SOUTH BURNETT REGIONAL COUNCIL

AGENDA

Infrastructure, Environment and Compliance Standing Committee Meeting

Wednesday, 2 August 2023

I hereby give notice that a Meeting of the Infrastructure, Environment and Compliance Standing Committee will be held on:

Date: **Wednesday, 2 August 2023**

Time: **9:00am**

Location: **Warren Truss Chamber**
45 Glendon Street
Kingaroy

Mark Pitt PSM

Chief Executive Officer

Order Of Business

In accordance with the *Local Government Regulation 2012,* please be advised that all discussion held during the meeting is recorded for the purpose of verifying the minutes. This will include any discussion involving a Councillor, staff member or a member of the public.

1 OPENING

2 LEAVE OF ABSENCE / APOLOGIES

3 RECOGNITION OF TRADITIONAL OWNERS

4 DECLARATION OF INTEREST

5 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

5.1 MINUTES OF THE INFRASTRUCTURE, ENVIRONMENT AND COMPLIANCE STANDING COMMITTEE MEETING HELD ON 5 JULY 2023

File Number: **02-08-2023**

Author: **Executive Assistant**

Authoriser: **Chief Executive Officer**

OFFICER'S RECOMMENDATION

1. That the Minutes of the Infrastructure, Environment and Compliance Standing Committee Meeting held on 5 July 2023 be received and the recommendations therein be adopted.

ATTACHMENTS

1. Minutes of the Infrastructure, Environment and Compliance Standing Committee Meeting held on 5 July 2023

SOUTH BURNETT REGIONAL COUNCIL

MINUTES

Infrastructure, Environment and Compliance Standing Committee Meeting

Wednesday, 5 July 2023

Order Of Business

MINUTES OF SOUTH BURNETT REGIONAL COUNCIL
INFRASTRUCTURE, ENVIRONMENT AND COMPLIANCE STANDING COMMITTEE MEETING
HELD AT THE WARREN TRUSS CHAMBER, 45 GLENDON STREET, KINGAROY
ON WEDNESDAY, 5 JULY 2023 AT 9:00AM

PRESENT: **Councillors:**

Cr Gavin Jones (Deputy Mayor), Cr Jane Erkens, Cr Danita Potter, Cr Kirstie Schumacher, Cr Kathy Duff, Cr Scott Henschen

Council Officers:

Mark Pitt (Chief Executive Officer), Aaron Meehan (General Manager Infrastructure), Peter O'May (General Manager Liveability), Susan Jarvis (General Manager Finance & Corporate), Kimberley Donohue (Executive Assistant), Tiarna Hurt (Executive Assistant), Darryl Brooks (Manager Environment and Planning), James D'Arcy (Manager Infrastructure Planning), Kevin Searle (Manager Works), Kerri Anderson (Manager Finance & Sustainability), Leanne Petersen (Manager Facilities & Parks).

1 OPENING

Cr Henschen opened the meeting and welcomed all attendees.

Attendance:
At 9:04 am, Cr Kathy Duff entered the meeting.

2 LEAVE OF ABSENCE / APOLOGIES

APOLOGY

COMMITTEE RESOLUTION 2023/1

Moved: Cr Danita Potter
Seconded: Cr Jane Erkens

That the apology received from Mayor Otto be accepted and leave of absence granted.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

3 ACKNOWLEDGEMENT OF TRADITIONAL OWNERS

Cr Duff acknowledged the traditional custodians of the land on which the meeting took place.

4 DECLARATION OF INTEREST

Nil

5 CONFIRMATION OF MINUTES OF PREVIOUS MEETING

5.1 MINUTES OF THE INFRASTRUCTURE, ENVIRONMENT AND COMPLIANCE STANDING COMMITTEE MEETING HELD ON 7 JUNE 2023

COMMITTEE RESOLUTION 2023/2

Moved: Cr Jane Erkens
Seconded: Cr Danita Potter

That the Minutes of the Infrastructure, Environment and Compliance Standing Committee Meeting held on 7 June 2023 be received.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

6 PORTFOLIO - INFRASTRUCTURE PLANNING, WORKS (CONSTRUCTION & MAINTENANCE), WATER & WASTEWATER, PLANT & FLEET

6.2 INFRASTRUCTURE PLANNING, WORKS (CONSTRUCTION & MAINTENANCE) PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/3

Moved: Cr Gavin Jones
Seconded: Cr Danita Potter

That Councillor Jones's Infrastructure Planning, Works (Construction & Maintenance), Portfolio Report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

6.1 APPLICATION FOR ROAD LICENCE OVER A PORTION OF THE TOOMEYS ROAD RESERVE TAABINGA

COMMITTEE RESOLUTION 2023/4

Moved: Cr Gavin Jones
Seconded: Cr Danita Potter

That the Committee recommends to Council:

1. That Council advise the applicant and the Department of Natural Resources and Mines that:
   (a) It does not object to the application for the road licence over a portion of the Toomeys Road reserve and nearby unformed road adjacent to Lot 59 FY17 and 60 FY17 as shown in Attachment one (1).

(b) Should the Department of Natural Resources and Mines approve the road licence that there be no cost to Council associated with the application.

2. Delegates authority under section 257 of the Local Government Act 2009 to the Chief Executive Officer or their delegate to finalise any and all matters associated with the application.

(a) Execute, as road manager, form Part C '*Statement in relation to an application under the Land Act 1994 over State land'* for the proposed road licence.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

6.3 REQUESTING COUNCIL NAME TWO NEW ROADS AS PART OF SUBDIVISION AT 241 IZZARDS ROAD SOUTH NANANGO

COMMITTEE RECOMMENDATION

Moved: Cr Gavin Jones
Seconded: Cr Danita Potter

That the Committee recommends to Council to name the roads:

- Road one (1) – Latrobe Road
- Road two (2) – Duncan Road

COMMITTEE RESOLUTION 2023/5

Moved: Cr Jane Erkens
Seconded: Cr Kathy Duff

That the matter lay on the table until further clarification.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

6.4 NANANGO CBD PARKING AND OPERATIONS

COMMITTEE RESOLUTION 2023/6

Moved: Cr Jane Erkens
Seconded: Cr Kathy Duff

The Committee recommend to Council that:

Council undertakes public consultation regarding introducing parking regulation and restriction within the Nanango CBD.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At 9:46am, Chief Executive Officer Mark Pitt left the meeting.
At 9:48am, Chief Executive Officer Mark Pitt returned to the meeting

6.5 WONDAI CBD STREETSCAPE

COMMITTEE RESOLUTION 2023/7

Moved: Cr Danita Potter
Seconded: Cr Jane Erkens

That Council consider and provide feedback as to the results from the Community Consultation for this project including the following points:

- Removal of two (2) traffic islands
- Removal of the crossing
- Proceed to final design including further design options for alternative footpath colours and construction materials which included colour options and ease of cleaning
- Consideration be given to placement options and recognition of traditional owners in the design.
- That the proposed final design be taken back to the affected business community and circulated to the broader Wondai community for final feedback before being endorsed by Council.

And that a report be provided to the September Standing Committee

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

6.5.1 QUESTION ON NOTICE - FACADE IMPROVEMENT APPLICATIONS

Question on Notice from Cr Henschen:

How many Façade Improvement Applications hsve been received for Scott Street, Wondