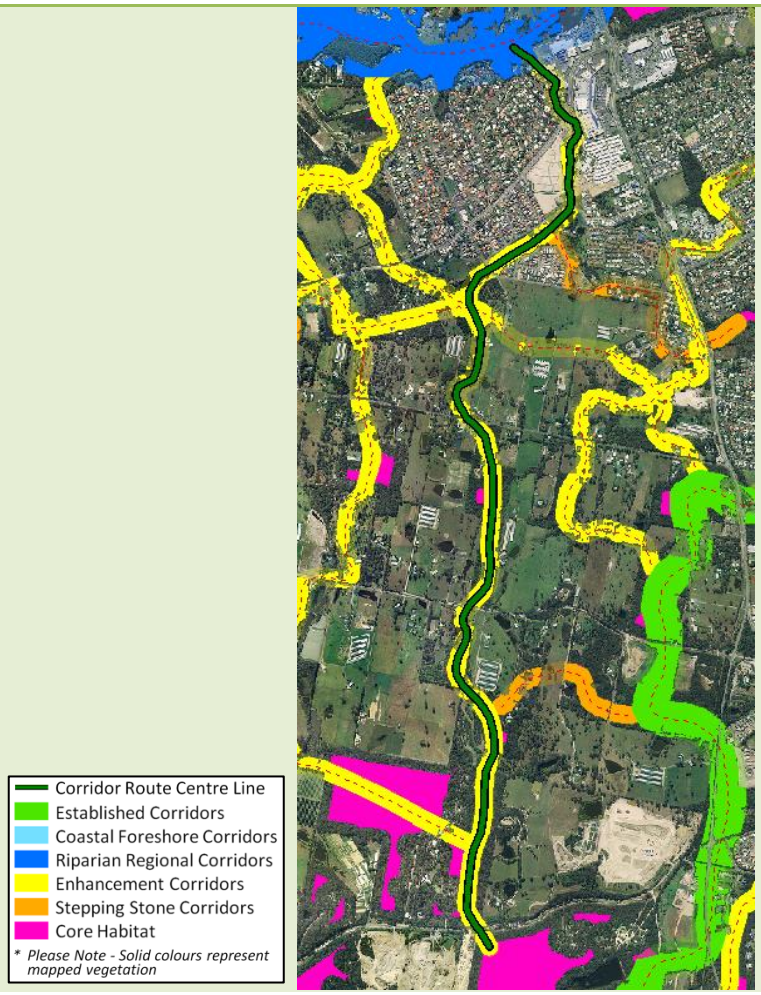
Description	East to west corridor linking Rushwood Creek Corridor to Hilliards Creek, via McBride Circuit Bushland Refuge.
Environmental Values	Linking paperbark riparian coastal vegetation (12.3.6) of Rushwood Creek Corridor to scribbly gum dominated open forest to woodland (12.9-10.4) of Hilliards Creek.
Core Habitat Linkages	Links 2 core habitat linkages. Maximum distance between patches is ≈200m.
Land Uses / Tenure	Primarily Open Space, with Conservation zoned land adjoining Urban Residential development at eastern end. Also situated in close proximity to land zoned as Community Purpose and Medium Residential around halfway point. Located within Kinross Road Local Development Area.
Community Use	Recreational value at Hilliards Creek end.
Threats & Barriers	Potential road strike and barrier at Kinross Road and Wrightson Road crossings. Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Located within Kinross Road Local Development Area.
Gaps & Pinch Points	Gap across cleared land west and east of Kinross Road. Gap immediately west of Lyndhurst Place.
Priority Outcomes	Provide input into planning for known development area. Assessment for road strike at Kinross Road and Wrightson Road crossings. Rehabilitation of gaps west and east of Kinross Road and immediately west of Lyndhurst Place.

Sandalwood Street Creek Corridor to Eprapah Creek Corridor (Luke Street) - Enhancement Corridor in Known Development Area



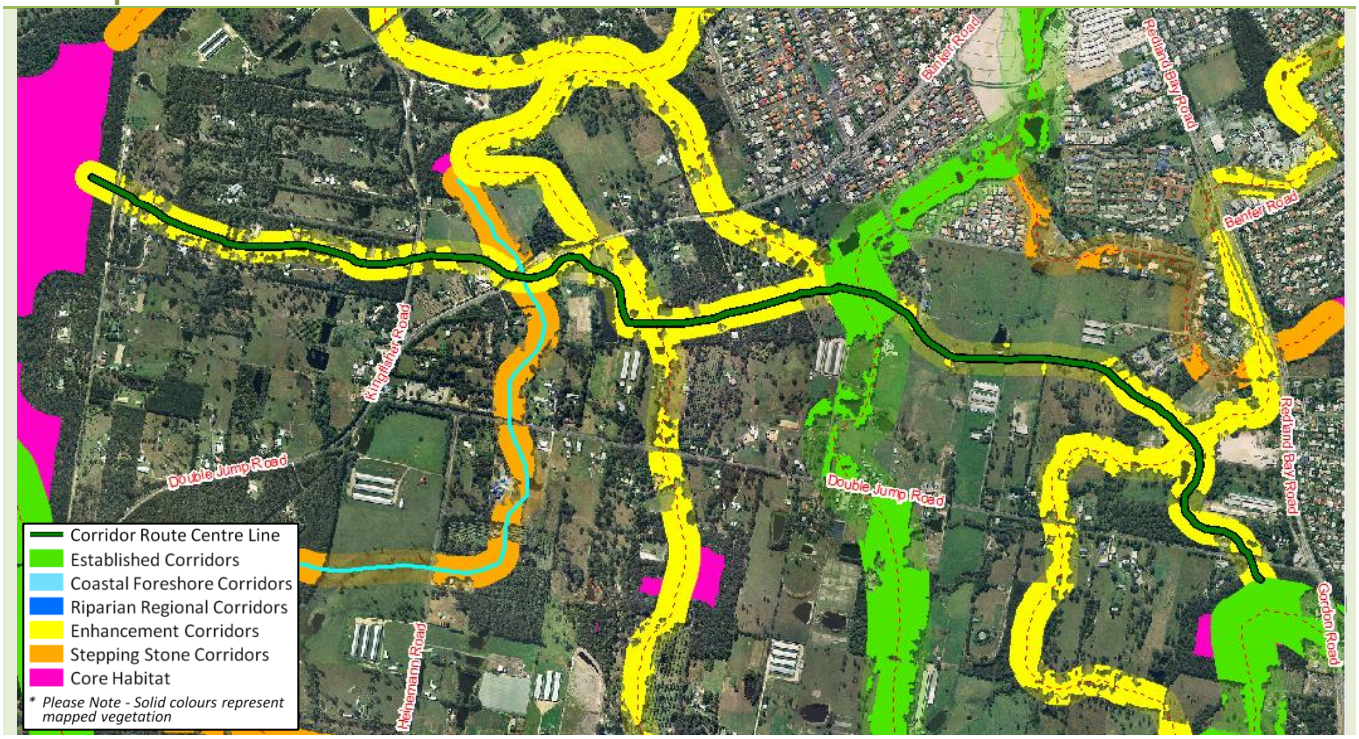
Description	North to south corridor linking Sandalwood Street Creek Corridor to Eprapah Creek Corridor-Luke Street, via Harrington Boulevard Bushland Refuge.
Environmental Values	North section of corridor paperbark riparian vegetation (12.3.6) to blue gum, iron bark, bloodwood riparian vegetation (12.3.11 and 12.5.2) of Eprapah Creek Corridor, via blue gum grassy open forest to woodland (12.5.2) and Scribbly gum woodland (12.5.3). Multiple corridor dependent bird species recorded at north and south sections of corridor. Glossy Black-cockatoo recorded in south section of corridor. Links to High Ecological Values waters under State Environmental Protection (Water) Policy 2009 at northern and southern ends.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Predominately freehold land zoned Park Residential, open Space and Environmental Protection.
Community Use	Recreational waterway and reserve values.
Threats & Barriers	Poor peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Main road crossings (Redland Bay Road, Dinwoodie Road and Boundary Road). Many local road crossings. Located within Kinross Road Local Development Area.
Gaps & Pinch Points	Pinch Points immediately east and west of Boundary Road.
Priority Outcomes	Provide input into planning for known development area. Safe fauna passage across Redland Bay Road, Dinwoodie Road and Boundary Road. Management of impacts from peri-urban area (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Rehabilitation of pinch points immediately east and west of Boundary Road (to create core habitat patch and reduce ≈2000m gap distance between patches).

Eprapah Creek Corridor to Kindilan/Days Road - Enhancement Corridor in Known Development Area



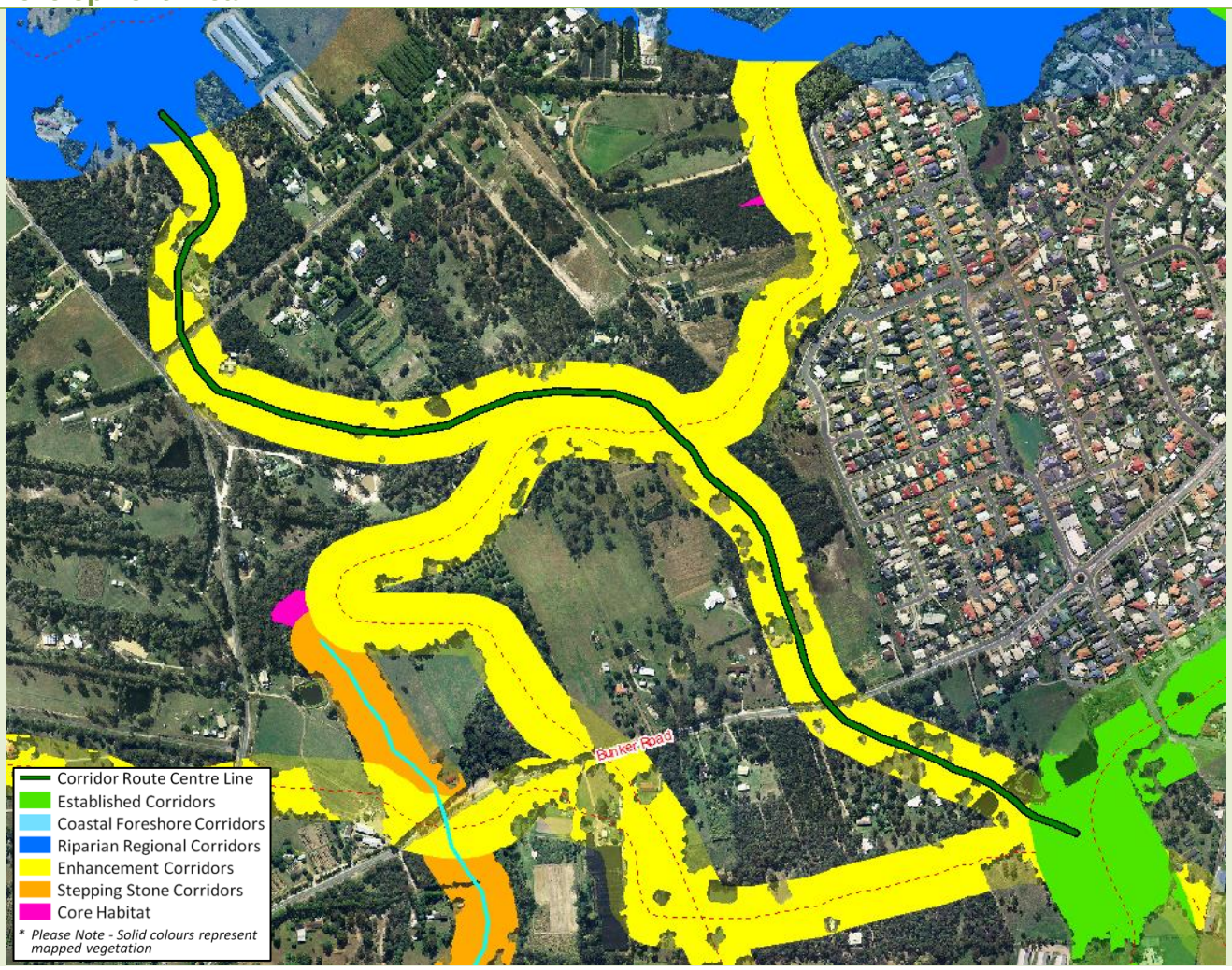
Description	North south corridor linking Eprapah Creek Corridor to Kindilan and Days Road Conservation Area, via Sandy Drive Creek Corridor, Giles Road area and German Church Road Conservation Area.
Environmental Values	Dominated by scribbly gum dominated open forest to woodland (12.9-10.4) in Prospector Crescent Creek Corridor to blackbutt open forest (12.11.23) along the south of the corridor. Multiple corridor and waterway dependent bird species recorded at south end of corridor (including Glossy Black-Cockatoo). Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~5 per cent of corridor length.
Core Habitat Linkages	Links ≈6 core habitat patches. Maximum distance between patches is ≈950m.
Land Uses / Tenure	Trunk of corridor mostly Conservation zoned freehold land adjacent to Rural zoned land.
Community Use	Some recreational values in conservation reserves.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Fauna crossings at Bunker, German Church and Giles Roads. Emerging Urban Community zoned land north of Double Jump Road.
Gaps & Pinch Points	Gaps immediately north and south of Bunker Road. Pinch points on private property immediately north and south of Giles Road and north of Double Jump Road.
Priority Outcomes	Safe fauna passage across German Church and Giles Roads. Rehabilitation of cleared rural areas on private properties north and south of Giles Road. Provide input into planning for Emerging Urban Community zoned land north of Double Jump Road.

Double Jump Road to Sandy Creek Conservation Area – Enhancement Corridor in Known Development Area



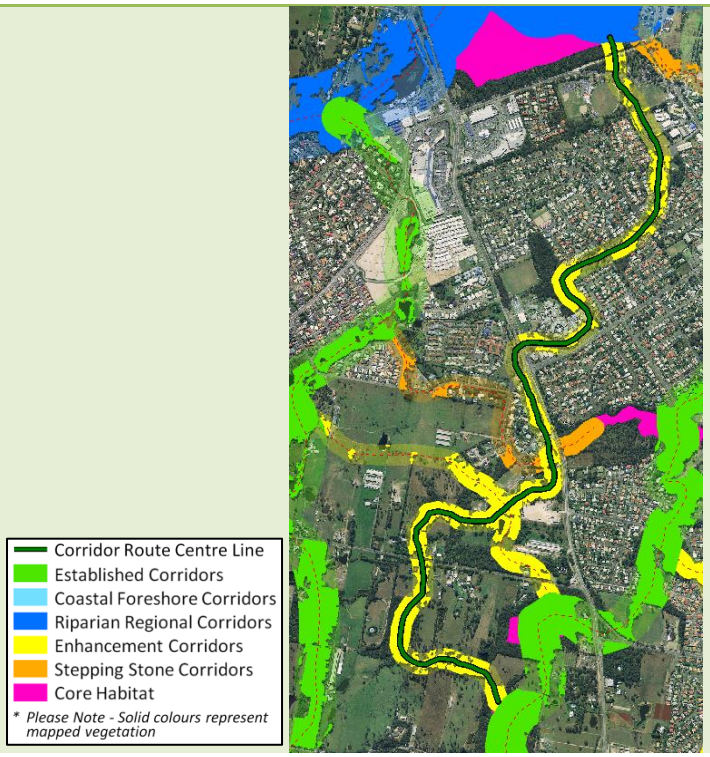
Description	Relatively long west to east corridor linking Sandy Creek Conservation Area to end of Double Jump Road.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Sandy Creek Conservation Area to scribbly gum, half-bark, stringybark woodland (12.12.14) at end of Double Jump Road. Multiple corridor dependent bird species recorded at Double Jump Road at Sandy Creek Conservation Area ends of corridor. Record of Scute-snouted Calyptotis at Sandy Creek Conservation Area. Links to High Ecological Values waters under State Environmental Protection (Water) Policy 2009 at eastern end.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈4,500m.
Land Uses / Tenure	Ends of corridor zoned as Conservation land, with mixed uses throughout trunk comprising Rural Non Urban, Environmental Protection, Emerging Urban Community and Park Residential.
Community Use	Valuable mixed peri-urban conservation, park and recreational area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). High potential road strike and barrier at Kingfisher Road, Bunker Road and Double Jump Road crossings. Emerging Urban Community zoned land north of Double Jump Road.
Gaps & Pinch Points	Pinch point between Warren Street and Kingfisher Road. Gaps immediately east and west of Bunker Road crossing. Gap (≈650m) across Rural Non Urban land west of Hanlin Place.
Priority Outcomes	Safe fauna passage near Estuary Avenue/Bunker Road crossing to complement nearby Eprapah Creek Corridor to German Church Road Conservation Area corridor. Rehabilitation of pinch point between Warren Street and Kingfisher Road. Rehabilitation of gaps between Kingfisher Road and Bunker Road, southwest of Estuary Avenue/Bunker Road crossing and significant gap across Rural Non Urban land west of Hanlin Place. Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, etc). . Provide input into planning for Emerging Urban Community zoned land north of Double Jump Road.

Prospect Crescent Creek Corridor to Eprapah Creek – Enhancement Corridor in Known Development Area



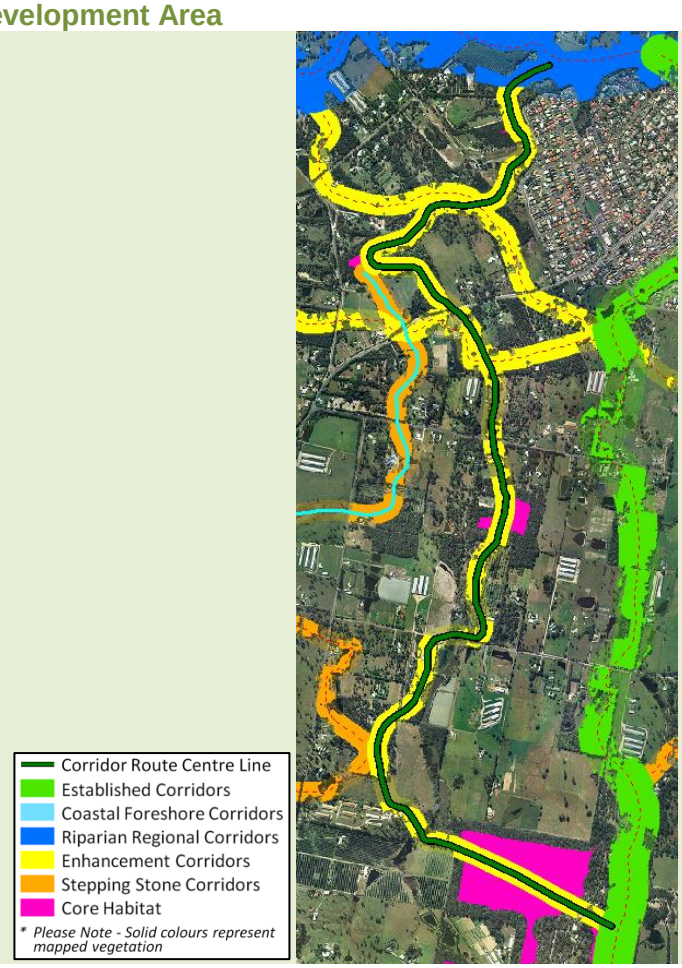
Description	North to south corridor from Worthing Road to Prospect Crescent Creek Corridor, via Eprapah Creek Corridor, Bob & Delphine Douglas Reserve and Bunker Road Bushland Refuge.
Environmental Values	Linking scribbly gum dominated open forest to woodland of Worthing Road (12.9-10.4) to that of Bunker Road Bushland Refuge, via the same of Bob & Delphine Douglas Reserve and Bunker Road Bushland Refuge. Links to High Ecological Values waters under State Environmental Protection (Water) Policy 2009 at northern end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2300m.
Land Uses / Tenure	Trunk primarily Conservation zoned land with some Environmental Protection and southern part zoned as Emerging Urban Community.
Community Use	High value conservation, park and recreational area.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike and barrier at Bunker Road crossing. Emerging Urban Community zoned land south of Bunker Road.
Gaps & Pinch Points	Minor pinch north-east of Kingfisher Road/Worthing Road crossing.
Priority Outcomes	Management of impacts from urban and peri urban area (e.g. garden escapee weeds, domestic animal control, etc). Rehabilitation of minor pinch north-east of Kingfisher Road/Worthing Road crossing. Provide input into planning for Emerging Urban Community zoned land.

Eprapah Creek Corridor to Giles Road Conservation Area – Enhancement Corridor in Known Development Area



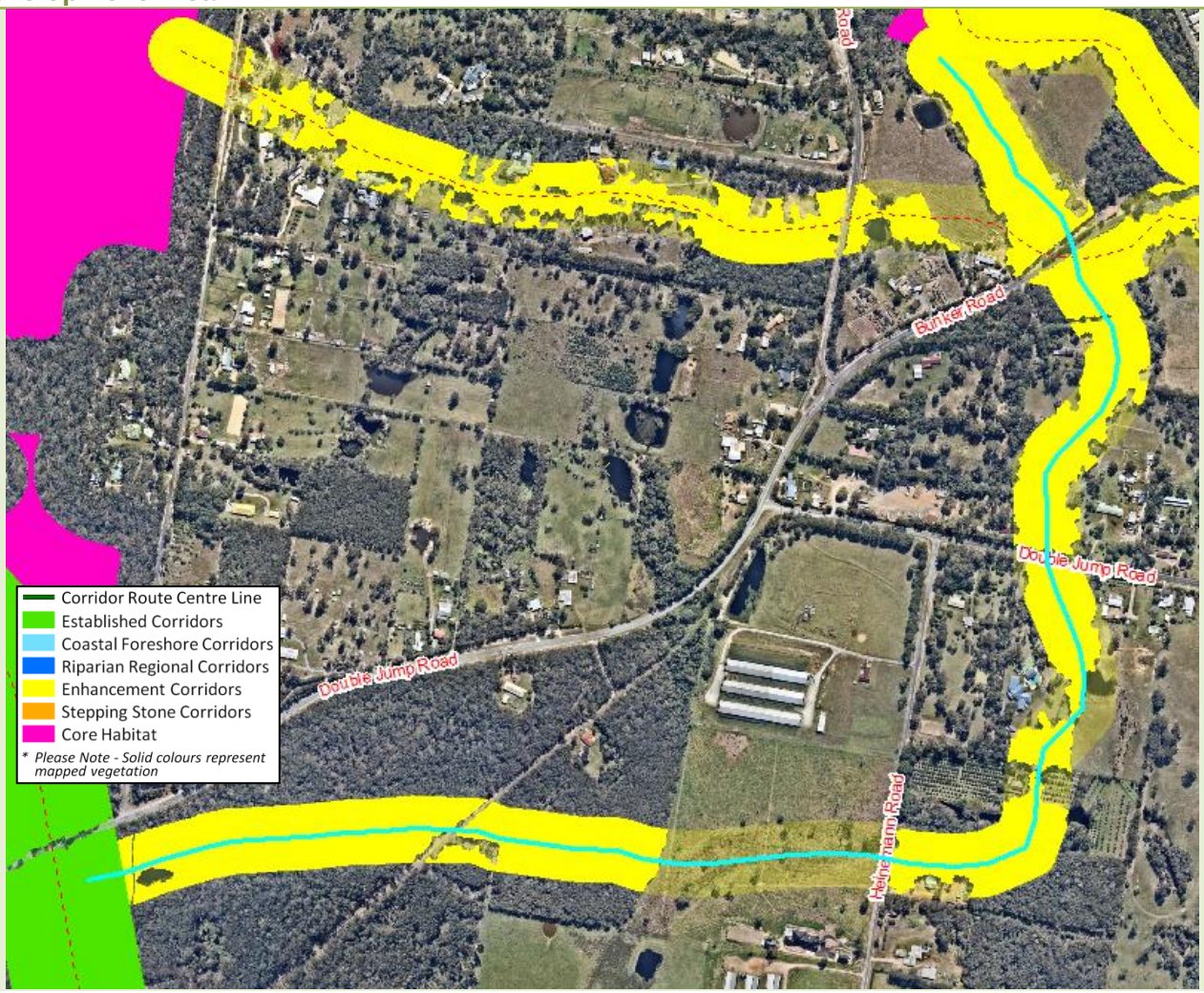
Description	Linking Eprapah Creek Corridor (Eprapah Scouts property) to the Giles Road Conservation Area, via Parklands Courk Refuge, Carnoustie Court Urban Habitat and Jay Crescent Wetlands.
Environmental Values	Linking the riparian blue gum, iron bark, bloodwood open-forest woodland (12.3.11) of Eprapah Scouts to the blackbutt open forest (12.11.23) and spotted gum open forest (12.11.5j) of Giles Road Conservation Area, via paperbark riparian (12.3.6) and scribbly gum dominated open forest (12.9-10.4). Multiple corridor dependent bird species recorded at south end of corridor (between Redland Bay and Double Jump Roads). Multiple corridor and waterway dependent bird species recorded in north of corridor (Eprapah Creek). Numerous koala records in north section of corridor.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈4500m.
Land Uses / Tenure	Northern section trunk of corridor is Conservation, open Space and Community Purposes zoned land surrounded by Urban Residential zoned development. Southern section of corridor is Conservation, Environmental Protection and Rural zoned land.
Community Use	Recreational use of conservation areas. Ern & Alma Dowling memorial park.
Threats & Barriers	Poor urban, peri urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Redland Bay and Double Jump Roads. Emerging Urban Community zoned land.
Gaps & Pinch Points	Southern section of Victoria Point State High School. Area around Redland Bay, Clay Gully and Benfer Roads intersection.
Priority Outcomes	Safe fauna passage across Redland Bay and Double Jump Roads. Management of impacts from urban and peri urban areas (e.g. garden escapee weeds, domestic animal control, etc). Management of impacts from rural land areas (e.g. vegetation management, weed control). Rehabilitation of pinch points at southern section of Victoria Point State High School and around Redland Bay, Clay Gully and Benfer Roads intersection (to create core habitat patch and reduce ≈4500m gap distance between patches). Provide input into planning for Emerging Urban Community zoned land.

Eprapah Creek Corridor to German Church Road Conservation Area - Enhancement Corridor in Known Development Area



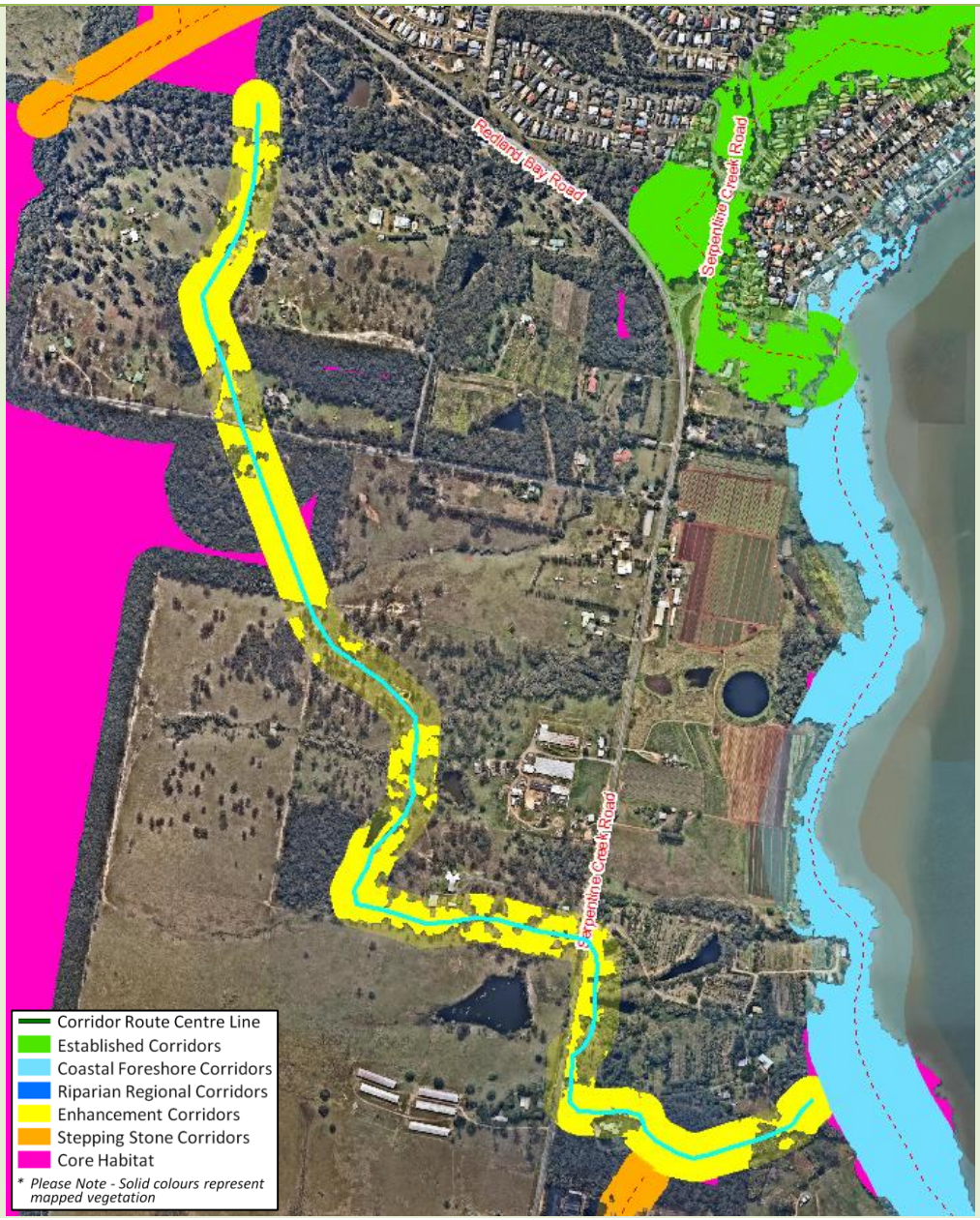
Description	North to south corridor linking Eprapah Creek Corridor to German Church Road Conservation Area, via Bob and Delphine Douglas Reserve, Bunker Road Bushland Refuge.
Environmental Values	Linking riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) in the north of the corridor to scribbly gum dominated open forest to woodland (12.9-10.4) between Double Jump and Giles Roads, to blackbutt open forest (12.11.23) and spotted gum open forest (12.11.5j) of German Church Road Conservation Area. Contains High Ecological Values waters under State Environmental Protection (Water) Policy 2009 covering ~80 per cent of corridor length.
Core Habitat Linkages	Links ≈8 core habitat patches. Maximum distance between patches is ≈1200m.
Land Uses / Tenure	Predominately freehold land zoned Conservation, Environmental Protection and Rural. Adjoins urban development in north section of corridor. South of Bunker Road is rural land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban, peri-urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Bunker, Double Jump and Giles Roads. Emerging Urban Community zoned land between Bunker and Double Jump Roads.
Gaps & Pinch Points	Gaps in private rural land immediately south of Giles Road, east of Heinemann Road, and immediately north of Double Jump Road. Pinch points on private rural land south of Bunker Road, south of Double Jump Road
Priority Outcomes	Safe fauna passage across Bunker, Double Jump and Giles Roads. Management of impacts from urban and peri urban areas (e.g. garden escapee weeds, domestic animal control, etc). Management of impacts from rural land areas (e.g. vegetation management, weed control). Provide input into planning for Emerging Urban Community zoned land between Bunker and Double Jump Road.

Bunker Road to Sandy Creek Conservation Area – Enhancement Corridor in Known Development Area



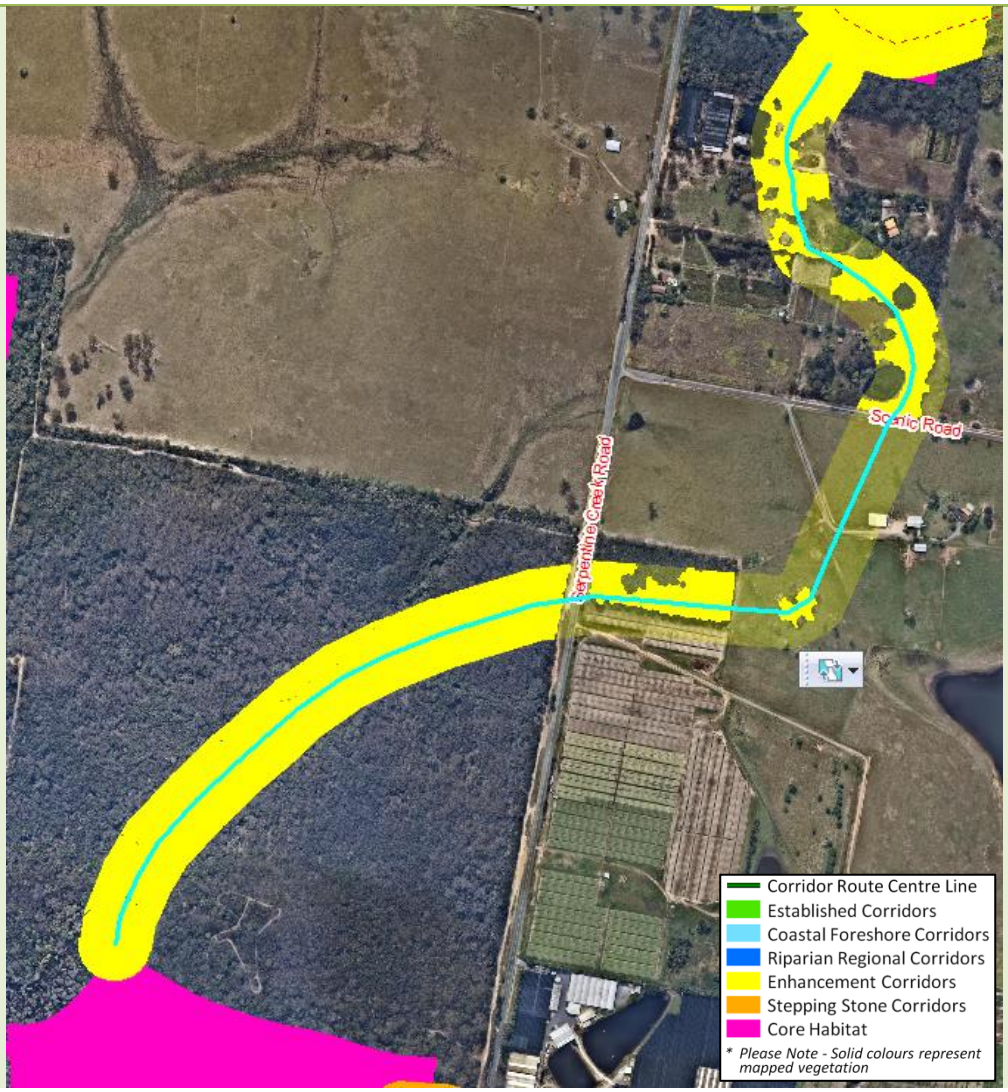
Description	Linking core habitat north of Bunker Road to Sandy Creek Conservation Area.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) to spotted gum core habitat (12.11.5a and 12.11.5k).
Core Habitat Linkages	Links core habitat patches. Maximum distance between patches is ≈2600m.
Land Uses / Tenure	Trunk of corridor predominately Conservation and Environmental Protection zoned land, surrounded by Rural zoned land.
Community Use	Recreational use of Sandy Creek Conservation Area.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Bunker, Double Jump and Heinemann Roads. Emerging Urban Community zoned land between Bunker and Double Jump Roads.
Gaps & Pinch Points	Pinch points immediately west of Heinemann Road, and south of Double Jump Road.
Priority Outcomes	Safe fauna passage across Bunker, Double Jump and Heinemann Roads. Rehabilitation of corridor immediately west of Heinemann Road, and south of Double Jump Road. Provide input into planning for Emerging Urban Community zoned land between Bunker and Double Jump Road.

Kidd Street Conservation Area to Coastal Foreshore – Enhancement Corridor in Known Development Area



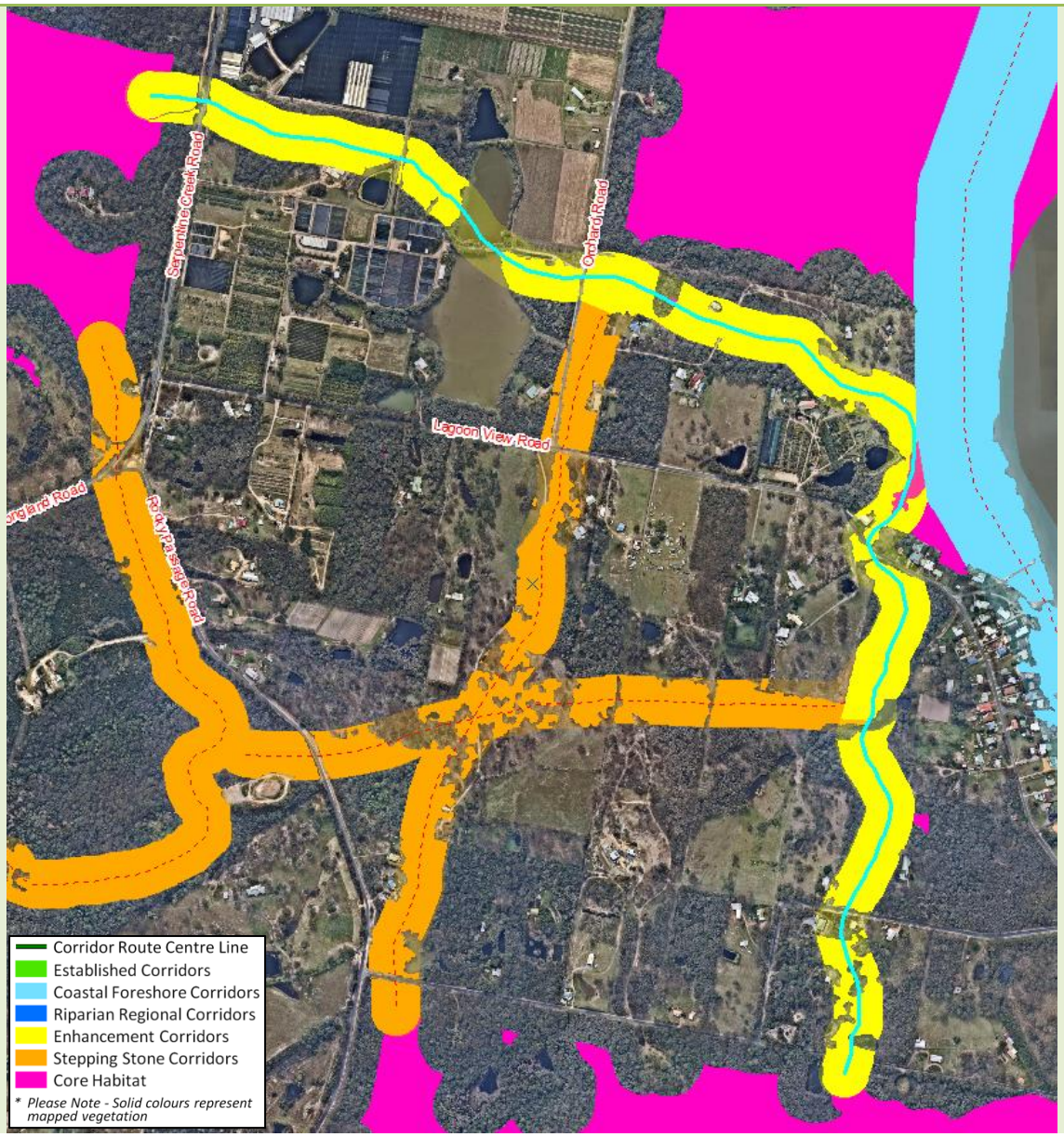
Description	Linking Kidd Street Conservation Area with Coastal Foreshore
Environmental Values	Linking coastal vegetation (12.1.2 saltpan and 12.1.3 mangrove) to blackbutt forests (12.11.23) of Kidd Street Conservation Area.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈1400m.
Land Uses / Tenure	Conservation, Environmental Protection and Rural zoned freehold land in the north west section of the corridor, and Investigation Zoned land (currently rural land uses) in the south east section of the corridor.
Community Use	Recreational use of coastal areas and in the Kidd Street Conservation Area.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Serpentine Creek Road. Development potential in Investigation Zone.
Gaps & Pinch Points	Pinch points along mid and north sections of corridor and section running parallel to Serpentine Creek Road.
Priority Outcomes	Safe fauna passage across Serpentine Creek Road. Rehabilitation along mid and north sections of corridor and section running parallel to Serpentine Creek Road (to create core habitat patch and reduce ≈1400m gap distance between patches). Provide input into planning for Investigation Zone.

Scenic Road to Serpentine Creek Conservation Area – Enhancement Corridor in Known Development Area



Description	North to south-west linkage of Scenic Road to Serpentine Creek Conservation Area, via Serpentine Creek Road Historic Cemetery.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5.j) to that of Serpentine Creek Conservation Area.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Vegetation south-west of Serpentine Creek Road/Unnamed Road crossing zoned as Conservation, with northern, north-eastern and eastern blocks of Serpentine Creek Road/Unnamed Road zoned as Investigation Zone.
Community Use	Some value for recreational use of conservation areas and community value of Serpentine Creek Road Historic Cemetery.
Threats & Barriers	Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing). Development potential in Investigation Zone.
Gaps & Pinch Points	Significant gap across Investigation Zone zoned land immediately north and south of Scenic Road.
Priority Outcomes	Provide input for planning of the development investigation area (Investigation Zone) immediately north and south of Scenic Road.

Zipfs Road to Serpentine Creek Road – Enhancement Corridor in Known Development Area



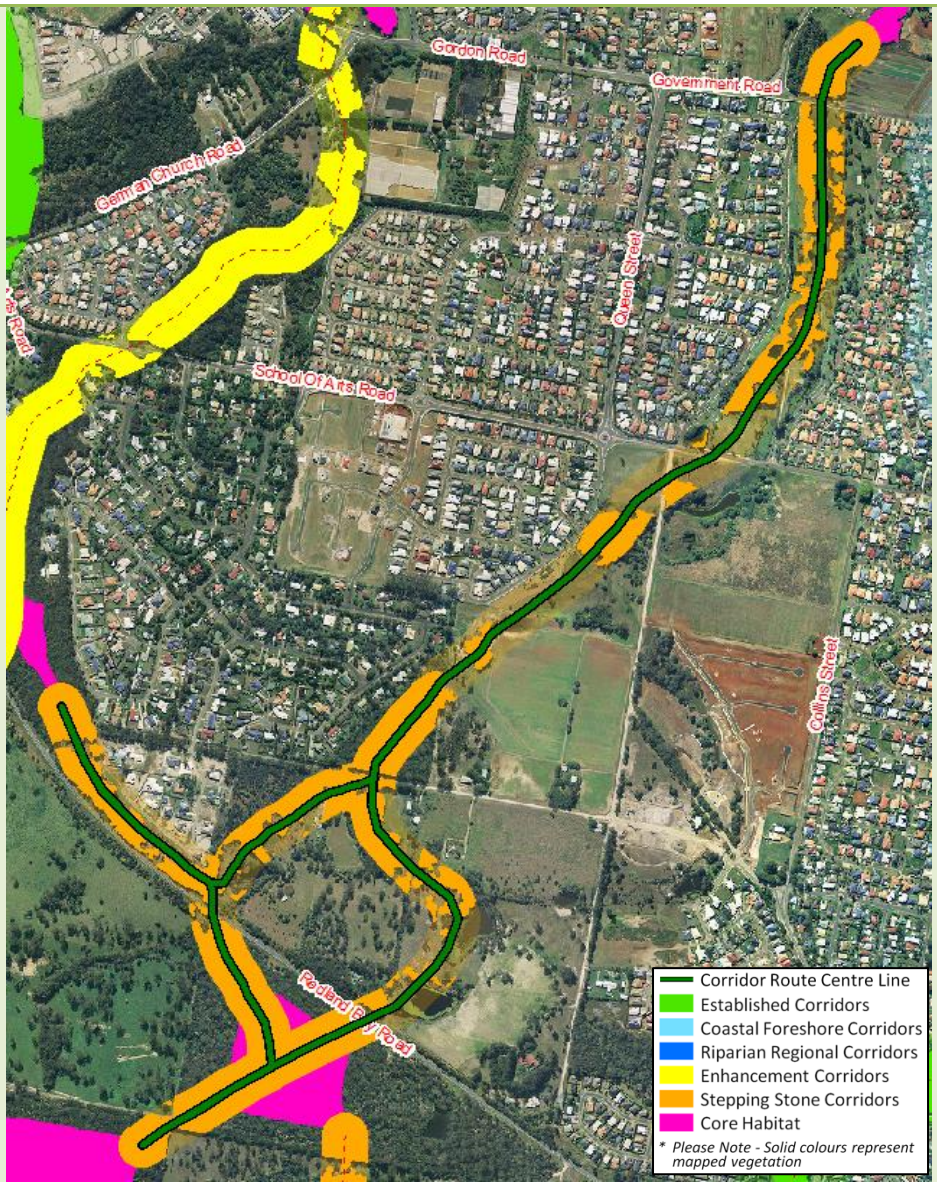
Description	Linking wetland on Zipfs Road to Serpentine Creek Road (and Serpentine Creek Conservation Area).
Environmental Values	Linking coastal vegetation (12.1.2 saltpan and 12.1.3 mangrove) to spotted gum open forest (12.11.5j). Multiple corridor dependent bird species recorded at north end of corridor.
Core Habitat Linkages	Links ≈7 core habitat patches. Maximum distance between patches is ≈650m.
Land Uses / Tenure	Conservation and Environmental Protection zoned freehold land, adjacent to Rural zoned land.
Community Use	Recreational use of coastal wetland area.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Serpentine Creek, Orchard, Wallaby and Zipfs Roads. Development potential in Investigation Zone.
Gaps & Pinch Points	Pinch point between Serpentine Creek and Orchard Roads.
Priority Outcomes	Safe fauna passage across Serpentine Creek Road. Rehabilitation of corridor buffer areas between Serpentine Creek and Orchard Roads. Provide input for planning of the development investigation area.

Appendix 8 – Priority Stepping Stone Corridors

Mount Cotton Road to Sanctuary Drive Bushland Refuge – Stepping Stone Corridor

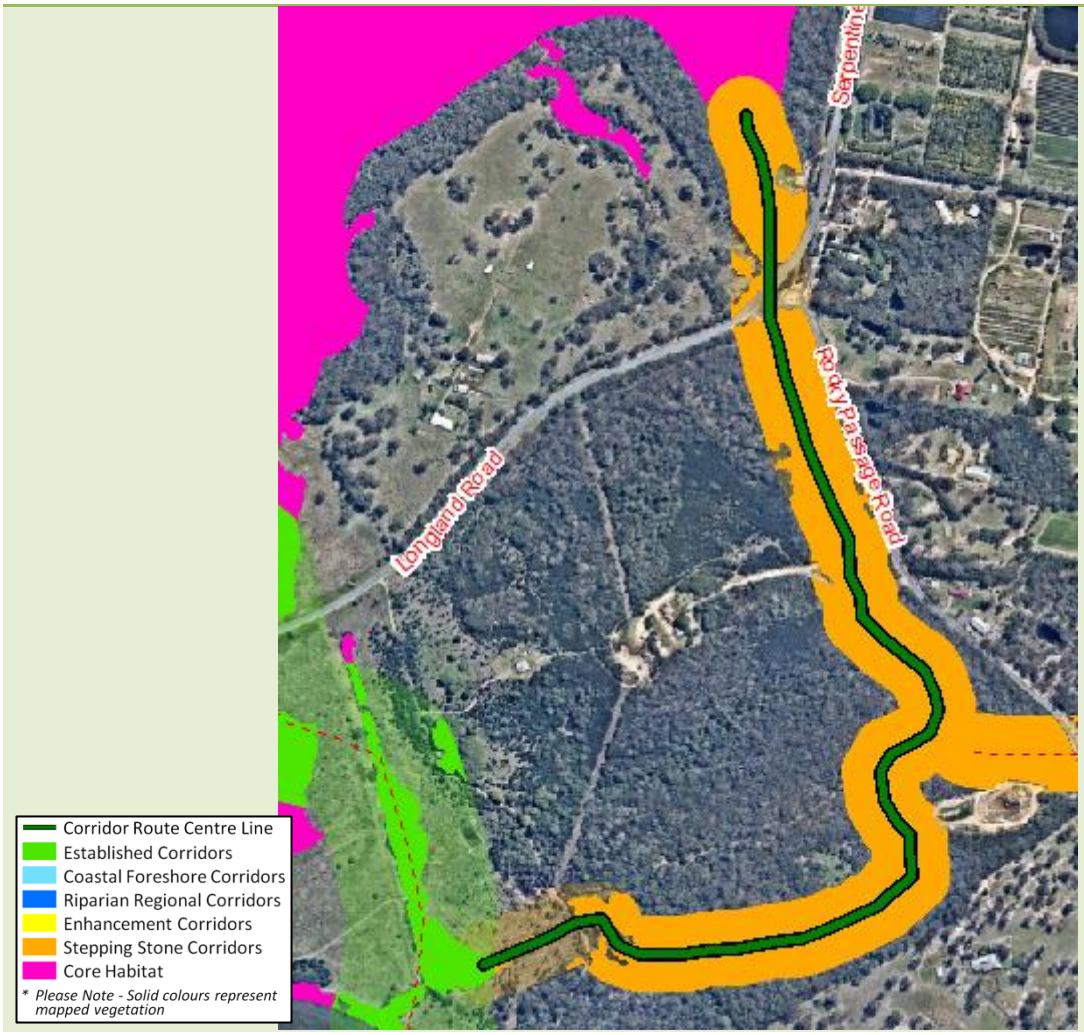
Description	Linking bushland west of Mount Cotton Road with Sanctuary Drive Bushland Refuge, via the Homestead Place Wetlands.
Environmental Values	Linking spotted gum core habitat (12.11.5a) adjacent to Mount Cotton Road to blackbutt forests (12.11.23) of Sanctuary Drive Bushland. Corridor dependent species recorded in wester section of corridor, including multiple bird species, Red-necked Wallaby, Northern Brown Bandicoot and Scute-snouted Calyptotis. Sugar Glider recorded at eastern end of corridor.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈850m.
Land Uses / Tenure	Conservation and Rural zoned freehold land in the west section of the corridor, and Park Residential zoned land in the east section of the corridor. Council reserve at Homestead Place Wetlands, and strip of Community Purposes zoned land in centre of corridor.
Community Use	Recreational use of conservation areas.
Threats & Barriers	Poor peri urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion). Fauna crossing at Mount Cotton Road. Development potential in Community zoned land.
Gaps & Pinch Points	Pinch points in rural land in the west section of the corridor, and Park Residential zoned land in the east section of the corridor.
Priority Outcomes	Safe fauna passage across Mount Cotton Road. Rehabilitation of corridor in rural land in the west section of the corridor, and Park Residential zoned land in the east section of the corridor. Provide input into planning for Community Purposes zoned land.

Weinam Creek Corridor to Days Road Conservation Area – Stepping Stone Corridor



Description	Linking Weinam Creek Corridor to Days Road Conservation Area
Environmental Values	Linking paperbark riparian vegetation (12.3.6) and pink bloodwood/blue gum open forest to mixed spotted gum open forest (12.11.5j) and blackbutt open forest (12.11.23). Flying fox roost sites at Meissner Street and Orchard Beach Wetlands. Multiple corridor and waterway dependent bird species recorded in north and centre sections of corridor.
Core Habitat Linkages	Links ≈3 core habitat patches. Maximum distance between patches is ≈1850m.
Land Uses / Tenure	Trunk of corridor council owned open Space zoned land, surrounded by Urban Residential development.
Community Use	Recreational use of waterway areas.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Redland Bay, Moores and School of Arts Roads.
Gaps & Pinch Points	Gaps north and south of School of Arts Road.
Priority Outcomes	Safe fauna passage across Redland Bay, Moores and School of Arts Roads. Management of impacts from urban and peri urban areas (e.g. garden escapee weeds, domestic animal control, etc.). Rehabilitation of corridor north and south of School of Arts Road (to create core habitat patch and reduce ≈1850m gap distance between patches).

Logan River to Native Dog Road – Stepping Stone Corridor



Description	Linking Logan River to Native Dog Road (and Serpentine Creek Conservation Area), via Rocky Passage Road Bushland Refuge.
Environmental Values	Linking riparian vegetation (12.1.3) of Logan River to spotted gum open forest (12.11.5j) along Native Dog Creek and Rocky Passage Roads. Aquatic species values in upper Moogurrapum Creek. Multiple corridor dependent bird species recorded at south end of corridor.
Core Habitat Linkages	Links ≈5 core habitat patches. Maximum distance between patches is ≈800m.
Land Uses / Tenure	Predominately Conservation and Environmental Protection zoned freehold land.
Community Use	Logan River waterway recreation. Recreation values of Rocky Passage Road Bushland Refuge.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Serpentine Creek and Longland Roads.
Gaps & Pinch Points	Pinch point where corridor joins Logan River.
Priority Outcomes	Safe fauna passage across Serpentine Creek and Longland Roads. Rehabilitation of cleared rural areas on private properties where corridor joins Logan River.

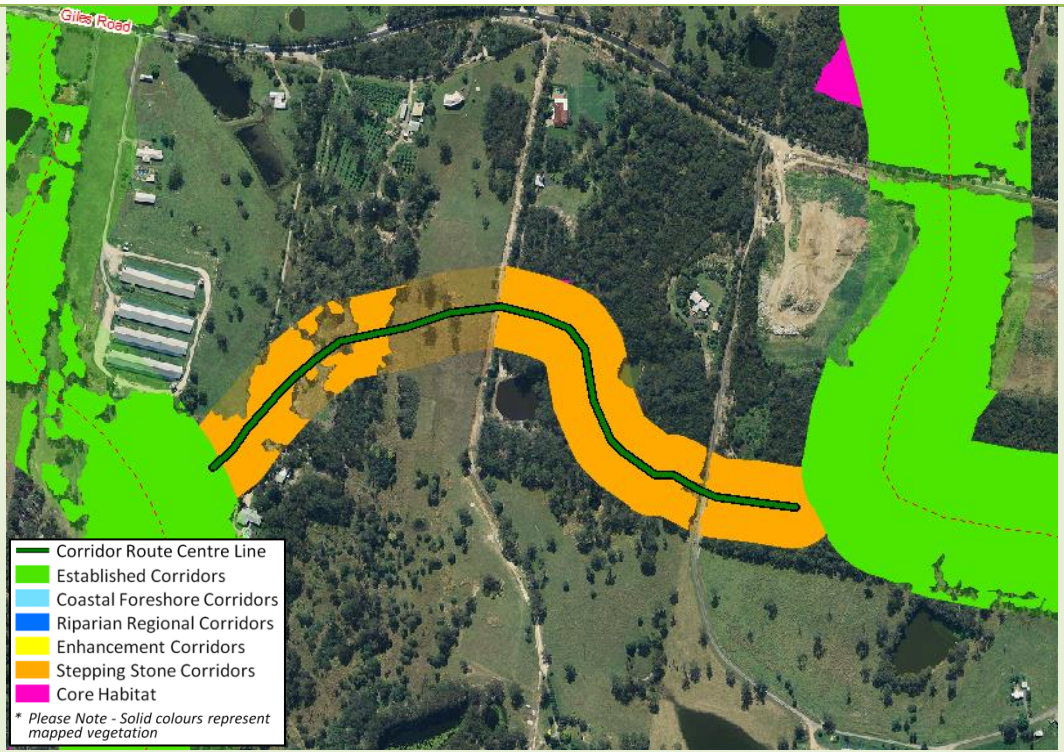
Orchard Road to Zipfs Road – Stepping Stone Corridor

Description	North to south, linking Orchard Road to Zipfs Road.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5j) of Orchard Road to that of Zipfs Road.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Trunk comprised of Conservation and Environmental Protection zoned land, with some adjacent Rural Non Urban land.
Community Use	No identified community use in along corridor itself, although recreational value of Lagoon View Road Bushland Refuge west of corridor.
Threats & Barriers	Poor rural and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing).
Gaps & Pinch Points	Pinch point immediately south of Lagoon View Road and patchiness around halfway point of trunk at intersection with Muriel Street-Rocky Passage corridor.
Priority Outcomes	Rehabilitation of corridor buffer immediately south of Lagoon View Road and patchiness around halfway point of trunk at intersection with Muriel Street-Rocky Passage corridor.

Muriel Street to Rocky Passage Road Bushland Refuge – Stepping Stone Corridor

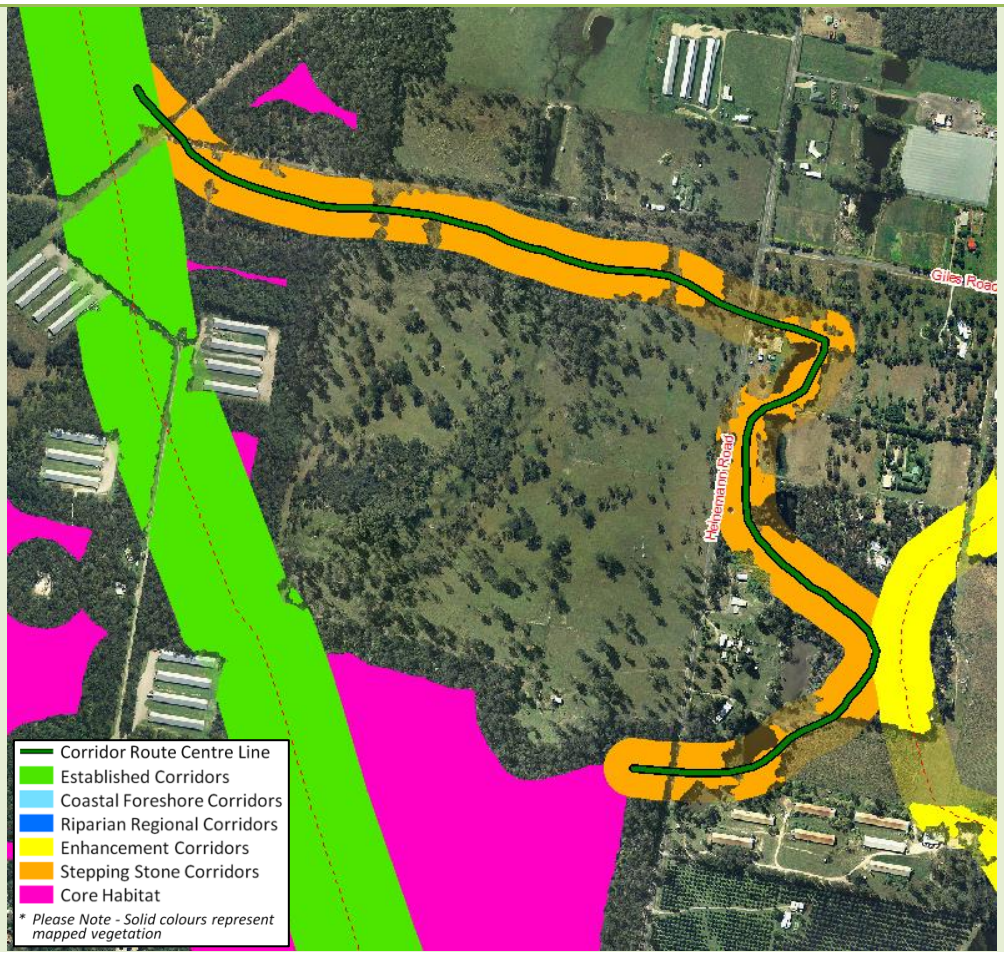
Description	West to east linkage of Rocky Passage Road Bushland Refuge to Muriel Street.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5j) of Rocky Passage Road Bushland Refuge to paperbark riparian coastal vegetation (12.3.6) of Muriel Street.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈1400m.
Land Uses / Tenure	Conservation and Environmental Protection zoned land, with nearby Rural Non Urban land.
Community Use	Some value for recreational use of conservation areas.
Threats & Barriers	Poor peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance and vehicles).
Gaps & Pinch Points	Pinch point at eastern end of trunk and patchiness around intersection Orchard-Zipfs Road corridor.
Priority Outcomes	Rehabilitation of pinch point at eastern end of trunk and patchiness around intersection Orchard-Zipfs Road corridor.

Giles Road Conservation Area to Giles Road – Stepping Stone Corridor



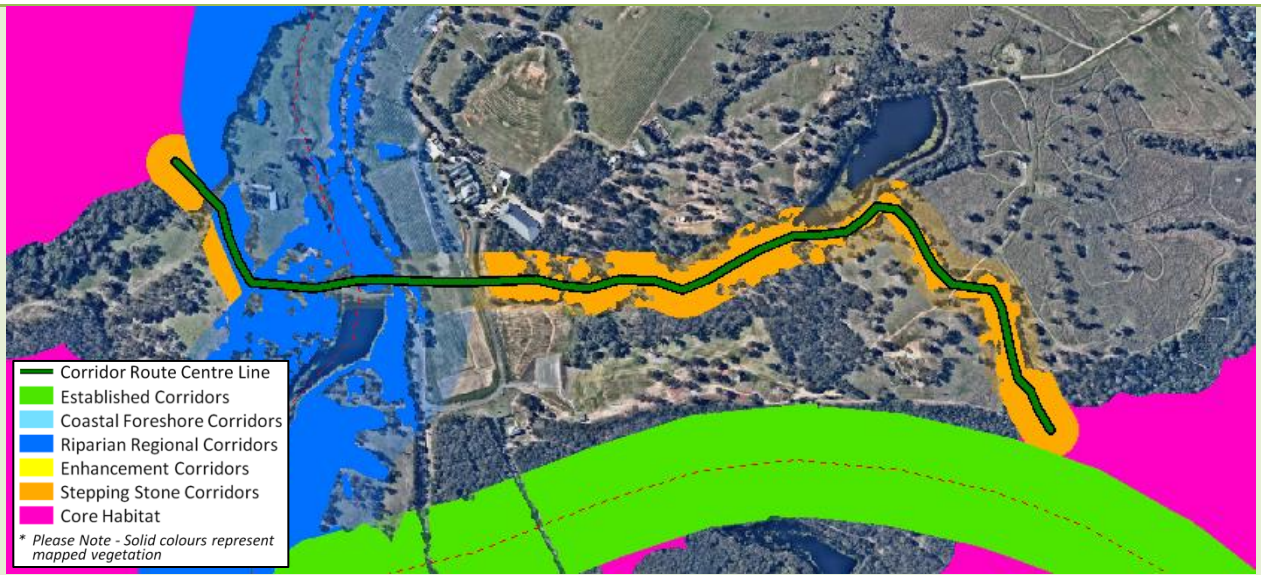
Description	East to west linkage of Giles Road Conservation to Giles Road.
Environmental Values	Linking blackbutt open forest/open spotted gum dominated forest complex (12.11.23/12.11.5j) of south of Giles Road to open spotted gum dominated forest complex of Giles Road Conservation Area.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈950m.
Land Uses / Tenure	Primarily Conservation zoned land with relatively large cleared area zoned as Rural Non Urban land.
Community Use	Recreational use of Giles Road Conservation Area.
Threats & Barriers	Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing).
Gaps & Pinch Points	Gap across cleared Rural Non Urban zoned land.
Priority Outcomes	Rehabilitation of gap across cleared Rural Non Urban zoned land.

Heinemann Road Crossing – Stepping Stone Corridor



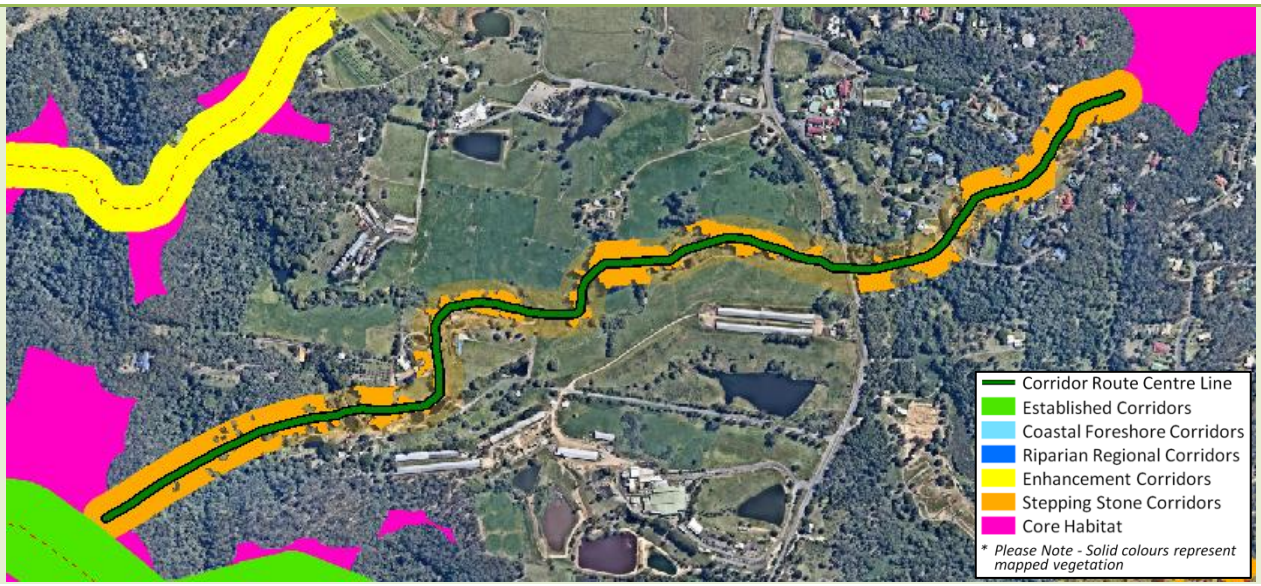
Description	North-west to east and south corridor directly west of Giles Road to south along Heinemann Road.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5a/12.11.5k) west of Giles Road to blackbutt open forest/open spotted gum dominated forest complex (12.11.23/12.11.5j) of Heinemann Road.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈2500m.
Land Uses / Tenure	Ends and east-west Giles Road part of trunk zoned as Conservation land, with rest zoned as Rural Non Urban with some open Space east of Heinemann Road.
Community Use	Some value for recreational use of conservation areas.
Threats & Barriers	Barrier and potential road strike along Heinemann Road crossings (2). Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing).
Gaps & Pinch Points	Gaps and pinch points along eastern side of Heinemann Road.
Priority Outcomes	Rehabilitation of vegetation across Rural Non Urban land west of Heinemann Road to avoid Heinemann Road crossings and minimise potential road strike.

Sandy Creek Conservation Area to Eastern Escarpment Conservation Area – Stepping Stone Corridor



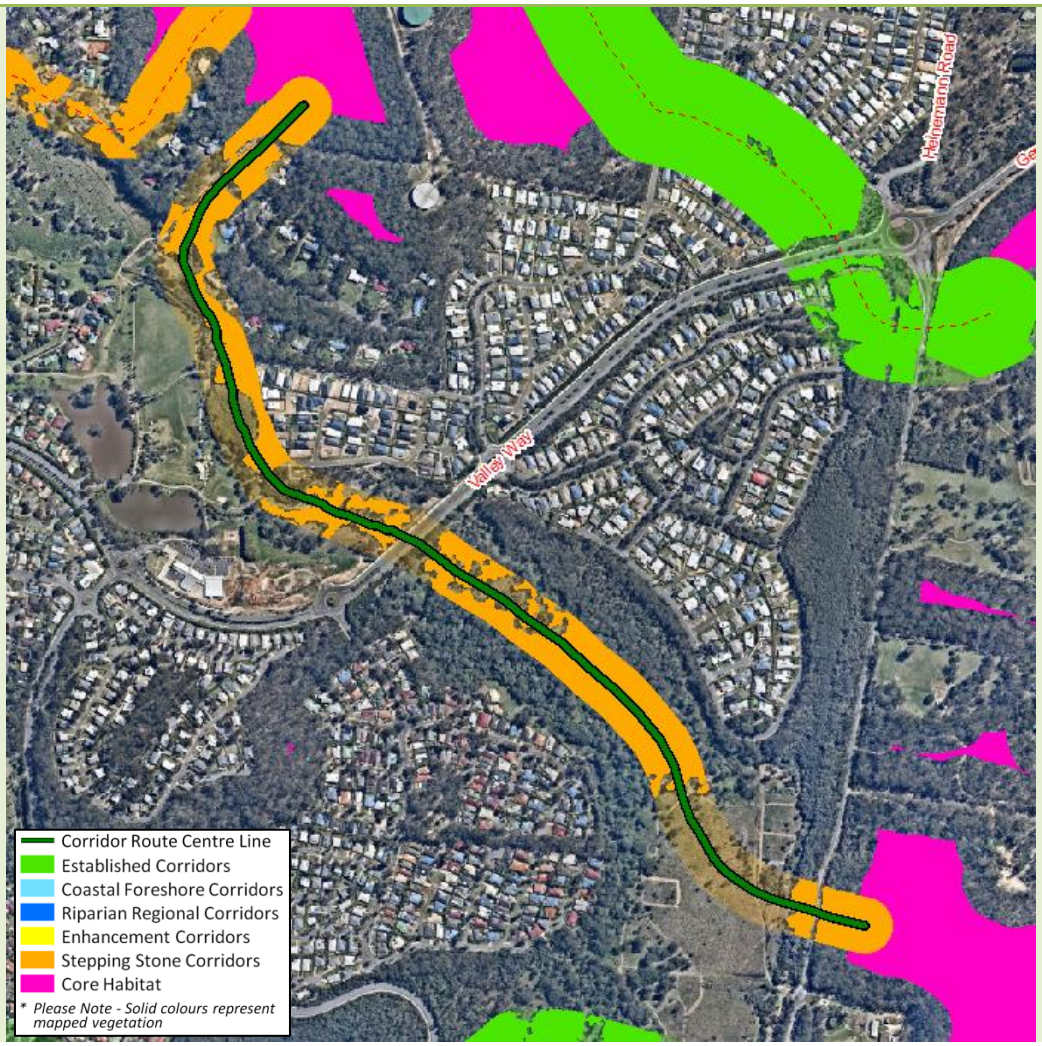
Description	Linking Sandy Creek Conservation Area to Eastern Escarpment Conservation Area across Mount Cotton Road.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5a/12.11.5k) of Sandy Creek Conservation Area to riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) of the Eastern Escarpment Conservation Area.
Core Habitat Linkages	Links 5 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Ends zoned as Conservation land, with trunk and surroundings a mix of open Space and Rural Non Urban.
Community Use	Recreational use of reserves.
Threats & Barriers	Barrier and road strike presented by Mount Cotton Road crossing. Poor rural and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing).
Gaps & Pinch Points	Gap immediately east of Mount Cotton Road crossing.
Priority Outcomes	Rehabilitation of corridor buffer area at eastern and western quarters of corridor and immediately east of Mount Cotton Road crossing. Assessment for potential road strike and safe fauna passage across Mount Cotton Road.

Sanctuary Drive Bushland Refuge to Mount Cotton – Stepping Stone Corridor



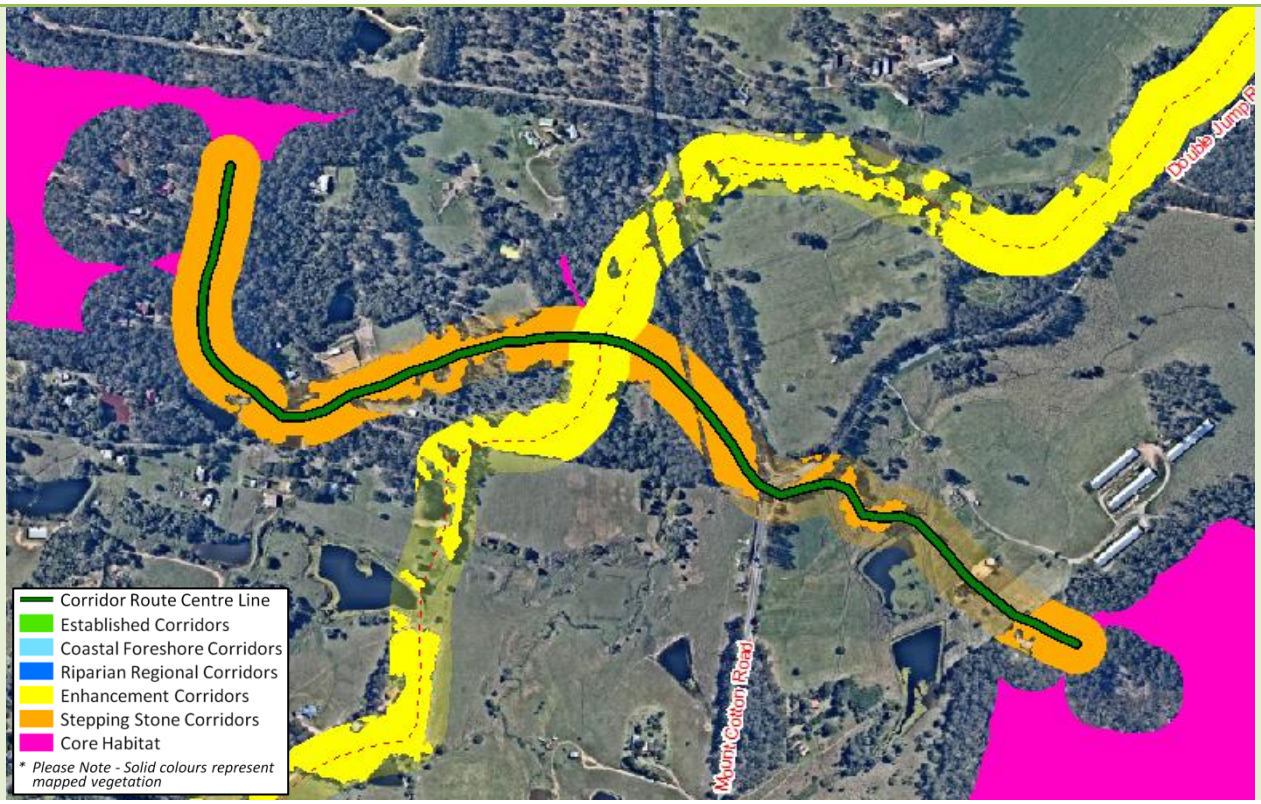
Description	East to west corridor linking Sanctuary Drive Bushland Refuge to Mount cotton.
Environmental Values	Linking open-forest with grey ironbark and small-fruited grey gum (12.11.3) of Sanctuary Drive Bushland Refuge to open spotted gum dominated forest complex (12.11.5a) of Mount Cotton.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2700m.
Land Uses / Tenure	Ends zoned as Conservation land, with trunk a mix of uses zoned as Park Residential, Rural Non Urban, Environmental Protection and Conservation.
Community Use	Recreational use of conservation areas.
Threats & Barriers	Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing). Potential road strike at Mount Cotton Road.
Gaps & Pinch Points	Gaps and pinches through part of corridor bound by Rural Non Urban zoned land, immediately west of Mount Cotton Road and past Hillview Road.
Priority Outcomes	Rehabilitation of corridor buffer across land immediately west of Mount Cotton Road crossing. Assessment for potential road strike and safe fauna passage across Mount Cotton.

Sanctuary Drive to Bushland Bayview Conservation Park – Stepping Stone Corridor



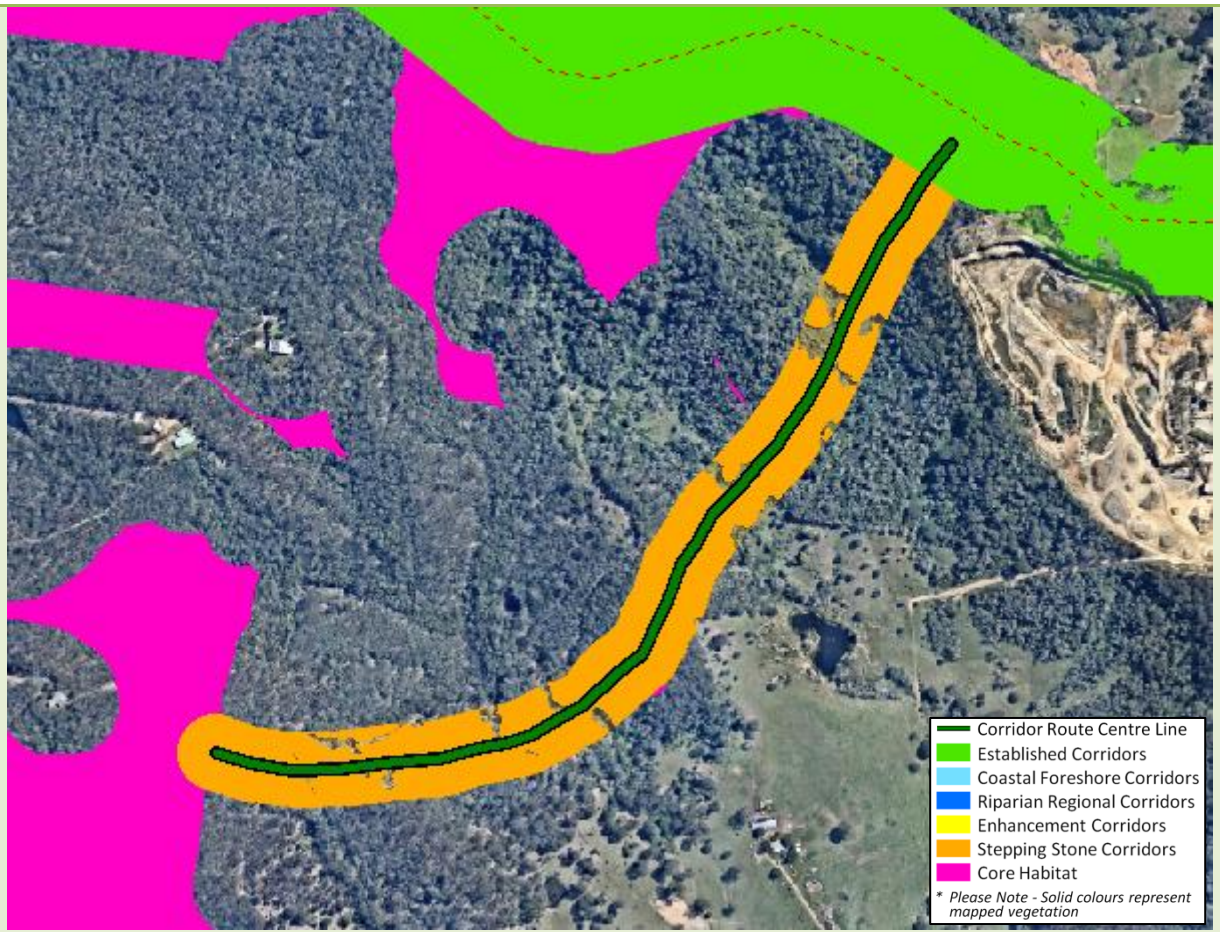
Description	North to south-east corridor linking Sanctuary Drive to Bushland Bayview Conservation Park, via Sarsenet Circuit Bushland Refuge and German Church Road Wetlands.
Environmental Values	Linking blackbutt open forest/open spotted gum dominated forest complex (12.11.23/12.11.5j) of Sanctuary Drive to blackbutt open forest/open spotted gum dominated forest complex (12.11.23/12.11.5j/12.11.5h) of Bushland Bayview Conservation Park, via blackbutt open forest/open spotted gum dominated forest complex (12.11.23/12.11.5j) of Sarsenet Circuit Bushland Refuge and paperbark riparian coastal vegetation (12.3.6) of German Church Road Wetlands.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2100m.
Land Uses / Tenure	Primarily Conservation zoned land, with some of trunk a mix of open Space and Park Residential. Trunk also neighbours areas of Urban Residential development.
Community Use	Recreational use of conservation areas and parks.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential barrier and road strike at Valley Way and German Church Road crossings.
Gaps & Pinch Points	Pinch points on north-western side of Valley Way and significant gap immediately west of German Church Road.
Priority Outcomes	Rehabilitation of pinches north-west of Valley Way and gap immediately west of German Church Road. Assessment for potential road strike and safe fauna passage across Mount Cotton.

Double Jump Road to Mount View Road – Stepping Stone Corridor



Description	Linking south-west Double Jump Road to north of Mount View Road.
Environmental Values	Linking open spotted gum dominated forest complex/blackbutt open forest/open spotted gum dominated forest complex (12.11.5a/12.11.23a/12.11.5k) south-east of Double Jump Road to open spotted gum dominated forest complex (12.11.5a) of Mount View Road.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Primarily Conservation zoned land, with some Rural Non Urban along parts of trunk.
Community Use	Some value for recreational use of conservation areas.
Threats & Barriers	Barrier and potential road strike at Mount Cotton Road/Krause Road/Double Jump Road crossing. Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing).
Gaps & Pinch Points	Pinch points east of Mount Cotton Road.
Priority Outcomes	Rehabilitation of pinch points east of Mount Cotton Road.

Mount Cotton Road to West Mount Cotton Road – Stepping Stone Corridor

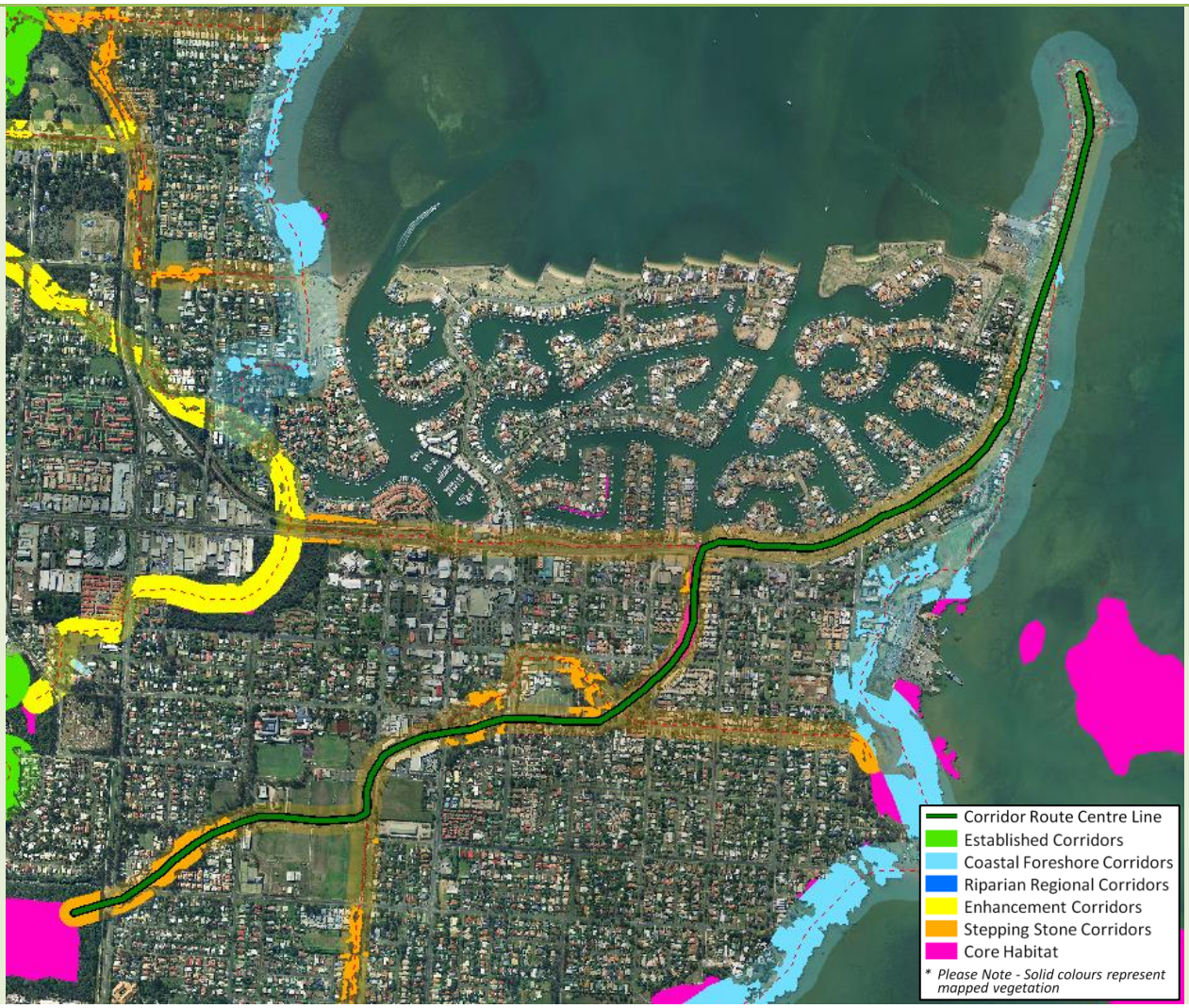


Description	North-east to south-west corridor linking west of Mount Cotton Road to east of West Mount Cotton Road.
Environmental Values	Linking open spotted gum dominated forest complex (12.11.5a) west of Mount Cotton Road to that of east of West Mount Cotton Road. Multiple corridor dependent bird species recorded near halfway point of corridor.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1,300m.
Land Uses / Tenure	Entire area a mix of land zoned as Rural Non Urban and Conservation.
Community Use	Some value for recreational use of conservation areas.
Threats & Barriers	Poor rural and peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, vehicles, grazing pressure, vegetation clearing)..
Gaps & Pinch Points	Potential gap and pinch point just north of halfway along trunk.
Priority Outcomes	Rehabilitation of vegetation in along Rural Non Urban zoned area of corridor.

Pinklands Bushland Refuge to Dicameron Court Corridor – Stepping Stone Corridor

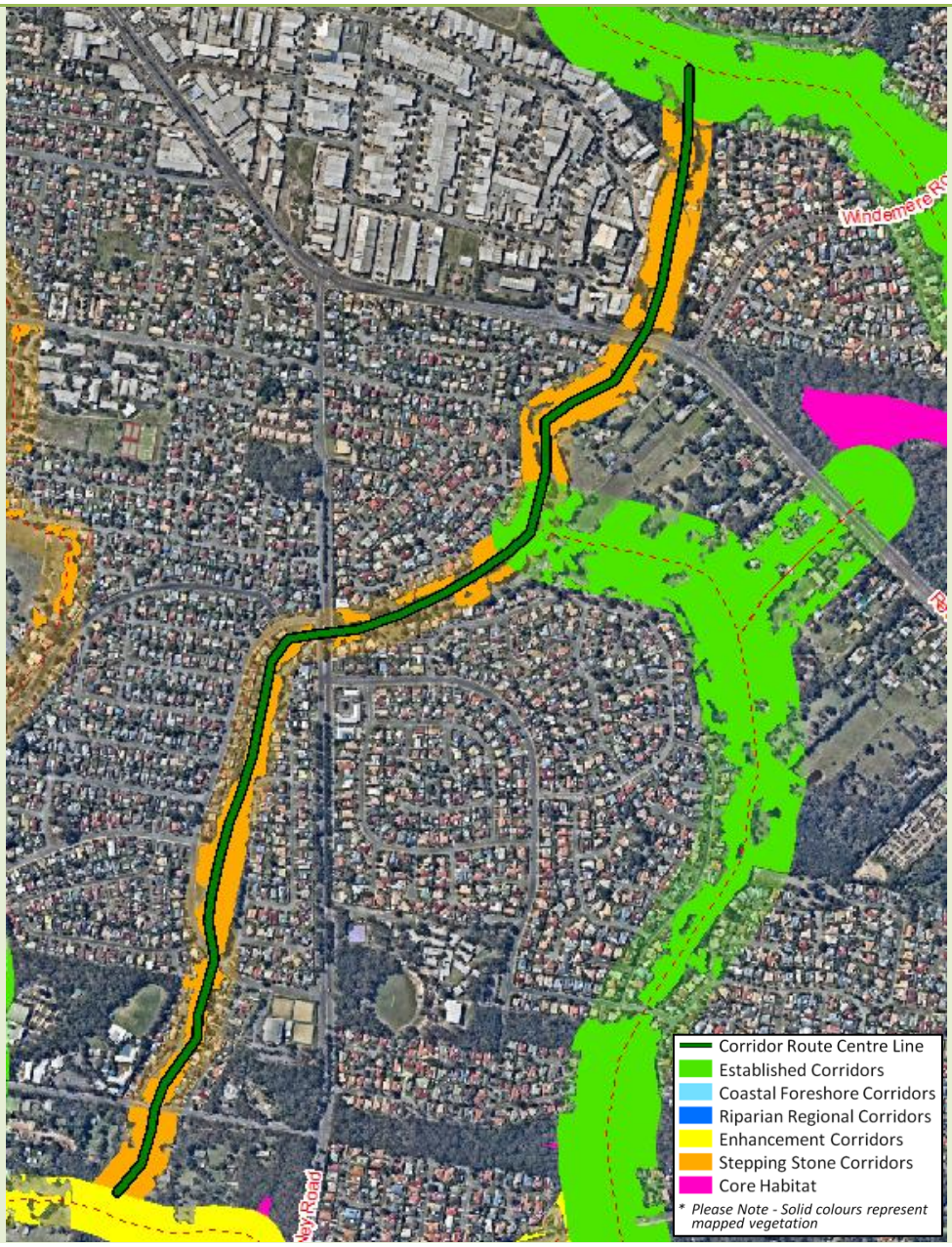
Description	East to west corridor linking Pinklands Bushland Refuge to Dicameron Court, via Dinwoodie Road Bushland Refuge.
Environmental Values	Linking the paperbark riparian vegetation (12.3.6) of Pinklands Bushland Refuge to scribbly gum dominated open forest to woodland (12.9-10.4) in Dicameron Court area.
Core Habitat Linkages	Links ≈1 core habitat patches.
Land Uses / Tenure	Predominately freehold land zoned Park Residential and Environmental Protection.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Road crossings on Dinwoodie and Trundle Roads and Dicameron Court.
Gaps & Pinch Points	Pinch points between immediately east of Dinwoodie Road and west of Trundle Road.
Priority Outcomes	Safe fauna passage across Dinwoodie and Trundle Roads and Dicameron Court. Rehabilitation of pinch points between immediately east of Dinwoodie Road and west of Trundle Road.

Cleveland Point to Wellington Street Bushland Reserve – Stepping Stone Corridor



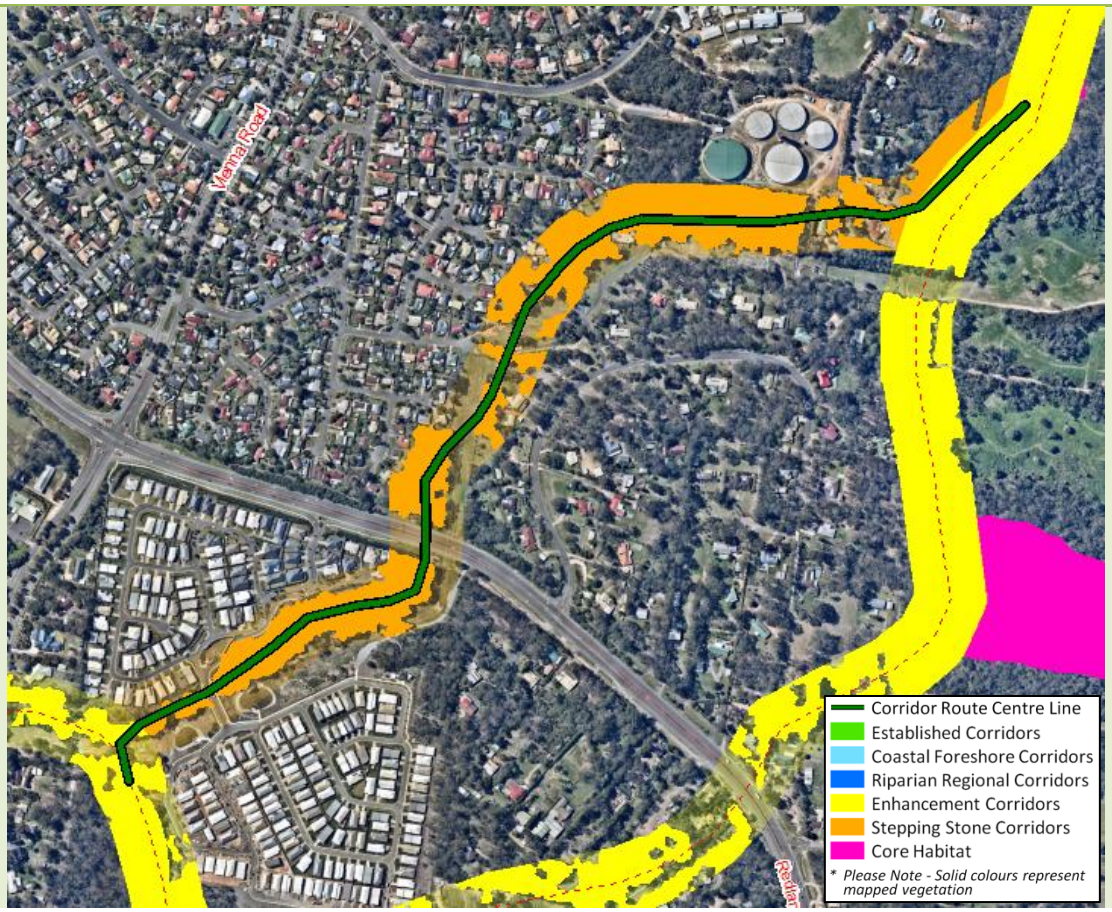
Description	East to west corridor linking Cleveland Point to Wellington Street Bushland Refuge, via Raby Bay, William Ross Park, Donald Simpson Park and Ross Creek Corridor.
Environmental Values	Linking bloodwood and blue gum open forest to woodland (12.5.2) to scribbly gum dominated open forest to woodland (12.9-10.4) in Wellington Street Bushland Refuge.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Trunk of corridor predominately Council land zoned open Space, boarded by Urban Residential and Medium Density Residential zoned land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Numerous local road crossings.
Gaps & Pinch Points	Gaps from Cleveland Point to crossing of Shore Street West. Pinch points between Bloomfield and Smith Streets.
Priority Outcomes	Rehabilitation of pinch points between Bloomfield and Smith Streets.

Coolnwynpin Creek - Industry Place to St Lukes Court – Stepping Stone Corridor



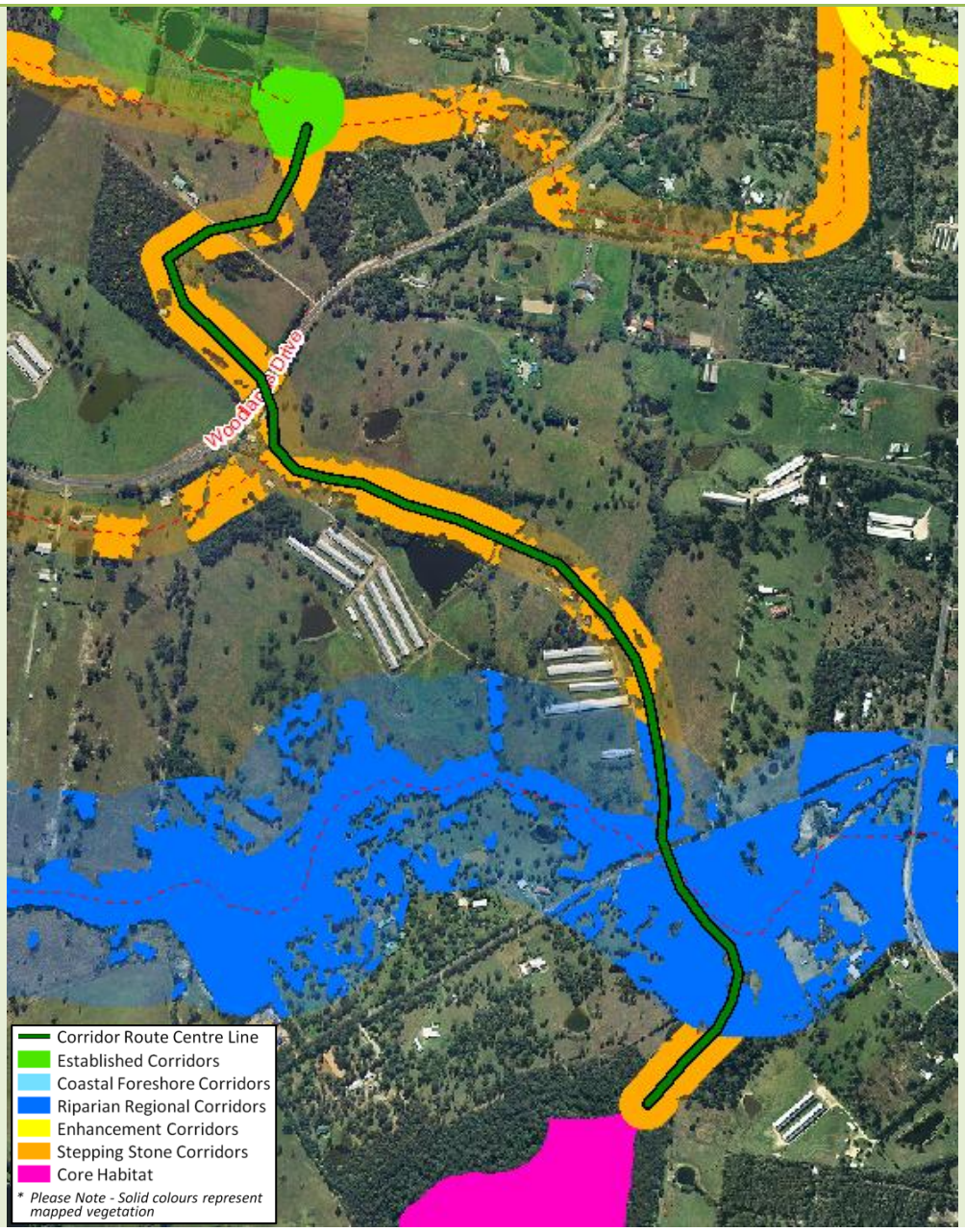
Description	East to west corridor linking Coolnwynpin Creek - Industry Place to St Lukes Court, via Glover Drive Park, Brosnana Drive Park and Coolnwynpin Creek Corridors (Jon Street, Silvara Circuit and Macquarie Street).
Environmental Values	Linking paperbark riparian vegetation (12.3.6) of Coolnwynpin Corridor to scribbly gum dominated open forest to woodland (12.9-10.4) around Degen Road.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈2800m.
Land Uses / Tenure	Trunk of corridor predominately Council land zoned Conservation and open Space, boarded by Urban Residential oned land.
Community Use	Recreational values of reserves and waterway.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings at Redland Bay and Ney Roads.
Gaps & Pinch Points	Pinch point immediately east of Ney Road.
Priority Outcomes	Rehabilitation of pinch point east of Ney Road. Safe fauna passage across Redland Bay and Ney Roads.

Weippin Street Conservation Area to Swamp Box Conservation Area – Stepping Stone Corridor



Description	East to west corridor linking Weippin St Conservation Area to Swamp Box Conservation Area, Alexandra Circuit Bushland Refuge, Sevenoaks Street Park, Springbrook Drive Bushland and Lyndon Road Park.
Environmental Values	Linking scribbly gum dominated open forest (12.9-10.4) of Weippin Street Conservation Area and Swamp Box Conservation Area.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈1800m.
Land Uses / Tenure	Trunk of corridor predominately Council land zoned Conservation and open Space, boarded by Urban Residential and Park Residential zoned land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossing at Redland Bay Road.
Gaps & Pinch Points	Pinch points in areas west and north of Sevenoaks Road.
Priority Outcomes	Rehabilitation of pinch points in areas west and north of Sevenoaks Road. Safe fauna passage at Redland Bay Road crossing.

Woodlands Drive to Eprapah Creek – Stepping Stone Corridor



Description	East to west corridor linking bushland areas on Woodlands Drive to Eprapah Creek Corridor.
Environmental Values	Linking scribbly gum dominated open forest (12.9-10.4) to the blue gum, iron bark, bloodwood riparian vegetation (12.3.11 and 12.5.2) of Eprapah Creek Corridor.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Freehold land zoned Environmental Protection and Rural.
Community Use	Recreational values of waterway.
Threats & Barriers	Poor rural land management (e.g. grazing pressure, vegetation clearing, erosion). Crossing at Woodlands Drive.
Gaps & Pinch Points	Pinch points north and south of Woodlands Drive, and north of Eprapah Road.
Priority Outcomes	Rehabilitation of pinch points north and south of Woodlands Drive, and north of Eprapah Road. Safe fauna passage at Woodlands Drive crossing.

Thornlands Road Bushland Refuge to South Street Conservation Park – Stepping Stone Corridor

Description	East to west corridor linking Thornlands Road Bushland Refuge to South Street Conservation Park, via Clifford Perske Drive Nature Belt, Sylvie Street Park, Anniversary Park and Robert Mackie Park.
Environmental Values	Linking paperbark riparian vegetation (12.3.6) of Thornlands Bushland Refuge to scribbly gum dominated open forest (12.9-10.4) of South Street Conservation Park.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Trunk of corridor predominately Council owned land zoned open Space, surrounded by Urban Residential zoned land.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings at Redland Bay Road and South Street.
Gaps & Pinch Points	Pinch points immediately east of Redland Bay Road, north and south of Blue Water Avenue and south of Panorama Drive.
Priority Outcomes	Rehabilitation of pinch points north and south of Woodlands Drive and north of Eprapah Road. Safe fauna passage at Woodlands Drive crossing.

Boundary Road to Henderson Road – Stepping Stone Corridor

Description	East to west corridor linking Boundary Road to Henderson Road.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Boundary Road to open spotted gum dominated forest complex (12.11.5k/12.11.5a) of Henderson Road. Corridor dependent bird species recorded along eastern end of corridor.
Core Habitat Linkages	Links ≈2 core habitat patches. Maximum distance between patches is ≈3800m.
Land Uses / Tenure	Mix of land zoned as Environmental Protection and Rural Non Urban, with some Community Purposes zoned land (Sheldon College) at halfway.
Community Use	Valuable community use, including Sheldon College.
Threats & Barriers	Road strike and barrier at Mount Cotton Road, Taylor Road and Woodlands Drive and Henderson Road. Poor urban, peri-urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light dsturbance, grazing pressure, vegetation clearing, erosion).
Gaps & Pinch Points	Pinch point along Platres Drive and multiple significant gaps (up to ≈1000m) from west of Sheldon College and east of Sheldon College towards Woodlands Drive.
Priority Outcomes	Rehabilitation of pinch point along Platres Drive and major gaps east and west of Sheldon College.

Woodland Drive to Mount Cotton Road – Stepping Stone Corridor

Description	East to west corridor linking Woodlands Drive to Mount Cotton Road.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Woodlands Drive to open spotted gum dominated forest complex (12.11.5k/12.11.5a) of Mount Cotton Road.
Core Habitat Linkages	Links 2 core habitat linkages. Maximum distance between patches is ≈200m.
Land Uses / Tenure	Significant portion of eastern half zoned as Rural Non Urban, with rest zoned as mix of Conservation and Environmental Protection zoned land.
Community Use	No identified community use.
Threats & Barriers	Road strike and barrier at Woodlands Drive and Mount Cotton Road crossings. Poor peri- urban and rural land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, grazing pressure, vegetation clearing, erosion).
Gaps & Pinch Points	Significant gap along Woodlands Drive, east/south-east of Taylor Road/Woodlands Drive crossing. Pinch points east of Mount Cotton Road.
Priority Outcomes	Rehabilitation of gap along Woodlands Drive and pinch points east of Mount Cotton Road.

Primrose Drive Wetlands to Rushwood Creek Corridor – Stepping Stone Corridor

Description	Corridor linking Primrose Drive Wetlands to Rushwood Creek Corridor, via Primrose Drive Park, William Stewart Park and Crystal Waters Wetlands.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland/paperbark riparian coastal vegetation (12.5.2/12.3.6) of Primrose Drive Wetlands to scribbly gum dominated open forest to woodland (12.9-10.4) and paperbark riparian coastal vegetation (12.3.6) of Crystal Waters Wetlands and Crystal Waters Park. Multiple waterway dependent bird species recorded at Crystal Waters Wetlands.
Land Uses / Tenure	Trunk of corridor zoned as Open Space and far western end zoned as Conservation, bound by Urban Residential developments.
Community Use	Very high value recreational use of parks and Crystal Waters Wetlands.
Threats & Barriers	Road strike and barrier at Redland Bay Road and Panorama Drive crossings and local roads. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points throughout corridor.
Priority Outcomes	Rehabilitation of corridor buffer throughout corridor west of King Street.

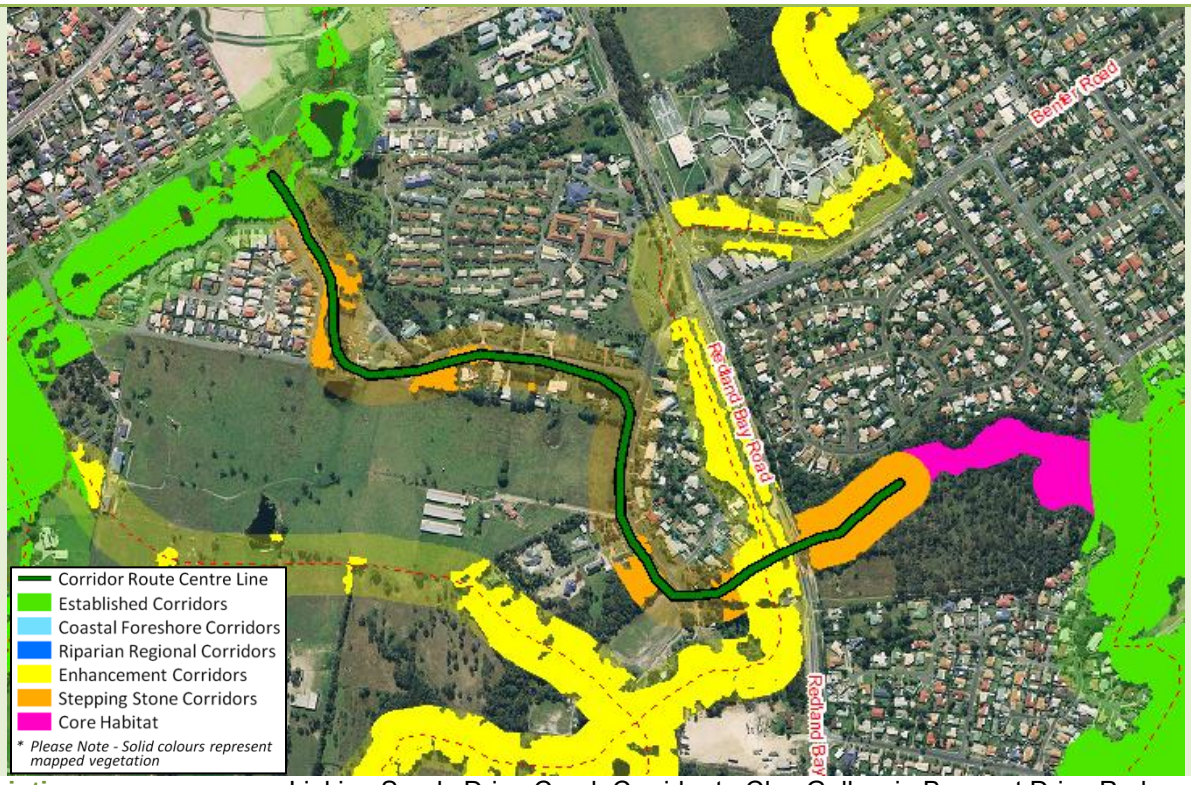
Sandalwood Street Creek Corridor to Springacre Road – Stepping Stone Corridor

Description	North-east to south-west corridor linking Sandalwood Street Creek Corridor to Springacre Road, via Doull Place Bushland Refuge and Dinwoodie Road Bushland Refuge.
Environmental Values	Linking paperbark riparian coastal vegetation/blood wood, blue gum grassy open forest to woodland (12.3.6/12.5.2) of Sandalwood Street Creek Corridor to scribbly gum dominated open forest to woodland (12.9-10.4), via paperbark riparian coastal vegetation (12.3.6) of Doull Place Bushland Refuge and scribbly gum dominated open forest to woodland (12.9-10.4) of Dinwoodie Road Bushland Refuge.
Land Uses / Tenure	Primarily Park Residential and Environmental Protection zoned land throughout corridor, with some Conservation and Open Space at northern end.
Community Use	High value community and recreational use, including bushland refuges and Carmel College.
Threats & Barriers	Road strike and barrier at Boundary Road and Redland Bay Road crossings and potentially Doull Place. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Significant gap north of Boundary Road and pinch point south of Boundary Road.
Priority Outcomes	Safe fauna passage and assessment for road strike at Boundary Road and Redland Bay Road crossings. Rehabilitation of vegetation north of Boundary Road and corridor buffer south of Boundary Road.

Anniversary Park to Weippin St Conservation Area – Stepping Stone Corridor

Description	West to east corridor linking Anniversary Park to Weippin Street Conservation Area, via Lorikeet Drive Nature Belt/Lorikeet Drive Park and Brindabella Circuit Park.
Environmental Values	Linking and scribbly gum dominated open forest to woodland (12.9-10.4) of Anniversary Park to that of Weippin Street Conservation Area, via paperbark riparian coastal vegetation (12.3.6) of Lorikeet Drive Nature Belt/Lorikeet Drive Park and scribbly gum dominated open forest to woodland (12.9-10.4) of Brindabella Circuit Park.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Western end of trunk zoned as Conservation land, with much of trunk zoned as a strip of Open Space and some Conservation. Corridor otherwise strongly bound by Low Residential and Urban Residential developments.
Community Use	High value recreational area, use of various walkways (Panorama Walkway, Plover Drive Walkway, Falcon avenue Walkway, Kite Crescent Walkway) and parks.
Threats & Barriers	Road strike and barrier at Wellington Street crossing. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point along eastern side of Wellington Street and south of Flamingo Crescent.
Priority Outcomes	Safe fauna passage across Wellington Street. Rehabilitation of corridor buffer east of Wellington Street and south of Flamingo Crescent.

Clay Gully to Sandy Drive Creek Corridor – Stepping Stone Corridor

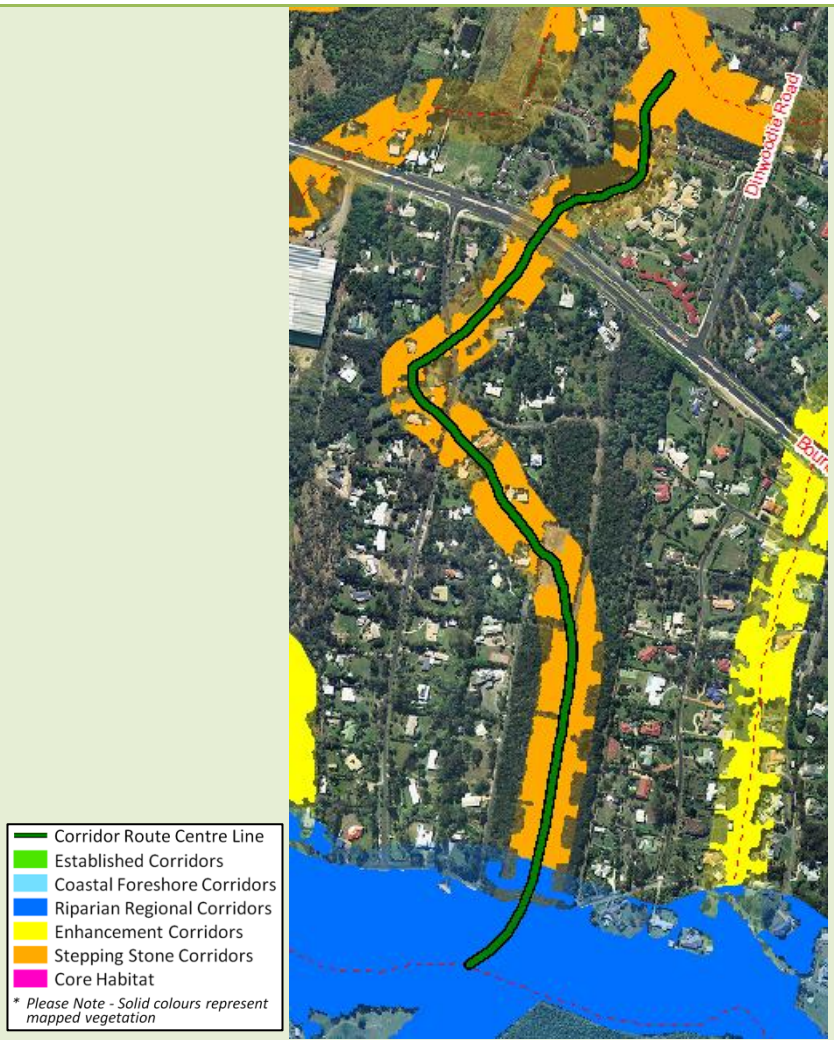


Description	Linking Sandy Drive Creek Corridor to Clay Gully, via Barcrest Drive Park.
Environmental Values	Linking scribbly gum dominated open forest to woodland/riparian open-forest woodland of blue gum, iron bark, bloodwood (12.9-10.4/12.3.11) of Sandy Drive Creek Corridor and Barcrest Drive Park to paperbark riparian coastal vegetation (12.3.6) of Clay Gully.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Open Space and Conservation zoned land at each end, with rest of trunk a mix of Community Purposes, Park Residential, Low Density Residential and small patch of Environmental Protection.
Community Use	High value community and recreational use including parks.
Threats & Barriers	Road strike and barrier at Redland Bay Road crossing. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points from Sandy Drive Creek Corridor through to Redland Bay Road crossing.
Priority Outcomes	Safe fauna passage across Redland Bay Road. Rehabilitation of corridor buffer from Sandy Drive Creek Corridor through to Redland Bay Road.

Egret Colony Wetlands to Eprapah Creek Corridor – Stepping Stone Corridor

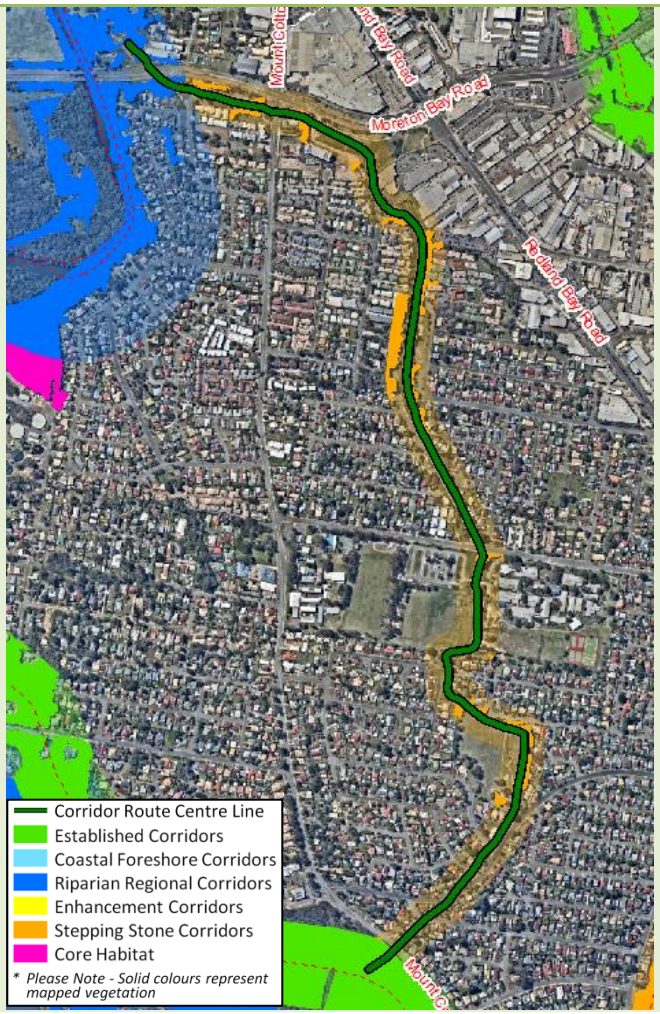
Description	Linking Wilson Esplanade Foreshore to Eprapah Creek Riparian Corridor, via Egret Colony Wetlands.
Environmental Values	Linking mangrove closed forest (12.1.3) of Wilson Esplanade foreshore to riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) and complex to simple notophyll vine forest (12.3.1) of Eprapah Creek Riparian Corridor, via Linking paperbark open-forest to woodland (12.3.5) and paperbark riparian coastal vegetation (12.3.6) of egret Colony Wetlands.
Core Habitat Linkages	Links ≈6 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Open Space and Conservation zoned land at each end, with rest of trunk a mix of Community Purposes and Urban Residential.
Community Use	High value community and recreational use including parks.
Threats & Barriers	Road strike and barrier at Point O'Halloran Road and along Colburn Avenue. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap between Link Road and Point O'Halloran Road.
Priority Outcomes	Rehabilitation of gap between Link Road and Point O'Halloran Road. Safe fauna passage at Point O'Halloran Road crossing and along Colburn Avenue.

Dinwoodie Bushland Refuge to Eprapah Creek – Stepping Stone Corridor



Description	North to south corridor linking Dinwoodie Bushland Refuge to Eprapah Creek, via Venn Parade Urban Habitat.
Environmental Values	Linking paperbark riparian vegetation (12.3.6) of Dinwoodie Bushland Refuge to riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) of Eprapah Creek, via scribbly gum dominated open forest to woodland/paperbark riparian coastal vegetation (12.9-10.4/12.3.6) of Venn Parade Urban Habitat. Multiple corridor dependent bird species recorded at southern end of corridor. Also several records of Glossy Black-cockatoo in along and at southern end of corridor.
Land Uses / Tenure	Each end zoned as Conservation zoned land with some Environmental Protection at northern end and Open Space at southern end. Trunk predominantly zoned as Park Residential, with Venn Parade Urban Habitat comprising Open Space.
Community Use	Valuable area for recreational use of Venn Parade Urban Habitat and Eprapah Creek.
Threats & Barriers	Road strike and barrier at Boundary Road crossing and potentially local roads. Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch point between The Grove and Venn Parade, immediately south of Anisila Road and along waterbody north of Boundary Road.
Priority Outcomes	Safe fauna passage across Boundary Road. Rehabilitation of corridor buffer between The Grove and Venn parade and along waterbody north of Boundary Road.

Capalaba Regional Park to Leslie Harrison Conservation Area – Stepping Stone Corridor

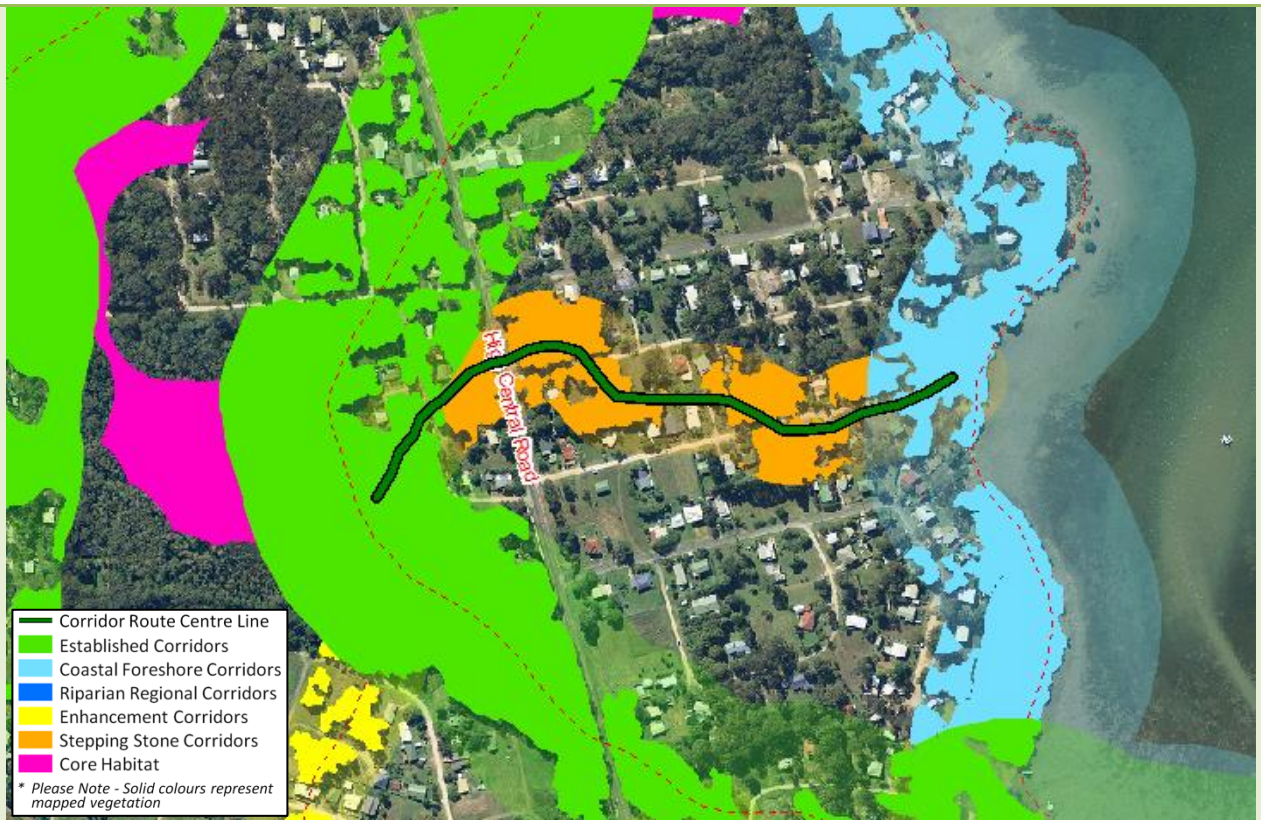


Description	North to south corridor linking Capalaba Regional Park to Leslie Harrison Conservation Area, via Wentworth Drive Park and Holland Crescent Park.
Environmental Values	Linking paperbark riparian coastal vegetation/scribbly gum dominated open forest to woodland/casuarina and mangroves open forest (12.3.6/12.9-10.4/12.1.1) of Capalaba Regional Park to /scribbly gum dominated open forest to woodland (12.9-10.4) of Leslie Harrison Conservation Area, via scribbly gum woodland (12.5.3) of Wentworth Drive Park.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Northern end of corridor zoned as Open Space, southern end zoned as Conservation land. Trunk primarily zoned as mix of Open Space and Community Purpose land, strongly bound by Urban Residential and Medium Density Residential developments.
Community Use	Recreational value mainly at each end of corridor with Capalaba Regional Park and Leslie Harrison Conservation Area. Recreational and community value along trunk at Holland Crescent Park, Wentworth Drive Park and Capalaba State College.
Threats & Barriers	Road strike and barrier at Moreton Bay Road, Mount Cotton Road (2) and School Road crossings and potentially local roads. Increased threat from poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance, Capalaba State College, Capalaba Main Drain, etc.).
Gaps & Pinch Points	Pinches and gaps throughout corridor.
Priority Outcomes	Investigate rehabilitation opportunity along Capalaba Main Drain and immediately south of School Road.

Cowes Street to Thomas Street Wetlands – Macleay Island – Stepping Stone Corridor

Description	East to west corridor linking Cowes Street to Thomas Street Wetlands, via Macleay Island Community Park.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) and saltpan vegetation to mangrove closed forest (12.1.2/12.1.3) of Cowes Street to bloodwood, blue gum grassy open forest to woodland (12.5.2) and mangrove closed forest (12.1.3) of Thomas Street Wetlands.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈850m.
Land Uses / Tenure	Primarily SMBI Residential zoned land, with some SMBI Centre, Open Space and Conservation land towards western end.
Community Use	High value community and recreation area.
Threats & Barriers	Poor urban area land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Potential road strike at High Central Road crossing.
Gaps & Pinch Points	Pinch along Macleay Island Community Park and south-west between Eastbourne Terrace and Scarborough Terrace through to Gibson Street.
Priority Outcomes	Rehabilitation of corridor across Macleay Island Community Park and south-west between Eastboure Terrace and Scarborough Terrace through to Gibson Street.

Marine Street to Tim Shea's Wetlands – Macleay Island – Stepping Stone Corridor

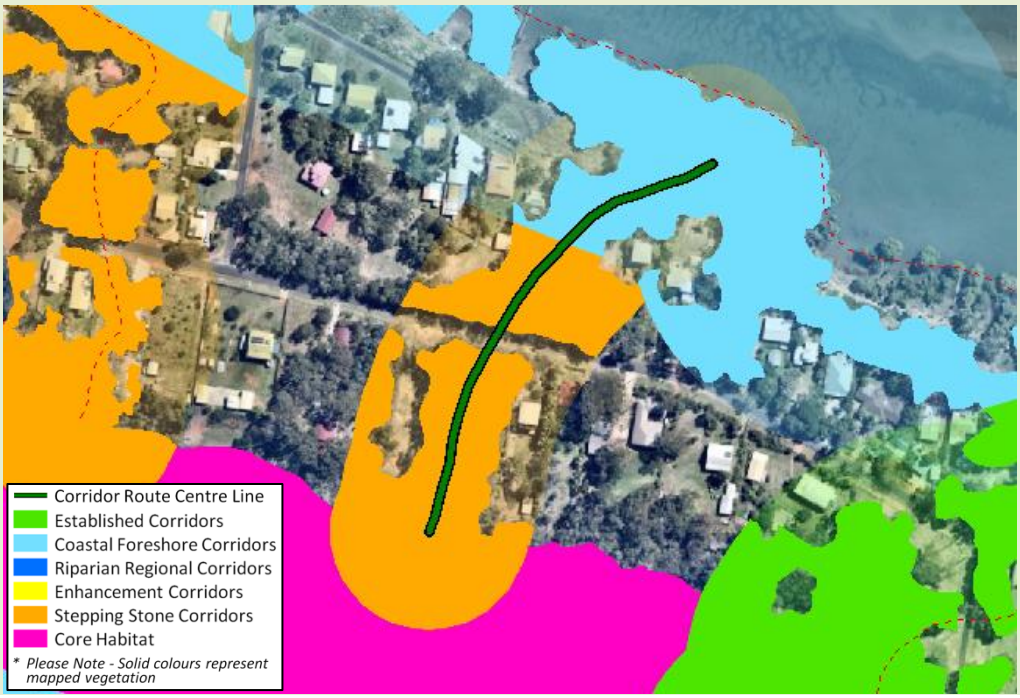


Description	Linking Marine Street to Tim Shea's Wetlands.
Environmental Values	Linking mangrove closed forest (12.1.3) and bloodwood, blue gum grassy open forest to woodland and scribbly gum woodland (12.5.2/12.5.3) of Marine Street to paperbark open forest on sand (12.2.7) of Tim Shea's Wetlands.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈650m.
Land Uses / Tenure	Primarily SMBI Residential, with Tim Shea's Wetlands zoned as Conservation.
Community Use	Moderate to high value recreation area.
Threats & Barriers	Poor urban area land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Potential road strike at High Central Road crossing.
Gaps & Pinch Points	Pinches between Marine Street and Orion Street, east of High Central Road.
Priority Outcomes	Rehabilitation of pinches between Marine Street and Orion Street, east of High Central Road.

Helen Parade to Lamb Island Commuter Facility – Lamb Island – Stepping Stone Corridor

Description	East to south-west corridor linking Helen Parade to Lamb Island Commuter Facility.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of Helen Parade to mangrove closed forest (12.1.3) of Lamb Island Commuter Facility. Multiple corridor and mangrove dependent bird species recorded in along corridor. Records of Glossy Black-cockatoos.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈950m.
Land Uses / Tenure	Mixed land use, primarily consisting of SMBI Residential with Conservation zoned land at Helen Parade end and SMBI Centre at Commuter Facility end. Trunk includes patch of Local Centre.
Community Use	Extremely high value community recreation and commuter area.
Threats & Barriers	Poor urban area land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.). Potential road strike along Lucas Drive and amongst Commuter Facility.
Gaps & Pinch Points	Pinch points along Lucas Drive, primarily near Leonie Crescent and Melaleuca Drive.
Priority Outcomes	Rehabilitation of corridor buffer along Lucas Drive to promote safe fauna passage.

Karragarra Island Urban Habitat – Karragarra Island – Stepping Stone Corridor

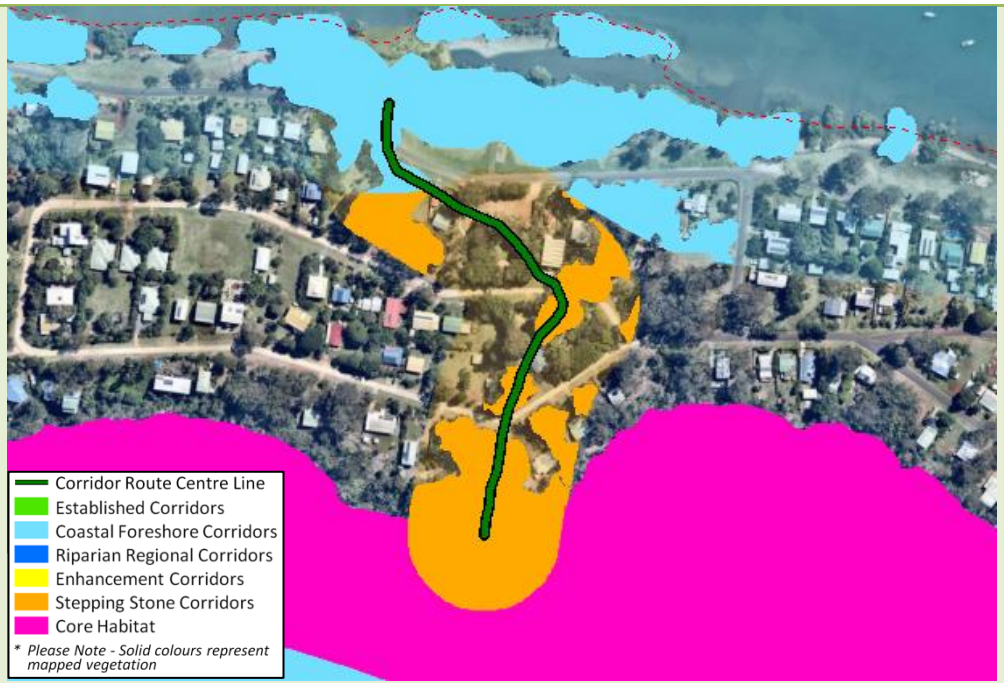


Description	Linking far eastern end of The Esplanade southwards through Karragarra Island Urban Habitat and across Treasure Island Avenue.
Environmental Values	Linking saltpan vegetation (12.1.2) at end of The Esplanade to saltpan vegetation and mangrove closed forest (12.1.2/12.1.3) of southern Karragarra Island. Multiple corridor and mangrove dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈250m.
Land Uses / Tenure	Trunk and adjoining area almost completely SMBI Residential, with strip of Open Space along The Esplanade. Some Open Space and Community Purposes zoned land halfway.
Community Use	High value peri-urban recreation area.
Threats & Barriers	Poor peri-urban area land management (e.g. garden escapee weeds, domestic animal control, noise and light reduction, etc.).
Gaps & Pinch Points	Pinch point between Treasure Island Avenue and The Esplanade.
Priority Outcomes	Rehabilitation of corridor buffer through Karragarra Island Urban Habitat and between Treasure Island Avenue and The Esplanade.

The Esplanade to Treasure Island Avenue – Karragarra Island – Stepping Stone Corridor

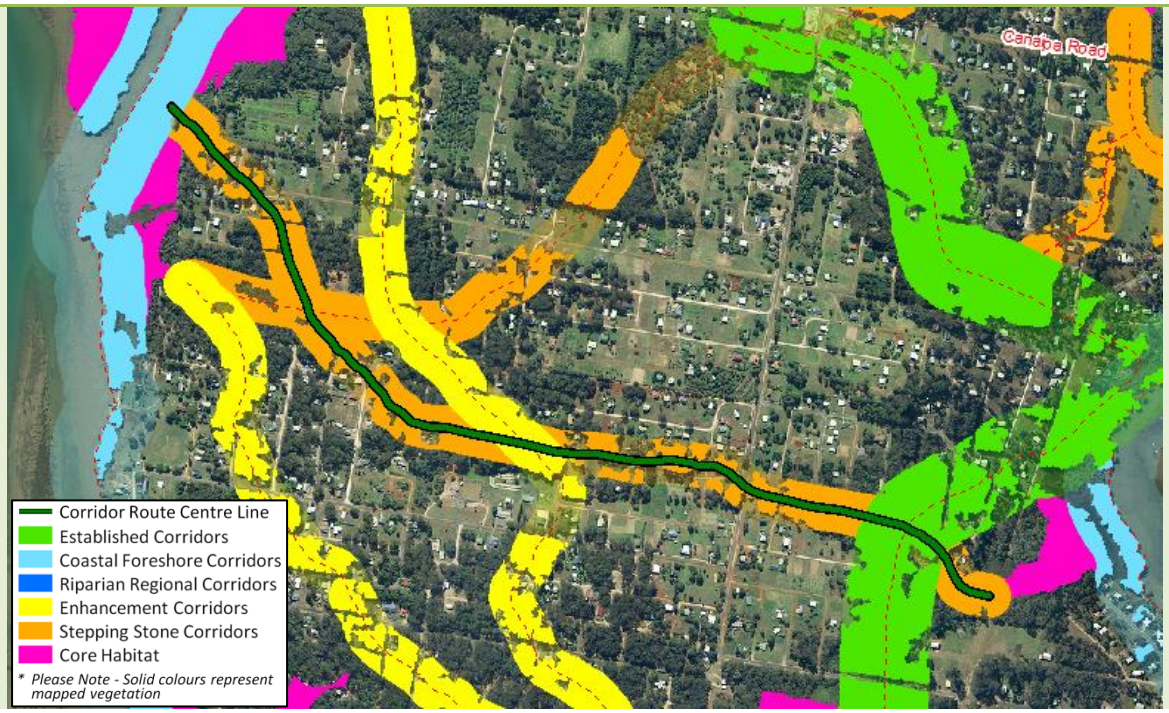
Description	North to south linkage of The Esplanade to Treasure Island Avenue.
Environmental Values	Linking mangrove closed forest (12.1.3) of The Esplanade to saltpan vegetation and mangrove closed forest (12.1.2/12.1.3) of Treasure Island Avenue. Multiple corridor and mangrove dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈380m.
Land Uses / Tenure	Trunk and adjoining area almost completely SMBI Residential, with strip of Open Space along The Esplanade.
Community Use	Moderate to high value coastal and peri urban recreational area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap southwards along corridor from Treasure Island Avenue crossing.
Priority Outcomes	Rehabilitation of gap at Treasure Island Avenue end of corridor.

Karragarra Island Community Park to Treasure Island Avenue – Karragarra Island – Stepping Stone Corridor



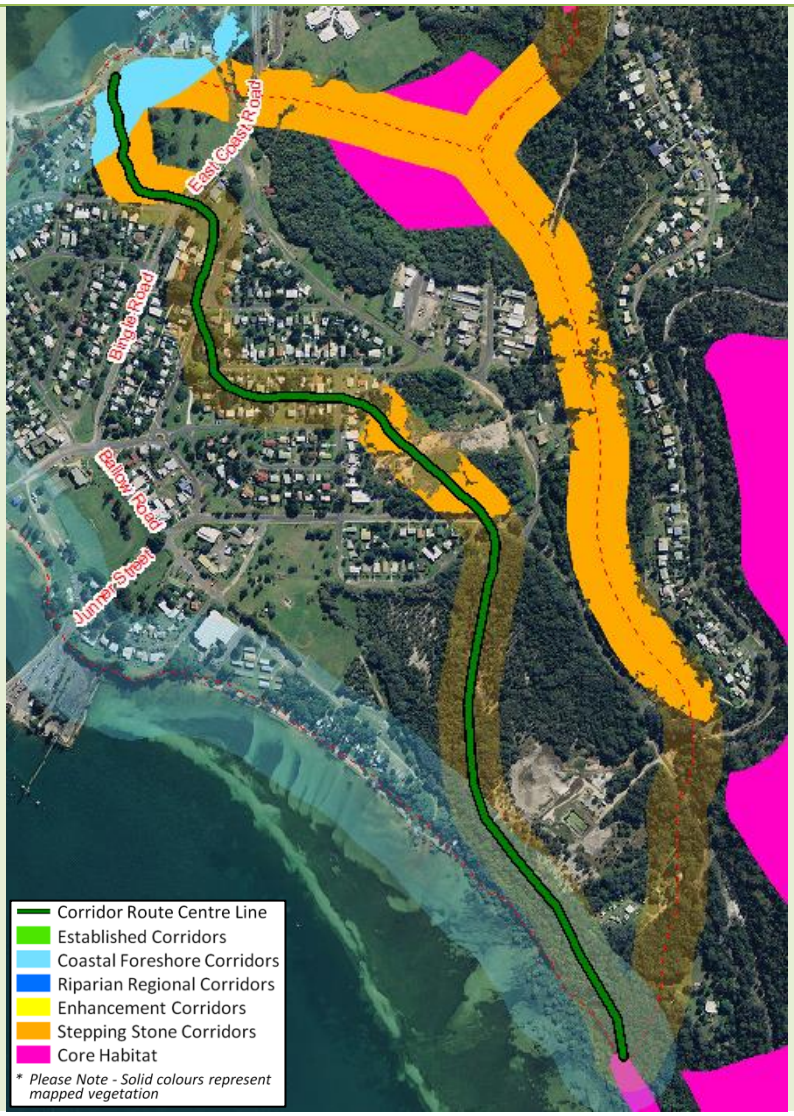
Description	North to south linkage of The Esplanade to Treasure Island Avenue, via Karragarra Island Community Park.
Environmental Values	Linking saltpan vegetation (12.1.2.) just north of Karragarra Island Community Park to saltpan vegetation and mangrove closed forest (12.1.2/12.1.3) of Treasure Island Avenue.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈350m.
Land Uses / Tenure	Trunk and adjoining area almost completely SMBI Residential, with strip of Open Space along The Esplanade and patches of Open Space and Community Purposes through trunk just south of The Esplanade.
Community Use	Moderate to high value coastal and peri urban recreational area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap at northern end of corridor on southern side of The Esplanade. Pinch along corridor at northern side of Noyes Parade crossing.
Priority Outcomes	Rehabilitation of gap at northern end of corridor on southern side of The Esplanade and of pinch along corridor at northern side of Noyes Parade crossing.

High Street Nature Belt to Kings Road – Russell Island – Stepping Stone Corridor



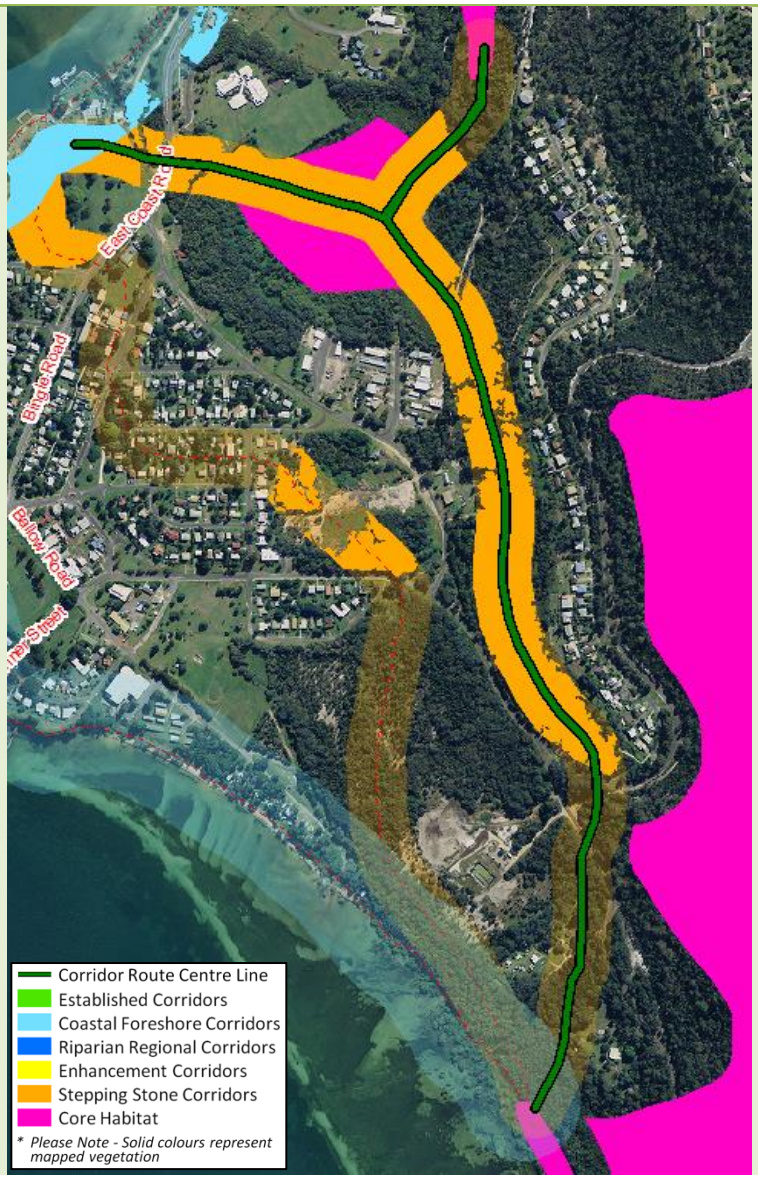
Description	West to east linkage of Kings Road to High Street Nature Belt, via Jackson Road Park.
Environmental Values	Linking saltpan vegetation (12.1.2) of Kings Road to mangrove closed forest and grey ironbark, blackbutt, small-fruited grey gum open-forest (12.1.3/12.5.6c) of High Street Nature Belt, via grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.6c) of Jackson Road Park.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1050m.
Land Uses / Tenure	Trunk and ends primarily Conservation zoned land, with some SMBI Residential at north-western end.
Community Use	High value peri-urban recreation area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap between Jackson Road Park and High Street Nature Belt. Gap across area comprising Kings Road, Coyne Street, Laurel Street, Taylor Street.
Priority Outcomes	Rehabilitation of corridor buffer between Jackson Road Park and High Street Nature Belt. Rehabilitation of gap across Kings Road, Coyne Street, Laurel Street, Taylor Street.

Dunwich Cemetery to West Coast Foreshore-North– North Stradbroke Island – Stepping Stone Corridor



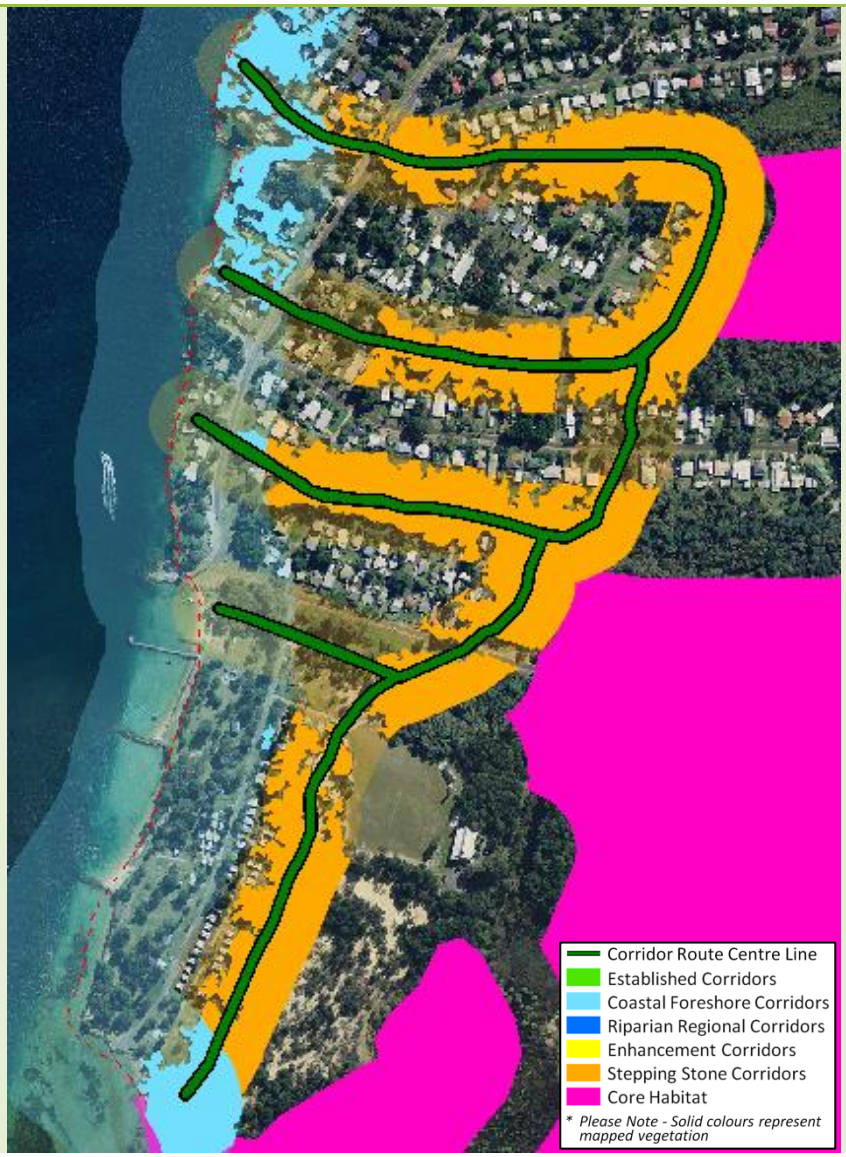
Description	North to south corridor linking Dunwich Cemetery to West Coast Foreshore-North, via Mallon Street Park and Ballow Road Bushland Refuge/Barton Street Park.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of Dunwich Cemetery to core habitat patch at West Coast Foreshore-North, via scribbly gum woodland (12.5.3) of Mallon Street Park. Flying fox roost (North Stradbroke Island, Dunwich) situated just east of northern part of corridor. Multiple shorebirds and waterway and corridor dependent bird species recorded in along corridor.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Southern half primarily Open Space and Conservation zoned land, with northern half a mix of Urban Residential developments, Open Space and Community Purpose.
Community Use	High value recreational and community use of parks and cemetery.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and potential road strike at East Coast Road-Bingle Road crossing.
Gaps & Pinch Points	Significant pinch points through northern half of corridor from Mallon Street Park.
Priority Outcomes	Rehabilitation of pinch points through northern half of corridor from Mallon Street Park.

Rainbow Crescent to West Coast Foreshore-North – North Stradbroke Island – Stepping Stone Corridor



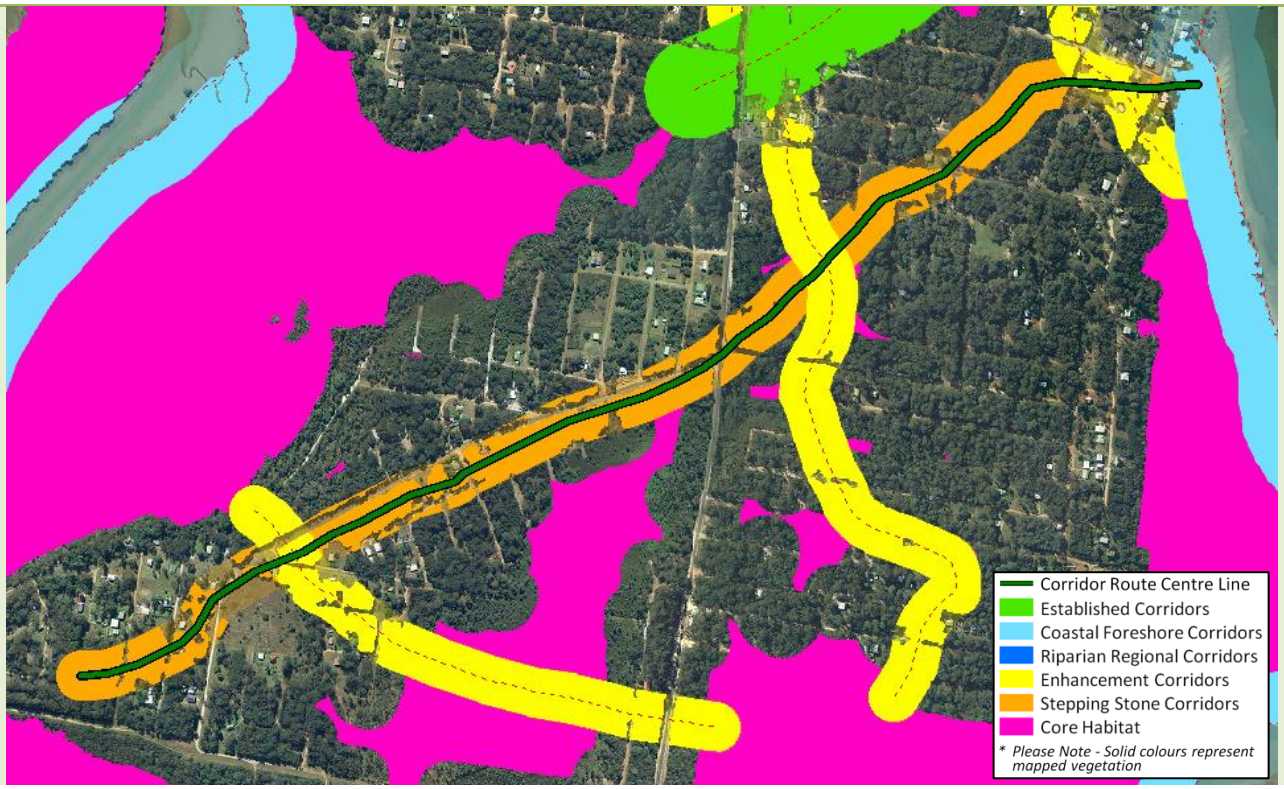
Description	North to south Y-shaped corridor linking Rainbow Crescent and Dunwich Cemetery to West Coast Foreshore-North.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland (12.5.2) of Rainbow Crescent and Dunwich Cemetery to core habitat patch at West Coast Foreshore North. Northern part of corridor runs through flying fox roost (North Stradbroke Island, Dunwich). Multiple shorebirds and waterway and corridor dependent bird species recorded at northern end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1600m.
Land Uses / Tenure	Southern half primarily Conservation zoned land with some Community Purposes and Rural Non Urban. Northern half a mix of Island Industry and Community Purposes, with Rainbow Crescent end zoned as Conservation.
Community Use	High value recreational and community use of nearby Rainbow Crescent Drainage Reserve, parks and cemetery.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gap across Community Purposes land at southern end and at Dunwich Cemetery.
Priority Outcomes	Rehabilitation of Community Purposes land at southern end and at Dunwich Cemetery.

Amity Point Urban – North Stradbroke Island – Stepping Stone Corridor



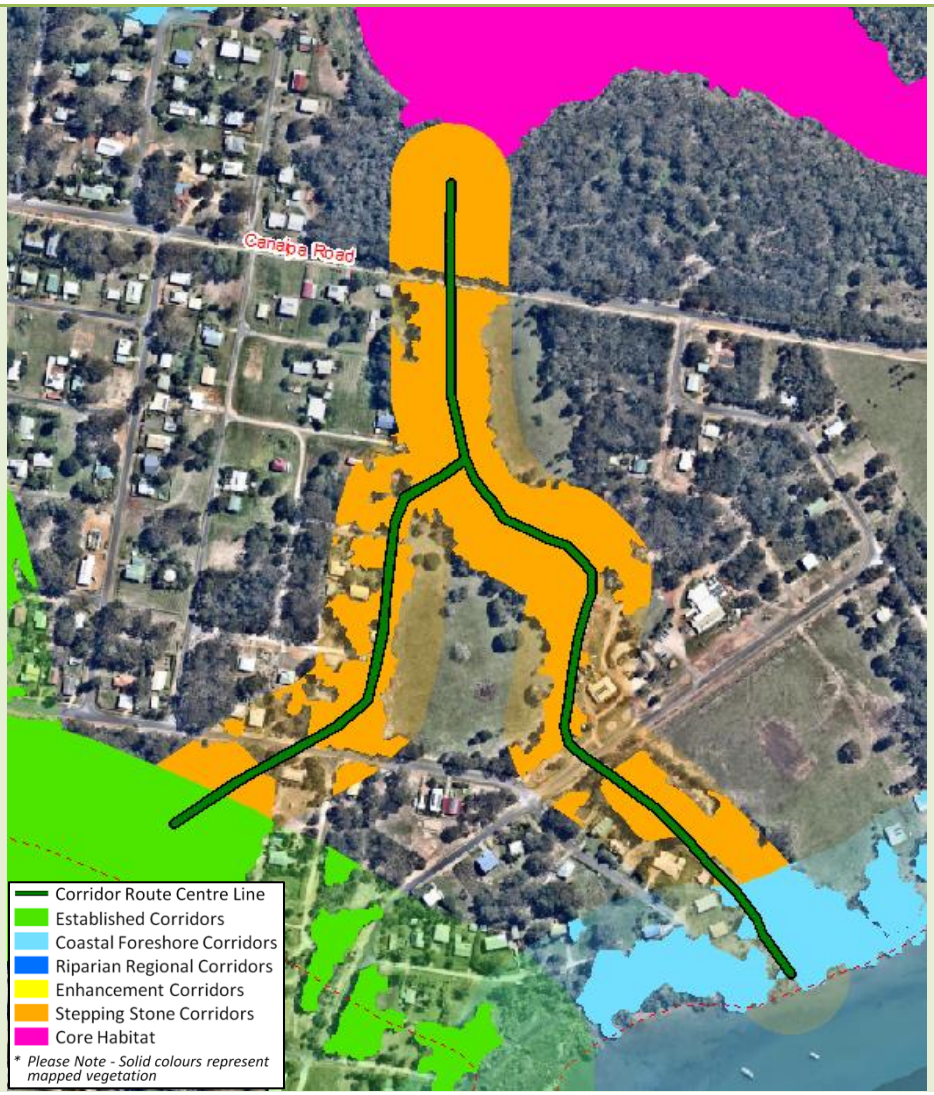
Description	Multiple branched corridor through urban Amity Point from Kawana Street Bushland Refuge south to Amity Point Recreation Reserve/West Stradbroke Foreshore-North, including Miles Street Wetlands, Llewellyn Street Wetlands and Amity Point Picnic Park.
Environmental Values	Linking open-forest to low closed forest (12.2.5) and paperbark open forest on sand (12.2.7) throughout corridor to coastal sedgeland/paperbark open forest on sand (12.2.15/12.2.7) of Amity Point Recreation Reserve. Two coastal raptor nests and multiple corridor dependent bird species in along corridor.
Land Uses / Tenure	Primarily Open Space and Conservation zoned land, with mix of Urban Residential and Local Centre north of Amity Point Recreation Reserve.
Community Use	High value recreational use of Amity Point Recreation Reserve, walkways, foreshore, wetlands and bushlands.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at local road crossings.
Gaps & Pinch Points	Pinch points immediately either side of Ballow Street and on northern side of Claytons Road.
Priority Outcomes	Rehabilitation of pinch points along Ballow Street and Claytons Road. Assessment for road strike at local road crossings.

Water Mouse Wetlands to Coolabah Street Urban Habitat – Russell Island – Stepping Stone Corridor



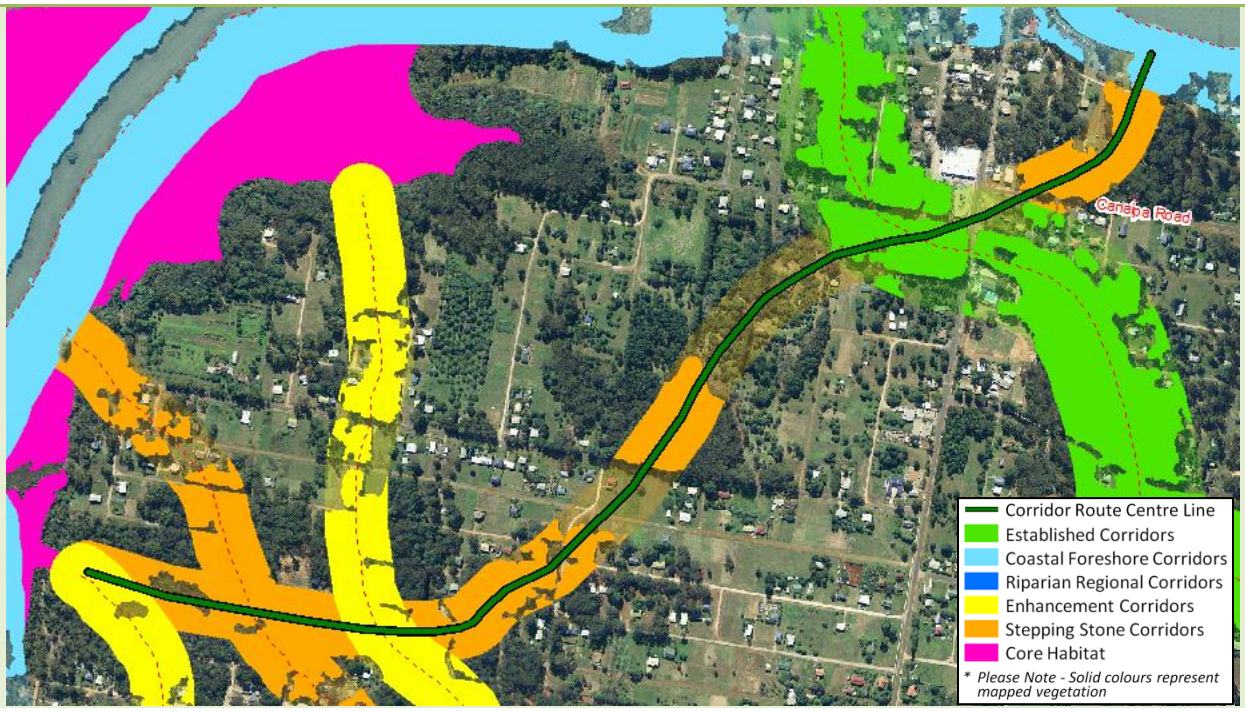
Description	East to south-west corridor linking Water Mouse Wetlands to Coolabah Street Urban Habitat, via Melomys Wetland.
Environmental Values	Linking mangrove closed forest/saltpan vegetation (12.1.3/12.1.2) of Water Mouse Wetlands on the eastern coast to scribbly gum woodland/grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.3/12.5.6c) of Coolabah Street Urban Habitat, via that of Melomys Wetland. Many records of Glossy Black-cockatoos in along corridor.
Core Habitat Linkages	Links 4 core habitat patches. Maximum distance between patches is ≈1700m.
Land Uses / Tenure	Approximately even mix of SMBI Residential and Conservation zoned land.
Community Use	Recreational value of wetlands and urban habitat.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential barrier and road strike at Centre Road crossing.
Gaps & Pinch Points	Pinch points at Wahine Drive and South End Road.
Priority Outcomes	Rehabilitation of pinch points at Wahine Drive and South End Road.

Canaipa Road to Virginia Parade – Russell Island – Stepping Stone Corridor



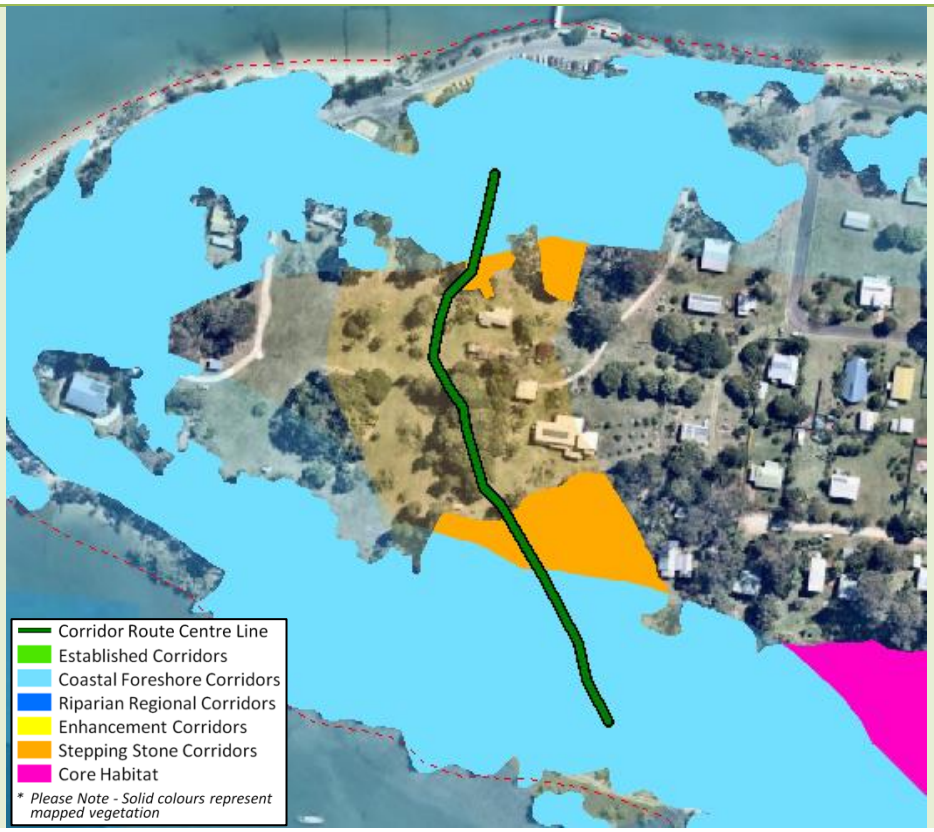
Description	Two-pronged corridor linking Canaipa Road to Virginia Parade and Fern Terrace Bushland Refuge.
Environmental Values	Linking paperbark open-forest to woodland (12.3.5) of Canaipa Road to scribbly gum woodland (12.5.3) and mangrove closed forest (12.1.3) of Virginia Parade to grey ironbark, blackbutt, small-fruited grey gum open-forest (12.5.6c) of Fern Terrace Bushland Refuge.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈650m.
Land Uses / Tenure	Each end of corridor bound by Conservation zoned land, with halfway area zoned as Rural Non Urban surrounded by Conservation and SMBI Residential land.
Community Use	Recreational value of Fern Terrace Bushland Refuge.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential barrier and road strike at Canaipa Road crossing.
Gaps & Pinch Points	Gaps immediately north of Fern Terrace and Anzac Drive.
Priority Outcomes	Rehabilitation of gaps immediately north of Fern Terrace and Anzac Drive. Potential assessment for road strike at Canaipa Road crossing.

Hawthornden Drive to Jenelle Grove – Russell Island – Stepping Stone Corridor



Description	Corridor linking Hawthornden Drive to Jenelle Grove, via Borrows Street Bushland Refuge, Russell Island Sport and Recreation Park and Kings Road Park.
Environmental Values	Linking mangrove closed forest (12.1.3) of Hawthornden Drive to paperbark open-forest to woodland/grey ironbark, blackbutt, small-fruited grey gum open-forest (12.3.5/12.5.6c) of Jenelle Grove, via paperbark open-forest to woodland (12.3.5) of Borrows Street Bushland Refuge. Corridor passes through and next to High Street and Oxford Road flying fox roosts. Glossy Black-cockatoo record south of High Street crossing.
Core Habitat Linkages	Links ≈4 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	North-eastern end bound by SMBI Centre zoned land, south-western end bound by Conservation zoned land. Trunk a mix of land for SMBI Residential, Conservation, Open Space and Community Purposes.
Community Use	High value recreational use of parks and refuge.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential barrier and road strike at High Street and Canaipa Road crossings.
Gaps & Pinch Points	Gap across Sport and Recreation Park and between Kings Road and Vista Street. Pinch point immediately east of High Street/Canaipa Road crossing.
Priority Outcomes	Rehabilitation of gap between Kings Road and Vista Street and pinch point east of High Street/Canaipa Road crossing.

Karragarra Island Foreshore Park to The Esplanade – Karragarra Island – Stepping Stone Corridor

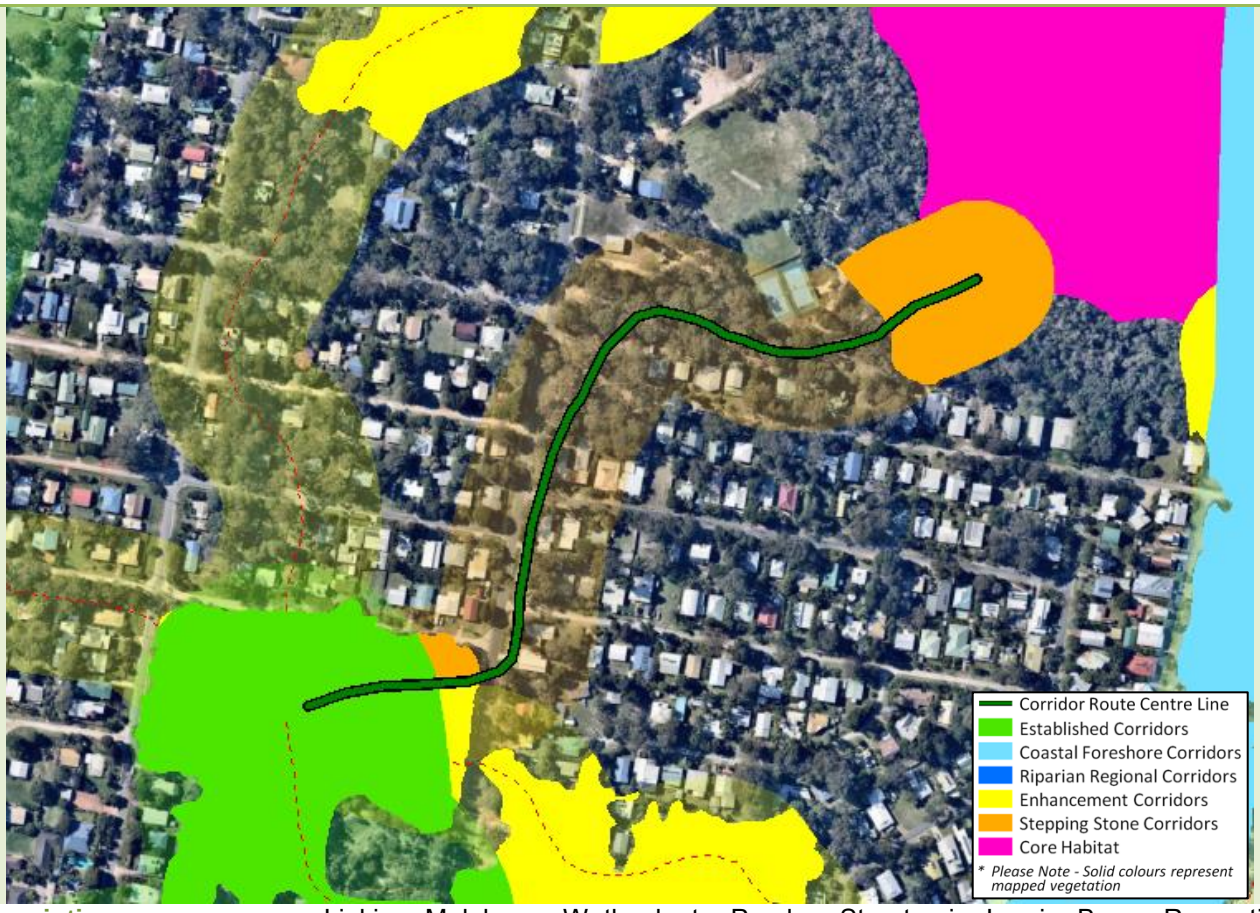


Description	North to south corridor linking Karragarra Island Foreshore Park to The Esplanade.
Environmental Values	Linking mangrove closed forest (12.1.3) of Karragarra Island Foreshore Park to that of The Esplanade. Brahminy Kite nest towards southern end of corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈300m.
Land Uses / Tenure	Each end bound by Conservation zoned land with inner trunk zoned as Rural Non Urban.
Community Use	Recreational value of Karragarra Island Foreshore Park.
Threats & Barriers	Poor urban and peri urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Gaps and pinch points along mid-section of corridor.
Priority Outcomes	Rehabilitation of gaps and pinch points along mid-section of corridor.

Doug & Mary Moreton Foreshore to Coochiemudlo Foreshore West – Coochiemudlo Island – Stepping Stone Corridor

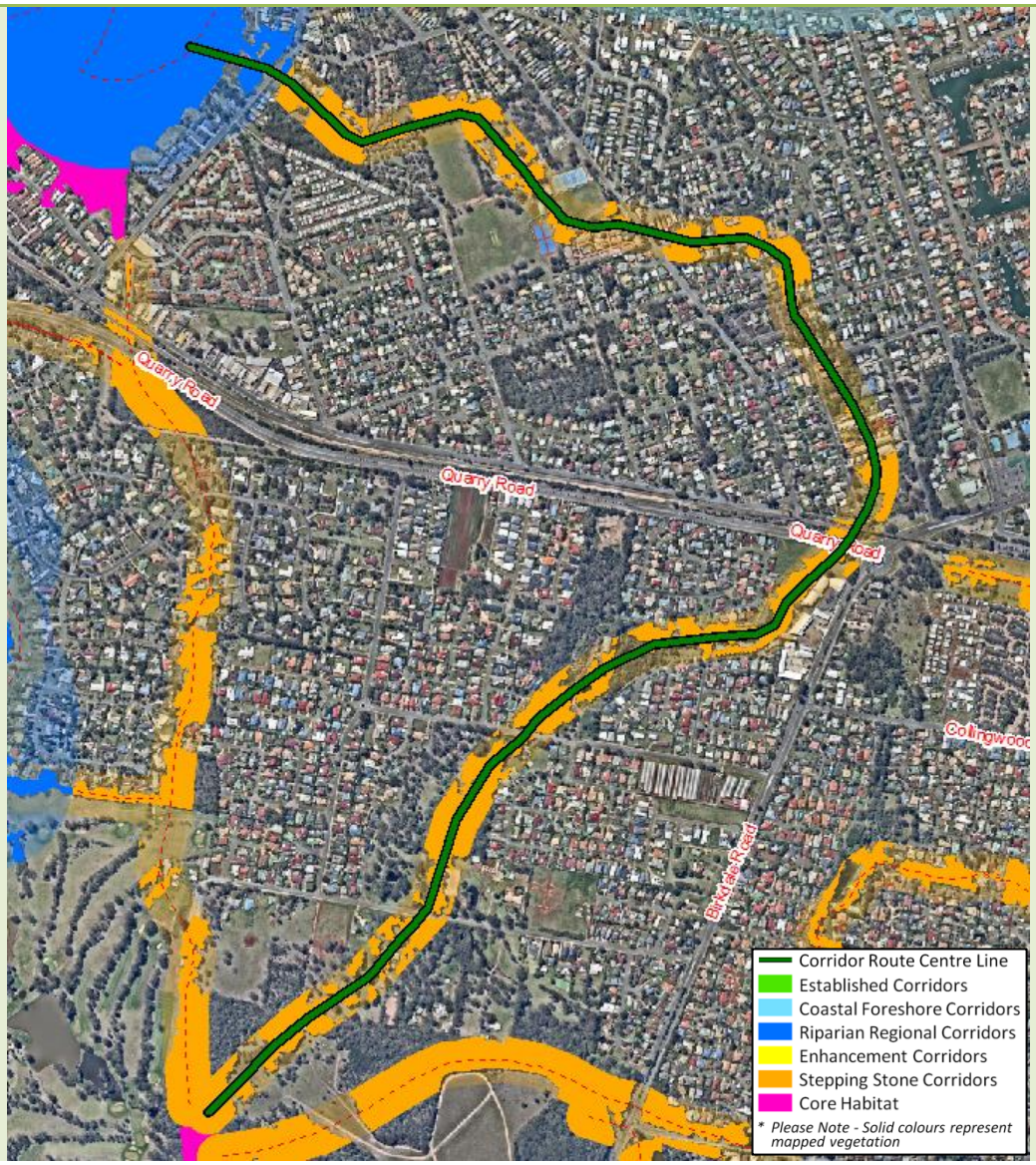
Description	North to south-west corridor linking Doug & Mary Morton Foreshore to Coochiemudlo Foreshore West.
Environmental Values	Linking mangrove closed forest (12.1.3) of Doug & Mary Morton Foreshore to saltpan vegetation/bloodwood, blue gum grassy open forest to woodland (12.1.1/12.5.2) of Coochiemudlo Foreshore West.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈500m.
Land Uses / Tenure	Each end zoned as Conservation land with trunk bound by Urban Residential developments.
Community Use	High recreational value of Doug & Mary Morton Foreshore and Coochiemudlo Foreshore West.
Threats & Barriers	Poor peri-urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points amongst Urban Residential developments between Victoria Parade South and Victoria Parade West.
Priority Outcomes	Rehabilitation of pinch points between Victoria parade South and Victoria Parade West.

Melaleuca Wetlands to Perulpa Street – Coochiemudlo Island – Stepping Stone Corridor



Description	Linking Melaleuca Wetlands to Perulpa Street, via Laurie Burns Recreation Reserve.
Environmental Values	Linking scribbly gum woodland (12.5.3) and paperbark open forest on sand (12.2.7) of Melaleuca Wetlands to paperbark riparian coastal vegetation (12.3.6) of Perulpa Street. White-bellied Sea Eagle nest on James Street and Brahminy Kite nest on Shirley Street. Multiple corridor dependent bird species just west and north of corridor. Flying fox roost (Coochiemudlo Island, Tageruba Street) at southern end of corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches ≈600m.
Land Uses / Tenure	Each end zoned as Conservation land. Trunk a mix of land for Open Space, Environmental Protection, Community Purposes and Urban Residential.
Community Use	High value recreational use of Laurie Burns Recreation Reserve and conservation land.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points from Melaleuca Wetlands to Carefree Street.
Priority Outcomes	Rehabilitation of pinch points from Melaleuca Street to Carefree Street.

Thorneside Wetlands to Birkdale Commonwealth Land – Stepping Stone Corridor



Description	Linking Thorneside Wetlands to the Birkdale Commonwealth Land, via the Ashwood Circuit Creek Corridor, Pentland Close Nature Belt and Urban Habitat,
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) of Thorneside Wetlands to bloodwood, blue gum grassy open forest to woodland (12.5.2) and Scribbly gum woodland (12.5.3) of the Birkdale Commonwealth Land, via coastal riparian vegetation (12.3.6). Multiple waterway dependent bird species recorded in north-section of corridor. Numerous koala records along corridor. Passes next to flying fox roosts (Collingwood Road; Mary Street) around halfway of trunk.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈4000m.
Land Uses / Tenure	Trunk of corridor predominantly zoned Open Space and Conservation, bounded by Urban Residential development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings of Quarry Road, Byng Road and Creek Road, and many other local roads.
Gaps & Pinch Points	Gaps north and south of Thorne Road, pinch points north and south of Ivy Street.
Priority Outcomes	Safe fauna passage across Quarry Road, Byng Road and Creek Road. Rehabilitation of gaps north and south of Thorne Road, pinch points north and south of Ivy Street.

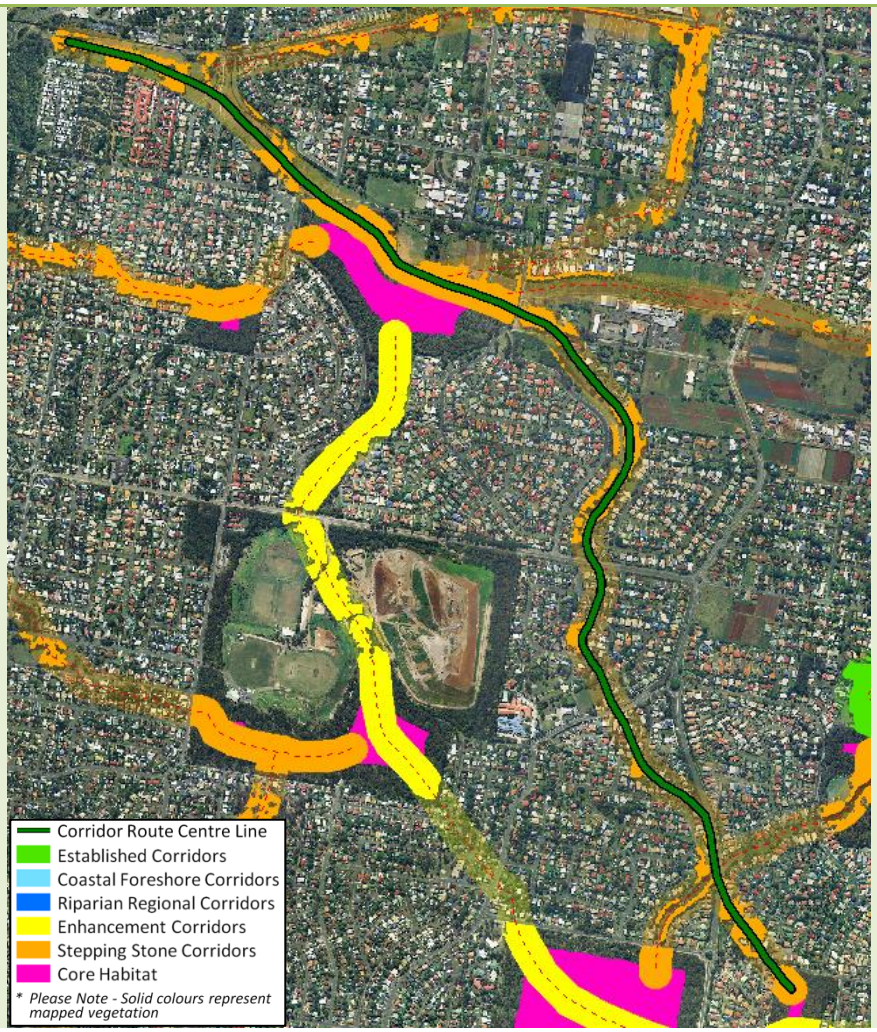
Eva Street Foreshore to Birkdale Commonwealth Land – Stepping Stone Corridor

Description	North to south corridor linking Eva Street Foreshore to Birkdale Commonwealth Land, Quarry Road Bushland Refuge and Harrogate Bushland Refuge.
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) of Eva Street Foreshore to bloodwood, blue gum grassy open forest to woodland (12.5.2) and scribbly gum woodland (12.5.3) of the Birkdale Commonwealth Land. Corridor dependent bird species recorded in mid-section of corridor. Osprey nest at northern end of corridor.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2000m.
Land Uses / Tenure	Medium Density Residential, Commercial Industry and Urban Residential zoned land in the north and mid-section of corridor, and Open Space and Conservation zoned land in the south.
Community Use	Recreational values of reserves. Birkdale Golf Course.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Crossings of Quarry Road, and many other local roads.
Gaps & Pinch Points	Pinch points north of Quarry Road and gaps north and south of Whitehall Avenue.
Priority Outcomes	Safe fauna passage across Quarry Road. Rehabilitation of pinch points north of Quarry Road and gaps north and south of Whitehall Avenue.

Tarradarrapin Creek Wetlands to Birkdale Commonwealth Land – Stepping Stone Corridor

Description	East to west corridor linking Tarradarrapin Creek Wetlands to Birkdale Commonwealth Land, via Birkdale Bushland Refuge, Carinyan Drive Nature Belt, Vedson Street Drainage Reserve, Sailfish Avenue Urban Habitat and Serene Place Urban Habitat.
Environmental Values	Linking the paperbark open forest (12.3.5), paperbark riparian vegetation (12.3.6) and Cyperus and Schoenoplectus swamp (12.3.8) of Tarradarrapin Creek Wetlands to the bloodwood, blue gum grassy open forest to woodland (12.5.2) and scribbly gum woodland (12.5.3) of the Birkdale Commonwealth Land, via patches of scribbly gum forest (12.9-10.4). Multiple corridor dependent bird species recorded in mid-section of corridor. Numerous koala records along corridor.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈2700m.
Land Uses / Tenure	Trunk of corridor predominantly Council owned Open Space and Conservation zoned land, surrounded by Medium Density Residential, Commercial Industry and Urban Residential development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Major road crossing at Birkdale Road, and many other local roads.
Gaps & Pinch Points	Gap immediately west of Spoonbill Street. Pinch points north of Barrett Street and between Sailfish Avenue and Old Cleveland Road East.
Priority Outcomes	Safe fauna passage across Birkdale Road. Rehabilitation gap immediately west of Spoonbill Street and pinch points north of Barrett Street and between Sailfish Avenue and Old Cleveland Road East.

Lachlan Street Park to Dawson Road Urban Habitat – Stepping Stone Corridor

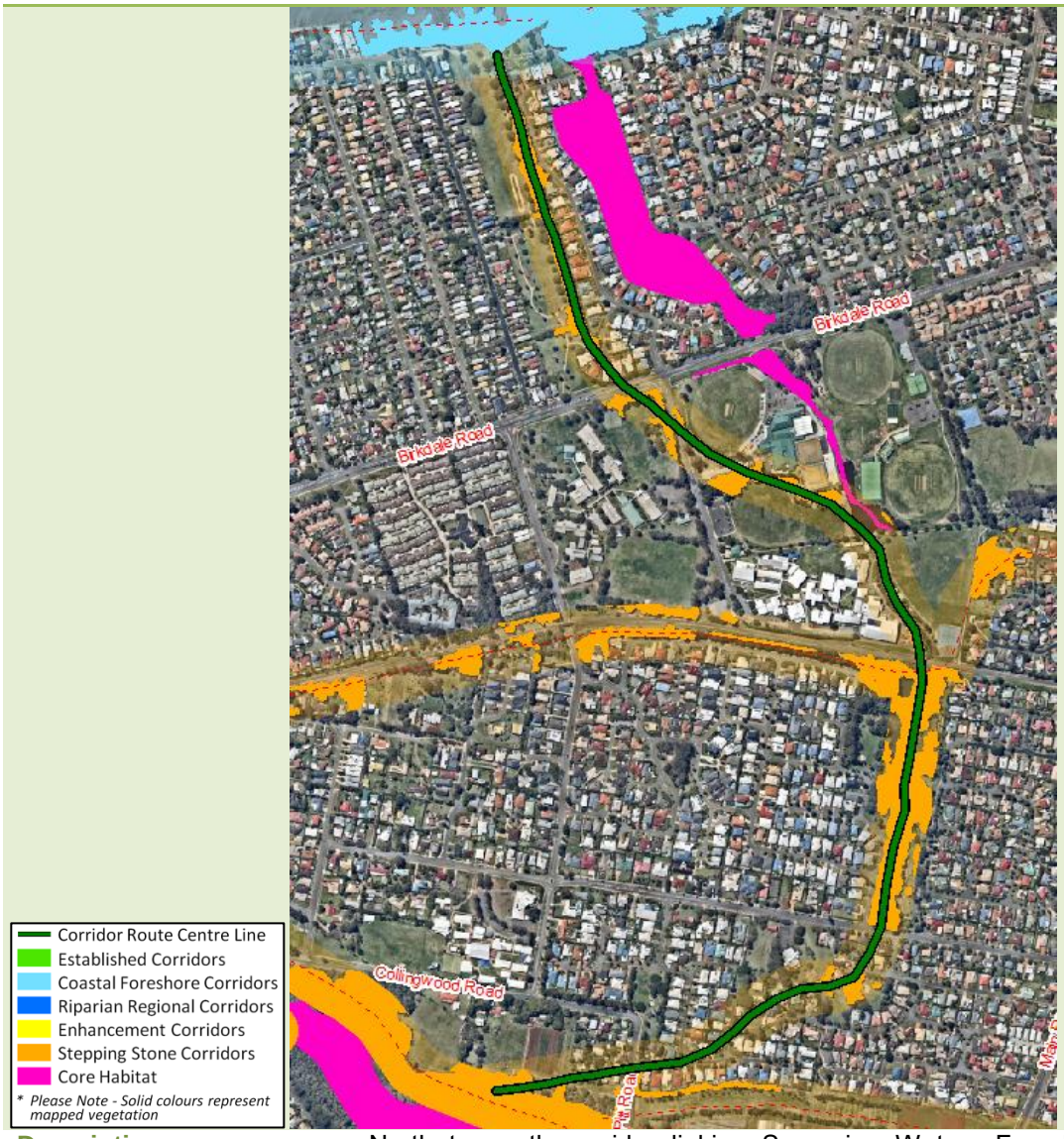


hilDescription	North to south corridor linking Lachlan Street Park to Dawson Road Urban Habitat, via Tarradarrapin Creek Wetlands, Riverton Drive Park, Rosella Street Park and Sylvania Street Park.
Environmental Values	Linking the paperbark riparian vegetation (12.3.6) and scribbly gum forest (12.9-10.4) of Lachlan Street Park to the scribbly gum forest (12.9-10.4) of Dawson Road Urban Habitat, via paperbark open forest to woodland and (12.3.5). Multiple corridor dependent bird species recorded in mid-section of corridor. Numerous koala records along corridor. Passes near flying fox roost (Tarradarrapin Wetlands) towards north.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈2500m.
Land Uses / Tenure	Trunk of corridor predominantly Council owned Community Purposes, Open Space and Conservation zoned land, surrounded by Medium Density Residential and Urban Residential development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Major road crossing at Collingwood Road, Old Cleveland Road East, Allenby Road and McDonald Road, and many other local roads.
Gaps & Pinch Points	Gaps throughout Lachlan Street Park, and south from Old Cleveland Road East to Mcdonald Road.
Priority Outcomes	Safe fauna passage across Collingwood Road, Old Cleveland Road East, Allenby Road and McDonald Road. Rehabilitation of gaps throughout Lachlan Street Park, and south from Old Cleveland Road East to McDonald Road.

Station Street Wetlands to Tarradarrapin Creek Wetlands – Stepping Stone Corridor

Description	East to west corridor linking Station Street Wetlands to Tarradarrapin Creek Wetlands, via the Wellington Point Constructed Wetlands, Duncan Street Drainage Reserve, Duncan Street Bushland Refuge and Belford Drive Road Reserve.
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) of Station Street Wetlands to the paperbark open forest to woodland and (12.3.5) of Tarradarrapin Wetlands. Flying fox roost (Tarradarrapin Wetlands) at western end.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1900m.
Land Uses / Tenure	Trunk of corridor Council owned Community Purposes and Conservation zoned land, surrounded by Urban Residential development.
Community Use	Recreational values of reserves.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Planning considerations for Community Purposes zoned land. Major road crossing at Main Road.
Gaps & Pinch Points	Gaps from Pitt Road to Belford Drive.
Priority Outcomes	Safe fauna passage across Main Road. Rehabilitation of gaps from Pitt Road to Belford Drive. Input into planning for Community Purposes land.

Sovereign Waters Foreshore to Tarradarrapin Wetlands – Stepping Stone Corridor



Description	North to south corridor linking Sovereign Waters Foreshore to Tarradarrapin Wetlands, via Three Paddocks Park and Crossley Drive Wetlands.
Environmental Values	Linking coastal vegetation (12.1.2 and 12.1.3) of Sovereign Waters Foreshore to the paperbark open forest to woodland and (12.3.5) of Tarradarrapin Wetland, via paperbark riparian vegetation (12.3.6) Crossley Drive Wetlands. Northern end of corridor spills out to Ramsar site. Passes through flying fox roost (Crossley Drive) around halfway of trunk.
Core Habitat Linkages	Links 3 core habitat patches. Maximum distance between patches is ≈1600m.
Land Uses / Tenure	Trunk of corridor Council owned Open Space zoned land, surrounded by Urban Residential zoned development.
Community Use	Recreational values of coastal foreshore and conservation reserves. EGW Wood Sports field.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Major road crossings at Birkdale Road and Marlborough Road. Railway line crossing.
Gaps & Pinch Points	Gaps between Birkdale Road and railway crossing. Gaps south of Marlborough Road.
Priority Outcomes	Safe fauna passage across Birkdale Road, Marlborough Road and railway line crossing. Rehabilitation of gaps between Birkdale Road and railway crossing, and gaps south of Marlborough Road.

Nandeebie Park to Donald Simpson Park – Stepping Stone Corridor

Description	West to east corridor linking Donald Simpson Park to Nandeebie Park, via William Ross Park and Nandeebie Foreshore.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland/scribbly gum woodland (12.5.2/12.5.3) of Donald Simpson Park to that of Nandeebie Park, via the same RE of William Ross Park and Nandeebie Foreshore. Highly extensive koala records around between Donald Simpson Park and William Ross Park. Renowned Cleveland koala hot spot.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈950m.
Land Uses / Tenure	Each end zoned as Open Space land, with western half of trunk zoned as Community Purposes and Open Space. Rest of trunk zoned as Medium Density Residential and Urban Residential.
Community Use	Very high recreational value use of Donald Simpson Park, Cleveland State School, William Ross Park and Nandeebie Park.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Potential road strike at local road crossings.
Gaps & Pinch Points	Pinch points and gaps throughout corridor, especially along Queen Street and Russell Street.
Priority Outcomes	Rehabilitation of pinch points along Queen Street and Russell Street. Assessment for road strike at local road crossings.

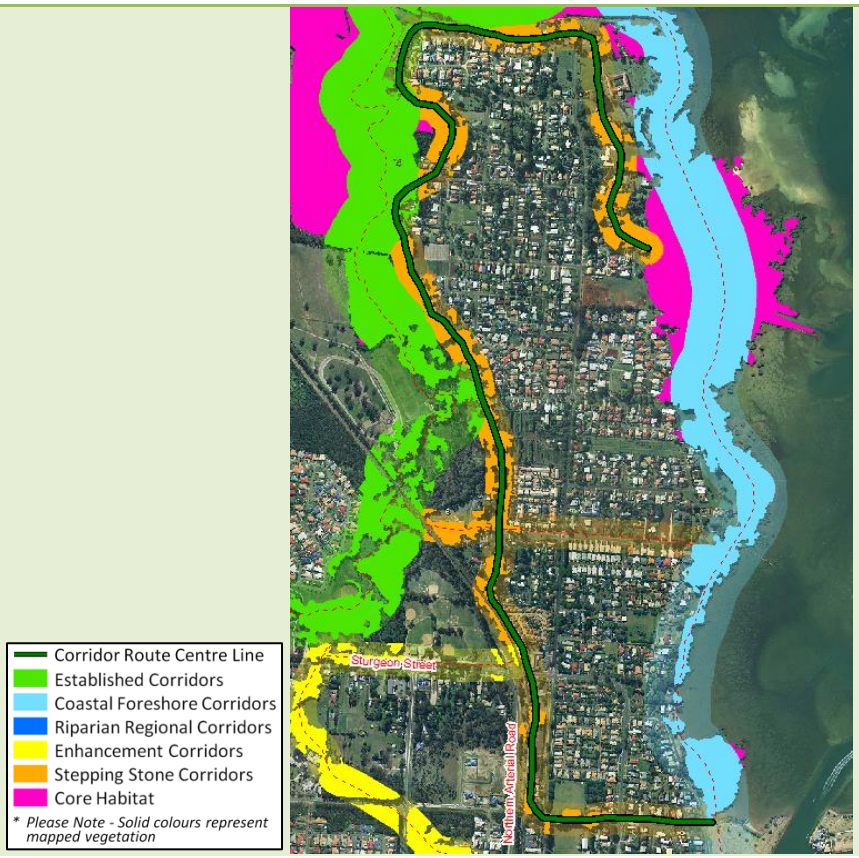
ANZAC Centenary Park to Merv Genrich Park – Stepping Stone Corridor

Description	East to west corridor along Raby Bay linking Merv Genrich Park to ANZAC Centenary Park, via Raby Bay Harbour Park, Bowsprit Parade Park and Bass Canal Park.
Environmental Values	Paperbark open-forest to woodland (12.3.5) and paperbark riparian coastal vegetation (12.3.6) near Merv Genrich Park. Multiple koala records near and in along corridor.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Mix of Community Purposes, Open Space, Major Centre, Urban Residential and Medium Density Residential.
Community Use	High value recreational use of parks, restaurants and walkway.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Cleveland railway and train station. Barrier and potential road strike along Shore Street West, Masthead Drive and local road crossings.
Gaps & Pinch Points	Pinches and gaps throughout corridor.
Priority Outcomes	Rehabilitation of vegetation patches where appropriate.

Norm Price Park to South Street Conservation Area – Stepping Stone Corridor

Description	North to south corridor linking Norm Price Park-Redland Showgrounds to South Street Conservation Area, via Long Street Park, Bay Street Park and Capricorn Drive Park.
Environmental Values	Linking bloodwood, blue gum grassy open forest to woodland/scribbly gum woodland (12.5.2/12.5.3) of Long Street Park, scribbly gum dominated open forest to woodland (12.9-10.4) of Bay Street Park, and 12.9-10.4/12.5.2/12.5.3 of Capricorn Drive Park to paperbark riparian coastal vegetation (12.3.6) of South Street Conservation Area.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Trunk of corridor all Open Space zoned land, with southern end zoned as Conservation. Bound by Urban Residential developments.
Community Use	Extremely high value recreational use of parks and conservation areas, especially of Norm Price Park.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance).
Gaps & Pinch Points	Pinch points throughout corridor before South Street Conservation Area.
Priority Outcomes	Rehabilitation of corridor buffer from Norm Price Park to Beach Street.

Jack Bruce and Gwen Bruce-Chandler Park to Raby Esplanade Park – Stepping Stone Corridor



Description	Long corridor linking Jack Bruce and Gwen Bruce-Chandler Park to Raby Bay Esplanade Park, via Ormiston Conservation Foreshore, Hilliards Conservation Foreshore-Stevens Place/Morris Street, Hilliards Creek Corridor-Hilliard Street, Fletcher Terrace Wetlands, Beckwith Street Wetlands and Beckwith Street Park.
Environmental Values	Linking paperbark riparian coastal vegetation/bloodwood, blue gum grassy open forest to woodland (12.3.6/12.5.2) of Jack Bruce and Gwen Bruce-Chandler Park and Ormiston Conservation Foreshore to Raby Bay Esplanade Park, via bloodwood, blue gum grassy open forest to woodland/casuarina and mangroves open forest/scribbly gum woodland (12.5.2/12.1.1/12.5.3) of Hilliards Conservation Foreshore-Stevens Place; 12.3.6 of Hilliards Conservation Foreshore-Morris Street; 12.3.6/12.5.2/12.5.3 of Hilliards Creek Corridor-Hilliard Street; 12.3.6 of Fletcher Terrace Wetlands; 12.3.6/12.5.2/12.5.3 of Beckwith Street Wetlands; and 12.3.6/12.5.2 of Beckwith Street Park. Highly extensive records of koalas in along corridor. Multiple records of corridor and waterway dependent bird species in along corridor.
Core Habitat Linkages	Links the same significantly sized core habitat patch at both ends. Maximum distance between patch is ≈2400m.
Land Uses / Tenure	Mix of land zoned for Community Purposes, Open Space, Conservation and Environmental Protection surrounding Low Density Residential, Urban Residential and Medium Density Residential developments.
Community Use	Extremely high value recreational use of parks, foreshore and reserves.
Threats & Barriers	Ormiston railway and train station. Potential road strike along railway, Northern Arterial Road and at local road crossings.
Gaps & Pinch Points	Pinch points and gaps along Northern Arterial Road, along railway and through residential developments.
Priority Outcomes	Rehabilitation of pinch points and gaps along Northern Arterial Road, along railway and through residential developments. Safe fauna passage and assessment for railway and road strike along Ormiston railway and local roads.

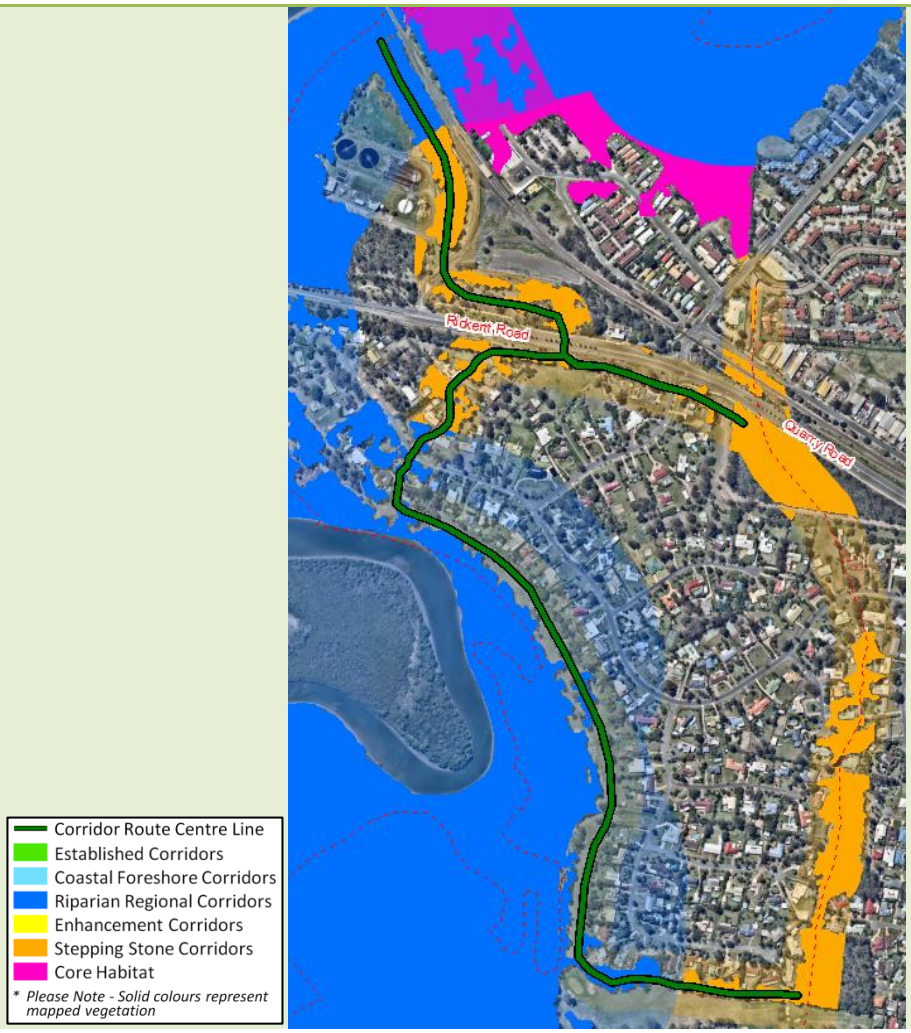
Beckwith Street to Hilliards Creek – Stepping Stone Corridor

Description	West to east corridor linking Hilliards Creek to Beckwith Street.
Environmental Values	Linking paperbark riparian coastal vegetation (12.3.6) of Hilliards Creek to bloodwood, blue gum grassy open forest to woodland (12.5.2) of Beckwith Street. Many koala records at Beckwith Street end.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Western third a mix of Community Purposes, Conservation, Open Space and Conservation. Rest of corridor bound by Medium Density Residential and Urban Residential developments. Eastern end zoned as Conservation and Open Space.
Community Use	Valuable for pedestrian access to Beckwith Street Park and Wetlands and Hilliards Park for recreational use.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and train strike at railway track between Hilliards Park and Beckwith Street. Potential road strike along Beckwith Street.
Gaps & Pinch Points	Pinch points and gaps along Beckwith Street and across railway track.
Priority Outcomes	Rehabilitation of pinch points and gaps along Beckwith Street. Safe fauna passage across railway track.

Bligh Street Wetland to MacFarlan Street Park – Stepping Stone Corridor

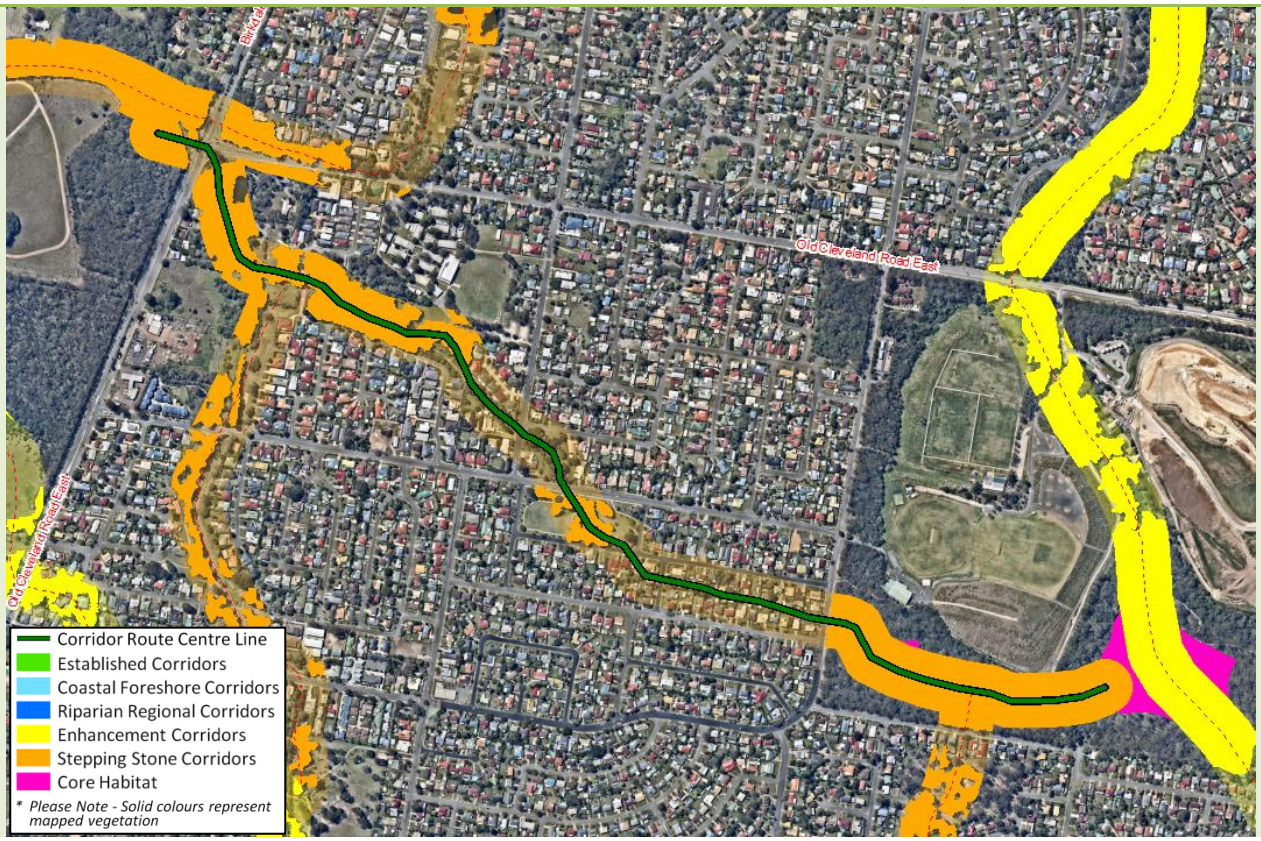
Description	East to west corridor linking Bligh Street Wetland to MacFarlan Street Park, via Jacob Street Nature Belt, Valley Road Wetlands, Roberts Street Park, Mindarie Crescent Park, Celsa Street Road Reserve and Hardy Road Park.
Environmental Values	Linking mangrove closed forest (12.1.3) of Bligh Street Wetland to bloodwood, blue gum grassy open forest to woodland/scribbly gum woodland (12.5.2/12.5.3) of MacFarlan Street Park, via paperbark riparian coastal vegetation/casuarina and mangroves open forest (12.3.6/1.1.1) of Jacob Street Nature Belt; 12.3.6/12.1.1/12.5.2 of Valley Road Wetlands and Roberts Street Park; 12.5.2/12.3.6/12.5.3 of Mindarie Crescent Park; 12.3.6/12.5.2 of Cesla Street Road Reserve; and 12.5.2/12.5.3 of Hardy Road Park. Many koala records and flying fox roost (Jacob Street) at eastern end. Records of waterway dependent bird species at western end.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Primarily Community Purposes, with some Conservation at eastern end and otherwise Urban Residential, Open Space and Medium Density Residential.
Community Use	High value recreational use of parks and walkways.
Threats & Barriers	Barrier and train strike where at least half of corridor adjoins railway track. Barrier and potential road strike at Main Road crossing and local streets.
Gaps & Pinch Points	Pinch points through eastern half of corridor and along railway track.
Priority Outcomes	Rehabilitation of vegetation and buffer along railway track and around residential developments where possible through eastern half of corridor.

Quarry Road Urban Habitat to Harrogate Bushland Reserve – Stepping Stone Corridor



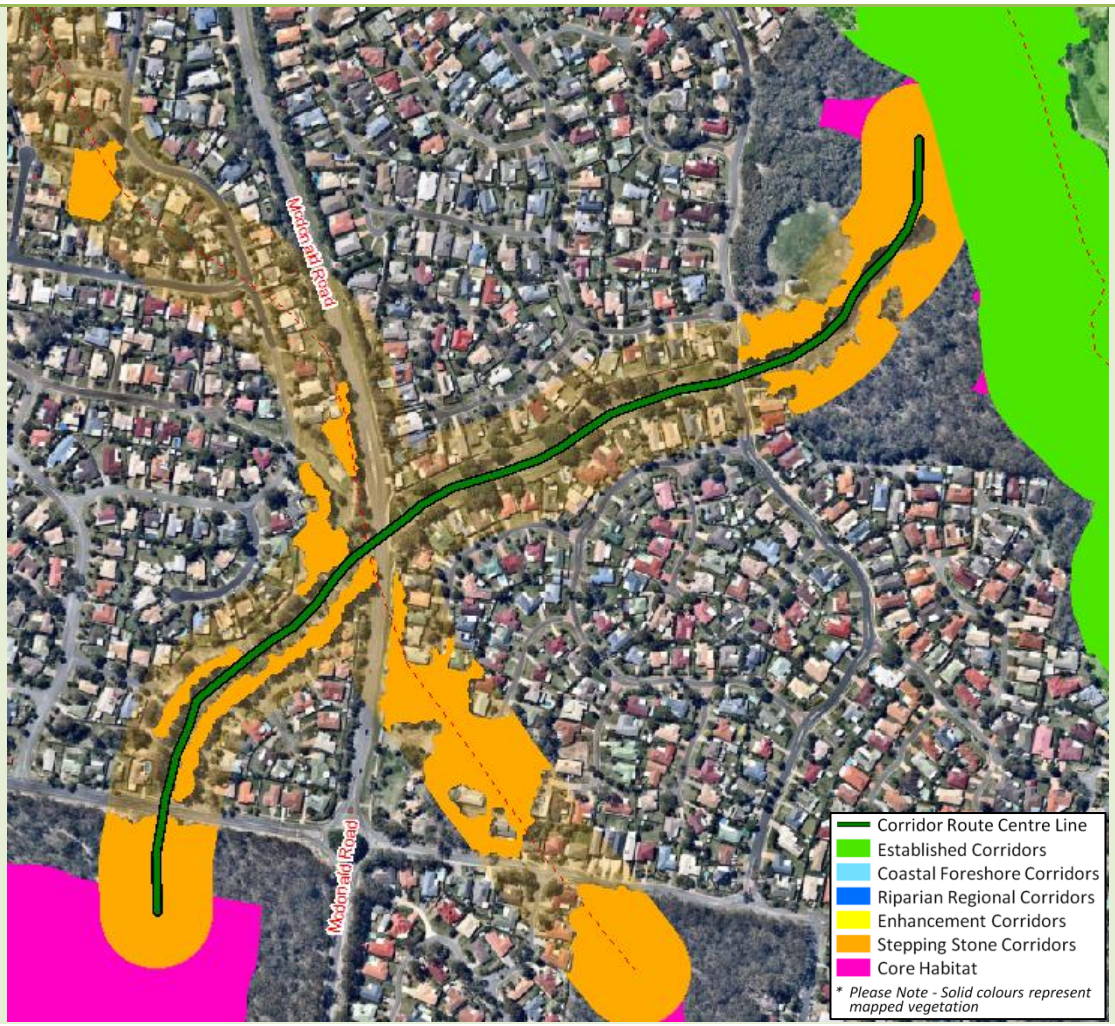
Description	Branched corridor linking Harrogate Bushland Refuge to Quarry Road Urban Habitat and Quarry Road Bushland Refuge, via Tingalpa Creek Corridor-Whitehall Avenue and Quarry Road Nature Belt.
Environmental Values	Linking scribbly gum woodland (12.5.3) of Harrogate Bushland Refuge to blue gum open-forest to woodland (12.3.3d) of Quarry Road Urban Habitat and bloodwood, blue gum grassy open forest to woodland (12.5.2) of Quarry Road Bushland Refuge, via bloodwood, blue gum grassy open forest to woodland/scribbly gum woodland/paperbark riparian coastal vegetation (12.5.2/12.5.3/12.3.6) of Tingalpa Creek Corridor-Whitehall Avenue and 12.3.3d of Quarry Road Nature Belt. Many koala records in northern half of corridor. Some corridor dependent bird species recorded along and near corridor. Osprey nest in north, across from Quarry Road Bushland Refuge.
Core Habitat Linkages	Links and adjoins 1 significantly sized core habitat patch.
Land Uses / Tenure	Trunk zoned as Conservation and Open Space land, with some Low Density Residential and Community Purposes in north. Eastward side bound by Low Density Residential developments.
Community Use	High value recreational use of parks and refuges.
Threats & Barriers	Barrier and train strike at railway track near Quarry Road. Barrier and potential road strike along and at Rickertt Road.
Gaps & Pinch Points	Pinch points throughout corridor south of Quarry Road.
Priority Outcomes	Rehabilitation of vegetation and buffer along corridor south of Quarry Road. Safe fauna passage and assessment for road and train strike at Rickertt Road and railway track.

Judy Holt Bushland to Birkdale Commonwealth Land – Stepping Stone Corridor



Description	Corridor linking Judy Holt Bushland Reserve to Birkdale Commonwealth Land, via Bailey Road Park, Gardenia Drive Park and Lemongrove Creek Corridor.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Judy Holt Bushland Reserve to bloodwood, blue gum grassy open forest to woodland/scribbly gum woodland (12.5.2/12.5.3) and paperbark riparian coastal vegetation (12.3.6) of Birkdale Commonwealth Land, via 12.9-10.4 of Bailey Road Park and 12.3.6 of Lemongrove Creek Corridor. Relatively large flying fox roost (Judy Holt) through Judy Holt Bushland Reserve. Extensive records of corridor dependent bird species recorded at Judy Holt Bushland Reserve.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈200m.
Land Uses / Tenure	Conservation zoned land at western end, Open Space zoned land at eastern end. Trunk a mix of Urban Residential, Open Space, Medium Density Residential, Community Purposes and Environmental Protection.
Community Use	Very high value of Judy Holt Recreation Reserve, Judy Holt Bushland Reserve and other reserves and parks along corridor.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and potential road strike at Bailey Road and Barron Road crossings.
Gaps & Pinch Points	Pinches and gaps through central region of corridor.
Priority Outcomes	Rehabilitation of pinches and gaps through central region of corridor. Safe fauna passage and assessment for road strike at Bailey Road and Barron Road crossings.

Hilliards Creek to Squirrel Glider Conservation Reserve – Stepping Stone Corridor



Description	Corridor linking Hilliards Creek to Squirrel Glider Conservation Reserve, via McDonald Drainage Reserve.
Environmental Values	Linking paperbark riparian coastal vegetation (12.3.6) and riparian open-forest woodland of blue gum, iron bark, bloodwood (12.3.11) of Hilliards Creek to 12.3.6 and scribbly gum dominated open forest to woodland (12.9-10.4) of Squirrel Glider Conservation Reserve, via patches of 12.3.6 through McDonald Drainage Reserve. Multiple records of corridor dependent bird species at Hilliards Creek end and in Squirrel Glider Conservation Reserve.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1000m.
Land Uses / Tenure	Each end zoned as Conservation land, with trunk zoned as Open Space bound by Urban Residential.
Community Use	Very high value recreational use of Hilliards Creek and Squirrel Glider Conservation Reserve, with McDonald Road Drainage Reserve providing pedestrian connectivity.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and road strike at McDonald Road crossing and potentially Montgomery Drive.
Gaps & Pinch Points	Pinch points through McDonald Drainage Reserve.
Priority Outcomes	Rehabilitation of vegetation and buffer corridor through McDonald Drainage Reserve. Safe fauna passage and assessment for road strike across McDonald Road and potentially Montgomery Drive.

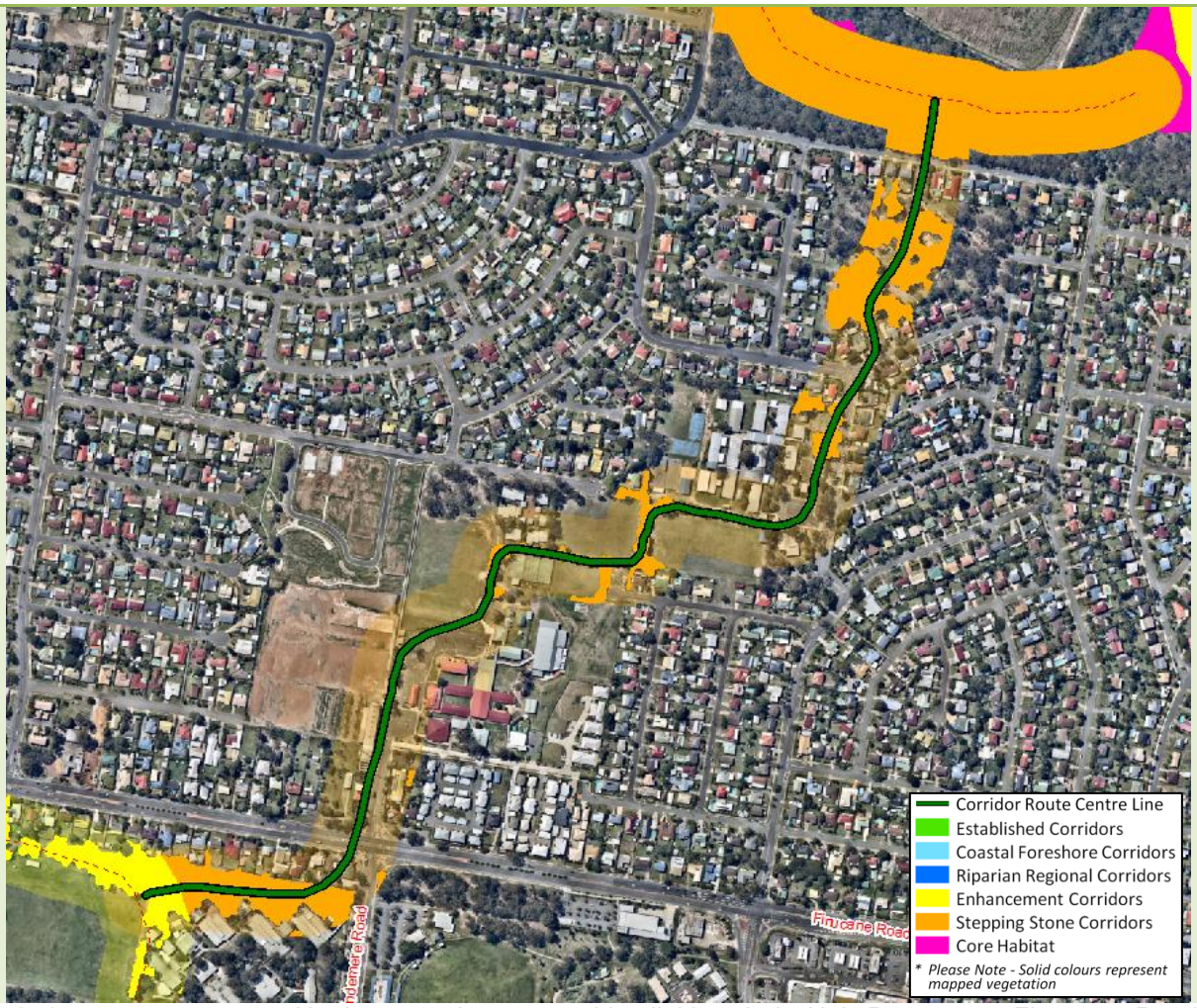
Squirrel Glider to Scribbly Gum Conservation Area – Stepping Stone Corridor

Description	North to south corridor linking Squirrel Glider Conservation Reserve to Scribbly Gum Conservation Area, via Heffernan Road Park, Sussex Street Park and O'Gorman Street Park.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Squirrel Glider Conservation Reserve to that of Scribbly Gum Conservation Area, via 12.9-10.4 of Heffernan Road Park and O'Gorman Street Park. Many koala records around Squirrel Glider end of corridor, with some at Scribbly Gum end. Multiple records of corridor dependent bird species through both conservation areas. Records of Glossy Black-cockatoos further east within Scribbly Gum Conservation Area.
Core Habitat Linkages	Links 2 core habitat patches. Maximum distance between patches is ≈1500m.
Land Uses / Tenure	Each end zoned as Conservation land, with trunk a mix of Open Space, Conservation, Community Purposes and Urban Residential. Trunk otherwise bound by Urban Residential developments.
Community Use	Very high value recreational use of reserves and parks.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and road strike at Finucane Road crossing and potentially local road crossings.
Gaps & Pinch Points	Pinches and gaps all through corridor, mainly south of Heffeman Road.
Priority Outcomes	Rehabilitation of pinches and gaps all through corridor, mainly south of Heffeman Road. Fauna safe passage and assessment for potential road strike at Finucane Road crossing.

Dawson Road Nature Refuge to Scribbly Gum Conservation Area – Stepping Stone Corridor

Description	North to south corridor linking Dawson Road Nature Refuge to Scribbly Gum Conservation Area, via Ludmilla Place Urban Habitat and Macarthur Street Urban Habitat.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Dawson Road Nature Refuge to that of Scribbly Gum Conservation Area, via the same of Ludmilla Place Urban Habitat and 12.9-10.4 and paperbark riparian coastal vegetation (12.3.6) of Macarthur Street Urban Habitat.
Core Habitat Linkages	Links 1 almost 2 core habitat patches.
Land Uses / Tenure	Each end zoned as Conservation land, with trunk mix of primarily Environmental Protection and Conservation, with some Urban Residential development and Open Space.
Community Use	Very high value recreational use of Dawson Road Nature Refuge and Scribbly Gum Conservation Area.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and road strike at Finucane Road crossing and potentially Macarthur Street and Flinders Street.
Gaps & Pinch Points	Gap across Finucane Road and pinch point immediately west of Ludmilla Place.
Priority Outcomes	Rehabilitation of pinch point immediately west of Ludmilla Place. Safe fauna passage across Finucane Road and assessment for potential road strike at Macarthur Street and Flinders Street crossings.

Judy Holt Reserve to Finucane Road – Stepping Stone Corridor



Description	North to south-west corridor linking Judy Holt Reserve to Finucane Road, via George Street Park.
Environmental Values	Linking scribbly gum dominated open forest to woodland (12.9-10.4) of Judy Holt Reserve to that of Finucane Road, via 12.9-10.4 of George Street Park.
Core Habitat Linkages	Links 1 core habitat patch.
Land Uses / Tenure	Judy Holt Reserve and George Street Park zoned as Open Space, with rest of trunk mix of Community Purposes, Medium Density Residential and Urban Residential.
Community Use	Very high value of Judy Holt Recreation Reserve, Judy Holt Bushland Reserve and parks along corridor.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and potential road strike at Finucane Road crossing.
Gaps & Pinch Points	Pinches and gaps throughout corridor after Judy Holt Reserve.
Priority Outcomes	Rehabilitation of vegetation and buffer throughout corridor, particularly amongst cleared spaces through central region of corridor.

Robinson Park to Valantine Park – Stepping Stone Corridor

Description	North to south corridor linking Robinson Park to Valantine Park.
Environmental Values	Linking paperbark riparian coastal vegetation (12.3.6) of Robinson Park to riparian coastal vegetation/scribbly gum woodland/bloodwood, blue gum grassy open forest to woodland (12.3.6/12.5.3/12.5.2) of Valantine Park.
Land Uses / Tenure	Entire trunk of corridor zoned as Open Space, with Conservation at southern end. Bound by Urban Residential and Medium Density Residential developments.
Community Use	High recreational value of Surman Street Drainage Reserve, Valantine Park, Robinson Park and smaller parks in along corridor.
Threats & Barriers	Poor urban land management (e.g. uncontrolled domestic animals, garden escapee weeds, noise and light disturbance). Barrier and potential road strike at Bailey Road crossing.
Gaps & Pinch Points	Pinch points through Drainage Reserve, Valantine Park and Robinson Park.
Priority Outcomes	Rehabilitation of buffer through Drainage Reserve, Valantine Park and Robinson Park.

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Redland
CITY COUNCIL

Wildlife Connections Plan 2018 - 2028 2028

Frequently Asked Questions

How will the Wildlife Connections Plan 2018-2028 (WCP) affect property owners?

- The WCP and associated mapping will assist Council's strategic planning and prioritisation of works for activities such as rehabilitation works, extension programs visits, community and Bushcare plantings, and infrastructure upgrades.
- The outcomes of the WCP can be achieved through a variety of methods based on public or private land ownership and location. Private properties within and adjoining corridors and core habitat may be engaged through Council's extension programs (the Environmental Partnerships Program run out of IndigiScapes) and assisted to:
    - Improve corridor habitat (rehabilitation of corridor gaps and pinch points)
    - Reduce impacts on corridors (e.g. weed management advice).
- Council offers a range of extension programs to private landowners such as Land for Wildlife, Waterways Extension Program and Koala Conservation initiatives
- The WCP has no statutory affect and concentrates primarily on non-statutory ways Council and the community can enhance wildlife habitat and corridors
- Statutory protection of priority corridor habitat on privately owned land may be considered through a review of the Redland City Plan (when adopted) to determine if any amendments are needed to environmental overlays

Will the WCP stop me clearing vegetation on my property?

- The WCP is a non-statutory document and does not impact on current vegetation protection on private property as it does not add any additional vegetation protection on private property.
- Vegetation clearing on private property will continue to be subject to current local law or other legislative provisions.
- The role of the Plan is to provide a strategic and operational focus to short and long-term planning and management of high priority wildlife networks and corridors.

How does the WCP fit with the Redland City Plan?

- The WCP is based on the same regional ecosystem mapping used in the preparation of the Environmental Significance and Waterway Corridors and Wetlands Overlays in draft Redland City Plan, which on commencement will regulate development in the City.
- Various codes within the proposed Redland City Plan help to secure viable and resilient wildlife corridors which link habitat areas and facilitate the movement of native fauna throughout the Redlands and beyond. Corridors connect terrestrial (land) and aquatic environments (including waterways, wetlands and along the foreshore) and significant habitat.
- Corridors and habitat are primarily protected by the Environmental Significance and Waterway Corridors and Wetlands overlays as well as the Conservation, Environmental Management and Recreation and Open Space zones.

- Drafting of the new Redland City Plan was based on the mapping used to identify the core habitat and corridors within the WCP and is currently with the Planning Minister for approval to adopt by Council in the near future.
- One of the key actions identified in the WCP Action Plan is to review the Redland City Plan and determine any necessary amendments that should be considered to enhance wildlife corridors.

Are these corridors identified through existing zoning overlays and local laws?

- Because the current Redland Planning Scheme was developed before the WCP, the mapping of the core habitat and corridors within the WCP does not necessarily align with the current zoning or Habitat Protection Overlay.

How will these corridors be protected from future harm?

- To meet the outcome of protecting corridor habitat, the Wildlife Connections Action Plan 2018-2023 identifies a series of actions aimed at preserving existing corridor values and enhancing them for the future.
- In short, actions are aligned to the following:
    - Improving corridor habitat through Council's conservation program, bushcare program, environmental partnerships program and land management
    - Minimising wildlife deaths through improving safe fauna passages across barriers such as roads
    - Reducing the impact on corridors through reducing edge effects through appropriate buffers, mitigation works, environmental education and domestic animal compliance and behaviour change
    - Protecting corridor habitat through considering any necessary amendments to the future Redland City Plan.

What support is there for implementation of the WCP?

- Council has a policy commitment to protect, manage and enhance wildlife connectivity within the Redlands. The Wildlife Connections Action Plan 2018-2023 identifies immediate on-ground measures that are achievable by Council.
- The successful implementation of the actions requires support and contribution from many sections within Council. Cooperation and assistance will also be required from government agencies, other councils, universities and industry and community groups.
- Year 1 of the WCP implementation focusses on planning, which will involve the review, identification and prioritisation of actions, and the development of an 'operational plan' to deliver on priorities.
- Delivery of the action plan will be funded, subject to Council's budget considerations, through a combination of business as usual, general revenue, environment separate charge, reserve funds and resources obtained through external funding sources.

How can property owners become involved, and are there incentives for involvement?

- Private properties within and adjoining corridors and core habitat can be involved through Council's extension programs (the Environmental Partnerships Program run out of IndigiScapes). Landholders can be assisted to:

    - Improve corridor habitat (rehabilitation of corridor gaps and pinch points). Priority planting of native vegetation (matched to appropriate Regional Ecosystem) in identified corridor gaps and pinch points on freehold land
    - Reduce impacts on corridors (e.g. weed management advice).
- Residents can also become involved in Council's Bushcare Program and community plantings which will assist with the rehabilitation of corridor gaps and pinch points on Council land.

Is there an identified priority for work and what are the areas of focus?

- Implementation of the Action Plan will be undertaken with the following prioritisation considerations:
    1. The Established, Regional Riparian Corridors and Coastal Foreshore are the highest priority for protection and rehabilitation;
    2. The Enhancement Corridors are the second highest priority for protection and rehabilitation;
    3. The Stepping Stone Corridors are a lower priority for protection and rehabilitation;
    4. All areas of Core Habitat are a high priority for protection and rehabilitation. All actions within the Action Plan can be implemented in the identified Core Habitat areas;
    5. All corridor rehabilitation and enhancement of buffer areas should follow South East Queensland Ecological Restoration Framework (SEQ Catchments, 2012); and
    6. All corridor rehabilitation and enhancement of buffer areas must take into account fire management planning.

What evidence is there for the planned corridors and what fauna use these corridors?

- The development of the WCP utilised spatial modelling (CircuitScape) to identify areas of key terrestrial wildlife corridor values that occur between core vegetation areas throughout Redland City.
- The modelling was based on the most up-to-date research, technology and available ecological and anthropogenic data. Expert local knowledge was used to develop the high priority wildlife habitat networks and corridors detailed within this plan.
- The priority corridors are assigned target widths and buffers, based on wildlife corridor principles. The core habitat and wildlife corridors were critiqued using corridor dependent species database records. This interrogation indicated that the corridors correspond closely with the verified corridor dependent species records.
- The WCP aims to include terrestrial (land), riparian (waterway) and coastal foreshore corridors to provide ecologically appropriate wildlife habitat networks and corridors for a range flora and fauna.

Is it just about wildlife or are there other benefits?

- The WCP recognises that the networks and corridors of wildlife habitat may consist of a combination of environmental (bushland habitat) areas, street tree plantings, recreational parks and reserves, residential backyards, non-urban private lands, foreshore areas, waterways and riparian areas.
- For each of the identified corridors the community uses (values and potential uses) are also identified. These community uses will be strongly considered during the planning and implementation stages of the corridor rehabilitation.

- Corridors can also assist in preventing urban heat island effect, assist with maintaining biological diversity between flora species (not just wildlife), ecological services (clean air, filtration of water, sediment removal), scenic amenity and an improved sense of community identity.

11.2.6 KOALA CONSERVATION ACTION PLAN 2016-2021 ANNUAL REPORT 2017

Objective Reference:	**A2708478** **Reports and Attachments (Archives)**
Authorising Officer:	**Louise Rusan** **General Manager, Community & Customer Services**
Responsible Officer:	**Graham Simpson** **Group Manager, Environment & Regulation**
Report Author:	**Cathryn Dexter** **Project Officer, Koala Conservation Program**

PURPOSE

This report provides an update on the progress for the initiatives outlined in the Koala Conservation Action Plan 2016-2021 (KCAP). It also chronicles progress on Council's longstanding 'business as usual' commitments to koala conservation programs.

BACKGROUND

In 2015 the 'SEQ Koala Population Modelling Study' by the University of Queensland (commissioned by the Queensland State Government) concluded that there had been an 80% decline in koala population density in the Koala Coast between 1996 and 2014.

A 2015 internal review on the implementation of the Redlands Koala Policy and Implementation Strategy 2008-2012 confirmed a number of strategies had been successfully implemented, and are now business as usual activities for Council. The review also identified some barriers to implementation and those key lessons were applied in the development of the new Koala Conservation Strategy 2016 and KCAP.

The KCAP articulates actions for koala conservation on both the mainland and North Stradbroke Island that Council can undertake in partnership with the community, State Government, businesses, neighbouring local governments and research bodies. The actions are formulated around four key objectives:

- Decisions based on science
- Protect and improve koala habitat
- Reduce koala deaths; and
- Community making a difference

Fundamental to the KCAP's 37 nominated actions is they seek to address the five key threats to koalas that include:

- Habitat loss and fragmentation
- Road mortality
- Dog attacks
- Disease; and
- Climate change
- The new Koala Conservation Strategy 2016 and KCAP were adopted by Council on 14 December 2016 as one of the strategies identified under the Natural

Environment Policy POL-3128. The first year budget for the Action Plan was approved to commence from 1 July 2017.

ISSUES

Progress of Implementation Actions

Budget was allocated from 1 July 2017 to progress the new actions and facilitate 'business as usual' programs that were identified as a priority for the first year of implementation (financial year 2017/2018). This included the appointment of an officer to the role of Koala Conservation Project Officer (KCPO).

The KCPO identified 10 first year actions with the koala population assessment being the critical first-step. Outcomes of this assessment will further inform planning for longer-term strategic koala monitoring and management. This process has included engaging with internal and external stakeholders to obtain the current understanding of population assessment for koala conservation strategies.

While this planning and design is underway, Council teams have been continuing to facilitate koala conservation programs such as koala habitat plantings, community education, Redlands Afterhours Wildlife Ambulance (RAWA) and the annual North Stradbroke Island koala survey.

The summary of implementation actions to date is listed in Table 1 below.

Table 1: Summary of Implementation Actions

Action	Progress
Decisions Based on Science - Koala Data	
Koala Numbers	• Meetings undertaken with key koala researchers to review current koala population assessment and monitoring methodologies – completed October 2017. • Council officers attended presentations by researchers on research methodology. 1) Koala detection dogs, Scats and DNA (October 2017), and 2) occupancy and density assessments (November 2017). • Council hosted Local Government (LG) Koala Officer Working group at IndigiScapes (November 2017). Meeting was attended by six Local Governments, 12 officers and two representatives from Department of Environment and Heritage Protection. • Formed the internal koala working group in November 2017. • Presented on 11 December 2017 to the internal working group on the short and medium term research/monitoring methods, recommendations and priorities. • Procurement process for the assessment of koala populations commenced in January 2018.
Koala Movement	• Council supported the citizen science koala survey completed October 2017. • Council's Community Grants program supported Koala Action Group koala GPS-collar monitoring of eight koalas residing in and around GJ Walter Park, Cleveland. The monitoring program has now been completed, with information and data to be supplied to Council in February 2018.
North Stradbroke Island Koala Monitoring (Citizen Science)	• Annual NSI Koala Count-a-thon has been completed October 2017.
Koala Threat Mapping	• Review of SEQ Catchments Koala Threat Mapping report – completed September 2017. • Review of research methodologies for mapping threats –

	completed October 2017. • Commenced review of the Assessment of Local Roads reports (2007 and 2009). • Update of Council's Arc Reader map with State Government koala record data completed October 2017.
Koala Research	• Research project collaboration concluded with the University of Sunshine Coast on the Assessment of chlamydial disease in wild animals - final report completed May 2017. Study results presented to the Mayor and Council members in October 2017. • Current koala research and other local government authorities' koala conservation strategies reviewed to inform assessment and management of Redlands Koala population completed in October 2017. • Recruitment through the university placement program, of a student to undertake a gap analysis is in progress.
Protect and Improve Koala Habitat - Corridors for Koalas	
Linking Koala Habitat on Council Land	• Draft report for Wildlife Connections Plan 2018 completed.
Koala Habitat Offsets	• Review of the effectiveness of offsets is planned for early 2018.
Improving Koala Movement	**One Million Native Plants Program and Koala Habitat plantings - December 2016 to December 2017** • Parks and Conservation planted 77,703 habitat plants and 1,851 koala food trees **Identifying habitat** • New layer added to Council road and drainage reserves onto Council's Arc Reader GIS system to identify tree planting opportunities completed November 2017. • New layer for Wildlife Corridors added to Council's Arc Reader GIS system to align koala movement and tree planting opportunities completed November 2017. **Agency Liaison** • Ongoing liaison with Department of Transport and Main Roads regarding fauna friendly fences and State corridors maintenance. • Ongoing liaison with Brisbane and Logan City Councils regarding facilitation of koala movement between City borders. **Property Acquisition** • 80-86 South Street, Thornlands – property is identified for koala habitat restoration works and as a priority corridor in the draft Wildlife Connections Plan 2018. The property is 32,480m² with open areas and some established trees.
Community Improving Koala Habitat	**Koala Conservation Agreement program – December 2016 to December 2017** • 68 properties in the program • 14 new properties signed up • 60 extension visits to participants • 162 koala food trees planted on properties **Koala tree plantings on public land through Bushcare and Parks & Conservation programs – December 2016 – December 2017** • Bushcare planted 275 koala food trees. • Bushcare general koala habitat planting - stems in ground 11,090 plants, which includes koala community planting events – two per year and monthly community group plantings.

Reduce Koala Deaths	
Koala Welfare	**Redlands 24 hour Wildlife Rescue figures December 2016 to December 2017** • Redlands Afterhours Wildlife Ambulance - 292 calls received from the community • Redlands Wildlife Care Network – 246 koala specific calls received from the community
Reduce Koala Deaths on Roads	**Smarter Road Signage** • Dynamic sign costs being investigated as part of longer term strategy to reduce koala road strike. Initial work undertaken October-November 2017. • A two week temporary koala signage trial using dynamic variable message boards trailers (VMS) was undertaken in November 2017 on Shore Street West, Cleveland. Two signs placed to face oncoming traffic in opposite directions displayed the message 'slow down, koalas crossing, next 1 km', between 6pm - 8am daily. Traffic data collected is currently being assessed for effectiveness in changing speed during times the signs were activated.
Controlling Dogs	**Behaviour Change program** • Council engaged Griffith University Social Marketing to undertake a behavioural change program - Dog owners and Koalas, which included online community survey (March 2017). • A 'Leave It' train-the-trainer pilot program was trialled and culminated in 'Dogfest' in June 2017, which was well attended. A final program evaluation report was delivered to Council in June 2017. This has been reviewed and a second draft marketing plan was delivered in October 2017. Plans for the next phase are in progress. • A review of No Dog Zones in Redland City was completed in November 2017 through the University of Queensland Student Industry Placement Program.
Community Making a Difference	
Koalas and the community	**Environmental Education December 2016 – December 2017** • Three koala related Eco-connect workshops held for internal staff with approximately 20 attendees at each session. • Updated Council webpage link to report koala sightings through to Australian Government (CSIRO) Atlas of Living Australia (ALA). • Koala related talks to eight local schools and kindergartens – student ages 2-5 years.
	Koala's on Social Media • IndigiScapes Facebook page promoted koala breeding season months, these were shared on Council's Facebook page. Koala movement post on Council's Facebook page shared 150 times.

Consultation and Meetings

The formation of an internal koala working group with stakeholders from eight Council Groups and 10 Units provides consistency in Council's approach to koala conservation and across departments. The key stakeholders for the internal koala working group include:

- City Planning and Assessment Group
    - Strategic Planning Unit
    - Engineering and Environment Unit

- Economic Sustainability and Major Projects Group
- Communication, Engagement and Tourism Group
- City Infrastructure Group
    - Roads, Drainage and Marine Unit
    - City Infrastructure Planning Unit
    - Traffic and Transport Planning Unit
    - Survey Services Unit
- Project Delivery Group
- City Spaces Group
    - Parks and Conservation Services Unit
- Environment and Regulation Group
    - Environment and Education Unit
    - Development Control Unit
    - Compliance Services Unit
- Community and Cultural Services Group
- Corporate Services Group
    - Indigenous Partnerships Unit

External Consultation and Meetings

Koala Specific Research Groups and Consultants

- Sunshine Coast University (Detection Dogs for Conservation)
- University Queensland (Koala Ecology Group)
- Griffith University (Applied Road Ecology Group)
- Queensland University Of Technology (Biosecurity)
- Endeavour Veterinary Ecology
- Biolink Ecological Consultants
- OWAD Environment Detection Dogs
- Australian Koala Foundation

State, Local Government and Community Groups

- Department of Environmental and Heritage Protection
- Logan City Council
- Gold Coast City Council
- Ipswich City Council
- Noosa Shire Council
- Sunshine Coast Council
- Brisbane City Council
- Moreton Bay Regional Council
- Koala Action Group

Commonwealth Government Actions

No changes to current legislation or regulations related to koalas have been noted for the following:

- *Environmental Protection and Biodiversity Conservation Act 1999*
- *National Koala Conservation Management Strategy 2009*

State Government Actions

State Government Koala Expert Panel

The Koala Expert Panel was established by the Queensland Government as an independent expert panel to provide recommendations on the most appropriate and realistic actions to ensure the long-term survival of koala populations in South East Queensland.

In March 2017, the Expert Panel submitted an interim report to the State Government. The report contains a set of recommendations, however the policy response will be provided by the State government. Once received, officers will review and consider recommendations, where appropriate for the inclusion into the Koala Conservation Strategy and Action Plan.

Changes to Queensland legislation

The South East Queensland Koala Conservation State Planning Regulatory Provisions (SPRP) has been carried forward to the *Planning Regulation 2017* on a 'like-for-like bases. The following summarises the main points:

- The *Planning Act 2016* and *Planning Regulation 2017* both commenced 3 July 2017
- These instruments have now replaced the former SEQ Koala State Planning Regulatory Provisions (SPRP)
- The mapping of assessable development areas and koala habitat values has not changed (the *Planning Regulation 2017* calls up the mapping that was originally prepared for the State Planning Policy, and which also underpinned the SPRP)
- The provisions from the former SPRP have been carried over into the *Planning Regulation 2017,* with only some changes to wording to improve clarity and be consistent with the new framework, for example:
    - previously "*Site design does not result in the clearing of non-juvenile koala habitat trees in areas of bushland habitat*" now "*the development does not involve clearing non-juvenile koala habitat trees in a bushland habitat area*"
    - previously referred to 'assessment criteria' now refers to 'assessment benchmarks'
- The regulation maintains protection of priority koala habitat areas (which includes most of the Redland City Council local government area) by:
    - requiring that development avoids clearing of non-juvenile koala habitat trees in bushland habitat areas, and
    - prohibiting urban development outside of the urban footprint.

Conclusions and Next Steps

Council is making good progress in the implementation of the KCAP.
Key areas of focus during 2017 have been the adoption of the koala conservation program budget; recruitment of a project officer and the commencement of recruitment for a part-time education officer role.

The planning and design for koala population and monitoring programs is underway and is considered the highest priority action. Implementation of other programs will begin in the second half of this financial year, once data and research is compiled and reviewed.

Subject to budget considerations, priority actions as detailed in the adopted KCAP for 2018/2019, will include habitat enhancement; koala movement solutions; community engagement and recruitment of a Koala Conservation Agreement Program Officer to enhance property owner stewardship of koala habitat.

Council teams continue to facilitate koala conservation programs such as koala habitat plantings, community education, RAWA ambulance and the annual North Stradbroke Island koala survey.

Council will review the KCAP when the State Government releases the report from the Koala Expert Panel.

STRATEGIC IMPLICATIONS

Legislative Requirements

Koala protection and conservation involves management action at all levels of government. Contained within the suite of State and Commonwealth legislation relating to planning and the environment, Council has numerous statutory obligations regarding the conservation of koalas. The implementation of the KCAP assists in addressing Council's obligations.

Risk Management

The risk of not implementing the KCAP is not delivering against Council's Operational Plan 2017-18 and not achieving the commitments set out in the longer term Corporate and Community plans for the Healthy Natural Environment outcome.

This includes not delivering on the specific commitment to implement the Koala conservation strategies as part of the adoption of the Natural Environment Policy POL-3128 on 3 June 2015.

Financial

Council has a long standing corporate commitment that continues to support significant investment in koala conservation. The adoption by Council Resolution on 14 December 2016 of the Koala Conservation Strategy 2016 and KCAP is further acknowledgement to that commitment.

The Koala Conservation Program is a multi-year program supported by an approved business case submitted to the Portfolio Management Office during the 2017-18 portfolio intake. This business case was used to support the approved budget for 2017-18. The program is being reported as part of Council's 2017-18 portfolio of projects.

People

Priority outcomes and actions listed in the KCAP are managed by the individual areas in Council responsible for the activity. Although delivery of the Plan is dependent on staff resources there are no direct impacts on people resulting from this report.

Environmental

The implementation of the KCAP continues to conserve and manage suitable koala habitat, which has significant benefits for a wide range of other native species and ecological communities that also share the koala's habitat.

Social

There are no implications on the social policy position.

Alignment with Council's Policy and Plans

Redland City Council's current policy and plans directed to meet statutory obligations and guide protections related specifically to the KCAP include the following:

- Redlands 2030 Community Plan
- Redland City Council Corporate Plan 2015 – 2020
- Redland City Council Operational Plan 2017-2018
- Natural Environment Policy POL-3128
- Local Law No.2 (Animal Management) 2015
- Redlands Planning Scheme 2006
- Draft Redland City Plan

CONSULTATION

The development and implementation of the KCAP includes commitment and contribution from Council Groups included in the Internal Working Group.

OPTIONS

Option 1

That Council resolves to note the report on the progress of the first year priority implementation of the Koala Conservation Action Plan 2016-2021.

Option 2

That Council resolves to request further information.

OFFICER'S RECOMMENDATION

That Council resolves to note the report on the progress of the first year priority implementation of the Koala Conservation Action Plan 2016-2021.

11.2.7 MANAGING IMPACTS OF DEVELOPMENT ON CANAL REVETMENT WALLS

Objective Reference:	**A2836018** **Reports and Attachments (Archives)**
Authorising Officer:	**Louise Rusan** **General Manager Community and Customer Services**
Responsible Officer:	**David Jeanes** **Group Manager City Planning and Assessment**
Report Author:	**Brett Hookway** **Principal Strategic Planner**

PURPOSE

The purpose of this report is to:

- Brief Council on matters relating to the protection of canal and lakeside revetment walls; and
- Seek Council endorsement of the recommended approach to address issues associated with the impacts of new development on canal and lakeside revetment walls.

BACKGROUND

The following provides relevant background information on the previous approaches and arrangements to manage the impacts of development on canal and lakeside revetment walls.

Covenants

- The original setback requirements for development from revetment walls in Raby Bay were achieved through building covenants imposed through contract of sales by the canal estate developer.
- The covenants restricted building work within 9m of the canal revetment wall to:
  - ensure consistent building setbacks and amenity along the canal frontages; and
  - protect the structural integrity of the revetment walls as land within 9m of the canal was designed to only accommodate a landscape loading.
- The covenants were not registered against the land title and as land ownership changed over time the covenants were not passed on to future owners of the land.

Waterfront Structures Transitional Planning Scheme Policy

- The Waterfront Structures Transitional Planning Scheme Policy was commenced in 2001 and sought to regulate the construction of buildings and structures adjoining both natural and artificial waterways across the City.

- The policy was designed to ensure:
  - Structural stability of the waterfront structure, waterway, embankment or revetment wall;
  - Waterfront structures did not restrict access and maintenance and hydraulic and flood carrying capacity of the waterway; and
  - Waterfront structures did not interfere with public access or usage of the waterway or inter-tidal zone.
- The above matters were assessed as part of the building application process.

Private Waterfront Structures Code & State IDAS Code

- In 2006 the Waterfront Structures Transitional Planning Scheme Policy was repealed by Council with the adoption of the Redland Planning Scheme as it no longer had a head of power to continue.
- The Waterfront Structures Transitional Planning Scheme Policy was replaced by the Redland Planning Scheme Private Waterfront Structures Code & State IDAS Code for Prescribed Tidal Works.
- The Private Waterfront Structure Code only applied to natural waterways and did not address artificial waterways and the State IDAS code only applied to development predominantly within the waterway e.g. construction of a pontoon within a canal.

Waterfront Structures Policy and Guideline

- In 2007 Council adopted the Waterfront Structures Policy and Guideline as an interim arrangement. Council however had a limited head of power to administer the policy and it was recognised that a longer term solution would be required.

Redland Planning Scheme - Canal and Lakeside Structures Overlay

- In 2013 Council supported the introduction of a new Canals and Lakeside Structures Overlay as part of a major planning scheme amendment package. The Canals and Lakeside Structures Overlay took effect on 20 March 2015 and remains in place until the commencement of the new City Plan.
- The Canals and Lakeside Structures Overlay elevates the level of assessment for most forms of development within 9m of canal revetment wall to code assessable and requires an application to Council.
- Applicants are required to demonstrate that any proposed development will not damage or weaken the structural integrity or stability of canal revetment walls or lake banks where the development is located within 9m.
- The Canals and Lakeside Structures Overlay also incorporates provisions that require an applicant to address amenity and visual impacts where development is proposed within 4.5m of a canal revetment wall.

Draft City Plan

- The draft City Plan does not include provisions that regulate structural stability based on advice received from the State Government during the City Plan drafting phase that structural stability is a building matter that cannot be regulated through a planning scheme.

- The draft City Plan however incorporates an editor's note which states:

  '*Applicants should also be aware that structures near a canal or revetment wall must maintain the structural integrity of the wall, in accordance with the Building Code of Australia (BCA). Any construction closer than 9m would need to be supported by the correct building structural design certificates which prove that any works within this distance will not cause any movement or damage to the existing revetment wall or bank which may have a limited capacity to withstand additional loadings. These matters are to be addressed in any application for building works'*.

- The draft City Plan continues to incorporate statutory provisions that seek to manage the amenity and visual impacts of new development where located within 9m of a revetment wall.

ISSUES

Council officers have recently met with canal and lakeside residents to discuss how best to manage new development proposed within a 9m setback from canal and lakeside revetment walls. At these meetings the following three key matters were discussed:

1. Structural Integrity of Revetment Walls
2. Amenity and Visual Impacts
3. Access for Maintenance

1. Structural Integrity of Revetment Walls

- While structural stability is a building matter rather than planning matter, subsequent investigations have highlighted that there are inadequate provisions within the existing Building Codes specifically applying to building work adjacent to revetment walls.
- In particular:
  - The Building Code of Australia performance requirement provisions relate to the structural integrity and resilience of the building under assessment rather than the proposed building's impact on revetment walls.
  - There are no specific building provisions dealing with structural integrity of revetment walls.
- In the absence of any specific Building Assessment Provisions addressing structural integrity of revetment walls, it is considered that Council can, at its discretion incorporate provisions into its planning scheme to address this matter.
- Council officers have made a number of representations to the State Government including a submission on the Queensland Housing Code Review and more recently direct correspondence to the Deputy Director General (Planning) of the former Department of Infrastructure Local Government and Planning. The Deputy Director General response acknowledges there appears to be a gap in this area and has committed to investigating this issue.

  To ensure new development addresses the structural integrity of revetment walls this report recommends:

1. Council continue to advocate for State Government changes to the building assessment provisions to ensure a consistent state wide approach to managing the impacts of new development on the structural integrity and stability of canal and lakeside revetment walls through the building application process.

   If the State Government does not undertake relevant changes to building legislation prior to commencement of the new City Plan, it is recommended that a Council report be prepared to consider the introduction of a Temporary Local Planning Instrument to manage the impact of development on the structural integrity of canal and lakeside revetment walls.

2. Amenity and Visual Impacts

- Through meetings and discussions with canal property owners, concerns have been raised regarding the effectiveness of the existing Redland Planning Scheme and the draft City Plan provisions to address amenity and visual impacts of development along canal and lake frontages. The current provisions of the Redland Planning Scheme Canals and Lakeside Structure Overlay require development to ensure the amenity of adjoining premises is maintained by:
  - Ensuring consistency with setbacks of adjoining buildings and structures;
  - Avoiding dominating or detracting from the built form, waterway and landscape setting of the location.
- It is considered there is opportunity to provide greater clarity with regards to these provisions. Possible improvements to the provisions may include additional performance and acceptable outcomes and providing greater guidance and clarity where structures are required to be open air/transparent rather than a solid construction.

To address amenity and visual impacts this report recommends:

- Council commence drafting additional provisions which provide greater clarity and direction regarding the protection of amenity and view corridors along canal and lake frontages. It is recommended the new provisions be prepared as part of the first major amendment package to the new City Plan.

3. Access for Maintenance

- Structures proposed to be built over revetment walls (e.g. decks, pontoons) should be demountable to more easily allow for maintenance work on the revetment wall to be undertaken. In addition, the costs for the removal and reinstatement of these structures should be borne by the landowner.
- Applications for these types of development generally require the lodgement of an Operational Works Application which is assessed by Council under the State Tidal Works Code.

To ensure structures built over or adjacent to revetment walls (e.g. decks, pontoons) are readily demountable at the landowner's expense to allow for maintenance work on the revetment wall to be undertaken, a revised set of new standard conditions has recently been developed. The new standard conditions will be imposed on all future development applications which extend over or adjacent to a revetment wall.

STRATEGIC IMPLICATIONS

Legislative Requirements

Investigations have confirmed that the existing Building Assessment Provisions do not adequately address the potential impact of new development on the structural integrity of revetment walls. In the absence of any specific Building Assessment Provisions addressing structural integrity of revetment walls, it is considered that Council can at its discretion incorporate provisions into its planning scheme to address this matter.

Risk Management

Development potentially impacting on the structural integrity of the revetment walls is a risk for Council and the community. The recommendations of this report seek to ensure provisions continue to be in place to ensure new development does not impact on the structural stability of revetment walls.

Financial

Repair work to canal and lakeside revetment walls represents a significant financial cost, it is therefore essential appropriate mechanisms are in place to ensure new development does not damage or impact on the structural integrity of revetment walls.

People

If the State Government does not amend the building assessment provisions to address structural integrity, Council will need to consider preparing a Temporary Local Planning Scheme. It is expected this work can be managed within existing workloads.

Environmental

There are no environmental implications as a result of the recommendation of this report.

Social

There are no social implications associated with the recommendations of this report.

Alignment with Council's Policy and Plans

The recommendations of this report do not conflict with any Council Policy or plans.

CONSULTATION

During the investigation of matters raised in this report and drafting of this report the following consultation has been undertaken:

- City Infrastructure Group;
- Economic Sustainability and Major Projects;
- Meetings and discussions with canal estate residents;
- Discussion with officers in the State Government Department of State Development, Manufacturing, Infrastructure and Planning.

OPTIONS

Option One

That Council resolves to:

1. Commence the drafting of additional provisions which will strengthen and provide greater clarity in the new City Plan regarding amenity and visual impacts of development along canal and lake frontages. The new provisions be finalised in time for inclusion in the first major amendment package to the new City Plan;
2. Where structures are proposed to be built over or adjacent to revetment walls (e.g. decks, pontoons) updated standard conditions will be imposed on all relevant development applications ensuring the structures are readily demountable at the landowner's expense to facilitate access to the revetment wall for maintenance purposes as required;
3. Continue to advocate for the State Government to make changes to building provisions to address the impacts of new development on the structural integrity and stability of revetment walls; and
4. If the State Government does not undertake relevant changes to building legislation prior to commencement of City Plan, prepare a report to a General Meeting of Council to consider the introduction of a Temporary Local Planning Instrument.

Option Two

That Council resolves to not undertake any further work to address structural integrity of canal and lakeside revetment walls or to amend provisions relating to visual amenity and access for maintenance purposes in the draft City Plan.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Commence the drafting of additional provisions which will strengthen and provide greater clarity in the new City Plan regarding amenity and visual impacts of development along canal and lake frontages. The new provisions be finalised in time for inclusion in the first major amendment package to the new City Plan;**
2. **Where structures are proposed to be built over or adjacent to revetment walls (e.g. decks, pontoons) updated standard conditions will be imposed on all relevant development applications ensuring the structures are readily demountable at the landowner's expense to facilitate access to the revetment wall for maintenance purposes as required;**
3. **Continue to advocate for the State Government to make changes to the building assessment provisions to address the impacts of new development on the structural integrity and stability of revetment walls; and**
4. **If the State Government does not undertake relevant changes to the building assessment provisions prior to commencement of City Plan, prepare a report to a General Meeting of Council to consider the introduction of a Temporary Local Planning Instrument.**

11.3 INFRASTRUCTURE & OPERATIONS

11.3.1 RUSSELL AND MACLEAY ISLAND WASTE TRANSFER STATION – OPENING HOURS

Objective Reference: **A2850631**
Reports and Attachments (Archives)

Authorising Officer: **Peter Best**
General Manager Infrastructure & Operations

Responsible Officer: **Kevin McGuire**
Group Manager Water & Waste Operations

Report Author: **Rob Walford**
RedWaste Service Manager

PURPOSE

This report sets out information resulting from the implementation of Recommendation 2 of the Redland City Council (RCC) Fire Management Plan to trial an increase in operating hours of the Russell and Macleay Island waste transfer stations (WTS) from five days to seven days per week.

This reporting is for noting and to guide decision making regarding the permanent change to opening hours and increased operational expenditure for the 2018/19 Annual Budget development.

BACKGROUND

On 26 October 2017, the Russell and Macleay Island WTS commenced a short term trial from five day to seven day operation each week. This followed Council's adoption of the Fire Management Plan Review Report 2017 and its recommendations prepared by Queensland Fire and Emergency Services. The extended operating hours were due to cease on 31 January 2018.

Given the success of the trial, Council's Executive Leadership Team (ELT) recommended continuing the previously resolved trial until 30 June 2018, whilst encouraging the business and organisation to deliver savings to offset the additional costs where possible. Subsequent extensions would be subject to additional funding allocations in the 18/19 budget.

On 5 February 2018, RedWaste continued seven day per week operations at the Russell and Macleay Island WTS on 30 June 2018.

ISSUES

Waste volumes and transactions at Russell and Macleay Island WTS

Table 1 and 2 below provide snapshots of total waste and recyclables handled, and customer visits for the trial periods of 26 October 2017 to 31 January 2018 compared to the same period of the previous calendar year at Russell and Macleay Island WTS. A five year average of waste and recyclables volumes and customers is provided against the 2017/18 end of year forecast (EOY).

Both Russell and Macleay Island WTS had been experiencing increased mixed waste volumes prior to the extended opening hours therefore it is difficult to establish a clear link between mixed waste volumes and extended hours but data clearly reflects higher customer demand on the Russell Island WTS.

Comparing 2016/17 actual and 2017/18 forecast EOY, annual mixed waste and recyclable material volumes at Russell and Macleay Island WTS are expected to increase by 17% and 0.5% respectively and green waste is expected to increase by 7% and 16% respectively.

Table 1 - Russell Island WTS - waste volume and transactions

Product	26/10/2016 to 31/01/2017	26/10/2017 to 31/01/2018	% Inc/Dec	5 year average PA	2017/18 EOY forecast	% Inc/Dec
Green waste (t)	931	959	3%	2,697	2,926	8%
Mixed waste and recyclables (t)	168	182	8%	522	745	43%
Total customers	3,397	4,625	36%	12,875	16,340	27%

Table 2 - Macleay Island WTS - waste volume and transactions

Product	26/10/2016 to 31/01/2017	26/10/2017 to 31/01/2018	% Inc/Dec	5 year annual average	2017/18 EOY forecast	% Inc/Dec
Green waste (t)	456	541	19%	1,693	1,985	17%
Mixed waste and recyclables (t)	200	209	5%	621	766	25%
Total customers	4,188	4,936	18%	11,563	15,905	38%

Commercial waste disposal

Table 3 below provides a snapshot of commercial waste disposal transactions for the trial period of 26 October 2017 to 31 January 2018 compared to the same period in the prior year demonstrating a significant reduction in commercial waste disposal at Russell Island WTS and overall negligible increase at Macleay Island WTS.

Table 3 - Commercial Transactions at Russell and Macleay Is WTS

Product	Russell Island WTS			Macleay Island WTS		
	26/10/2016 to 31/01/2017	26/10/2017 to 31/01/2018	Inc/Dec (%)	26/10/2016 to 31/01/2017	26/10/2017 to 31/01/2018	% Inc/Dec
Green Waste	107	77	-28%	67	72	7%
Mixed Waste	23	15	-35%	5	28	460%
Total Commercial Customers	130	92	-29%	72	100	39%

Budget

Tables 4 and 5 below reflect operating costs for Russell and Macleay Island WTS for the three month extended hours trial. Additional expenditure is shown where the trial is extended to 31 June 2018. The financial impact of the 3 month trial is $60,258 (excluding GST), additional expense, and extended to 30 June 2018 will cost an additional $87,072 (excluding GST), against adopted 2017/18 budget.

Annualised additional operating expenditure for increased opening hours at Russell and Macleay Island waste transfer stations is estimated to be $130,608 (excluding GST).

Table 4 – Russell Island WTS operating costs

Product	3 month trial			Continued 7 day operation		
	2017/18 adopted budget ($)	2017/18 forecast EOY ($)	Variance ($)	2017/18 adopted budget ($)	2017/18 forecast EOY ($)	Variance ($)
Gatehouse operation	98,164	95,629	2,535	98,164	104,845	(6,681)
Plant and machinery	45,946	51,247	(5,301)	45,946	59,629	(13,683)
Waste transport and disposal	62,522	106,345	(43,823)	62,522	106,345	(43,823)
Sub total	206,632	253,221	(46,589)	206,632	270,819	(64,187)

Table 5 - Macleay Island WTS operating costs

Activity	3 month trial			Continued 7 day operation		
	2017/18 adopted budget ($)	2017/18 forecast EOY ($)	Variance ($)	2017/18 adopted budget ($)	2017/18 forecast EOY ($)	Variance ($)
Gatehouse operation	98,164	95,629	2,535	98,164	104,845	(6,681)
Plant & machinery	61,392	59,551	1,841	61,392	59,551	1,841
Transport and disposal	85,656	103,701	(18,045)	85,656	103,701	(18,045)
Sub total	245,212	258,881	(13,669)	245,212	268,097	(22,885)

Green waste transport and disposal costs are not included in the financial information above due to seasonal variability in volumes and the 2017/18 adopted budget reflects contract rates from the terminated contract with ARG Trees that are no longer applicable to the service.

Illegal dumping

Data relating to illegal dumping complaints received by RCC is presented in Table 6 below. The information suggests that illegal dumping complaints received are consistent with historical averages. The data may also suggest there is no clear link between extended opening hours and a reduction in illegal dumping complaints.

Further advice from Service Manager Compliance indicates that commercial contractors represent the majority of illegal dumping complaints.

Table 6 - Illegal dumping complaints

	2015/16	2016/17	2017/18 YTD	26/10/2017 to 31/01/2018	Illegal dumping material
Russell Island	13	23	17	6	Commercial and residential green waste, household waste, builders rubble
Macleay Island	12	17	11	4	Commercial and residential green waste, household waste, car bodies

STRATEGIC IMPLICATIONS

Legislative Requirements

Not applicable.

Risk Management

Not applicable.

Financial

The extended opening hours trial at the Russell and Macleay Island WTS and continuation of extended hours to 30 June 2018 in support of Recommendation 2 of the Redland City Council Fire Management Plan is unbudgeted in the 2017/18 Annual Budget.

The additional expenditure resulting from the trial is $60,258 (excluding GST), and extended to 30 June 2018, the total additional cost will be $87,072 (excluding GST). The estimated annual cost, should Council decide to make these changes permanent, will be $130,608 (excluding GST).

People

Changes to opening hours at the Russell and Macleay Island WTS are made in accordance with the Terms and Conditions of Contract T-1795-16/17-WST (Separable Portion E).

Environmental

Not applicable.

Social

The extension of opening hours at Russell and Macleay Island WTS from five days per week to seven days per week has shown to have significant engagement from the communities on each island, as demonstrated in Tables 1 and 2 above.

Alignment with Council's Policy and Plans

The operation of Council's waste transfer stations supports the Redlands 2030 Community Plan Vision - 2 Green Living.

CONSULTATION

Consultation has been undertaken with:

- Executive Leadership Team;
- Group Manager Water and Waste Operations;
- Finance Manager – Business Partnering.

OPTIONS

Option 1

That Council resolves to:

1. Note this report and financial commitment relating to the extended opening hours at Russell and Macleay Island waste transfer stations for the 2017/18 financial year;
2. Note the recommendation from Executive Leadership Team to RedWaste to continue extended hours at the Russell and Macleay Island waste transfer stations until 30 June 2018; and
3. Consider this report in determining a permanent increase to opening hours at Russell and Macleay Island waste transfer stations during the upcoming FY2018/19 budget development, at an estimated cost of $130,608 (excluding GST).

Option 2

That Council resolves to seek further information.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Note this report and financial commitment relating to the extended opening hours at Russell and Macleay Island waste transfer stations for the 2017/18 financial year;**
2. **Note the recommendation from the Executive Leadership Team to RedWaste to continue extended hours at the Russell and Macleay Island waste transfer stations until 30 June 2018; and**
3. **Note this report in considering a permanent increase to opening hours at Russell and Macleay Island waste transfer stations during the upcoming FY2018/19 budget development, at an estimated cost of $130,608 (excluding GST).**

12 MAYORAL MINUTE

In accordance with s.22 of POL-3127 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.

13 NOTICES OF MOTION TO REPEAL OR AMEND RESOLUTIONS

In accordance with s.262 Local Government Regulation 2012.

14 NOTICES OF MOTION

In accordance with s.3(4) of POL-3127 Council Meeting Standing Orders

15 URGENT BUSINESS WITHOUT NOTICE

In accordance with s.26 of POL-3127 Council Meeting Standing Orders, a Councillor may bring forward an item of urgent business if the meeting resolves that the matter is urgent.

Urgent Business Checklist	YES	NO
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 can 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 to a General Manager previously?		

16 CLOSED SESSION

16.1 INFRASTRUCTURE & OPERATIONS

16.1.1 MT COTTON PARK COMMUNITY PARK – CARPARK FEASIBILITY

Objective Reference:	**A2858758** **Reports and Attachments (Archives)**
Authorising Officer:	**Peter Best** **General Manager Infrastructure & Operations**
Responsible Officer:	**Bradley Salton** **Group Manager City Infrastructure**
Report Author:	**Benjamin Bruce** **Infrastructure Network Analyst**

EXECUTIVE SUMMARY

Council or Committee has a broad power under Section 275(1) of the *Local Government Regulation 2012* to close a meeting to the public where there are genuine reasons why the discussion on a matter should be kept confidential.

OFFICER'S RECOMMENDATION

That the meeting be closed to the public to discuss this matter pursuant to Section 275(1) of the *Local Government Regulation 2012*.

The reason that is applicable in this instance is as follows:

(e) contracts proposed to be made by it;

(h) other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage

17 MEETING CLOSURE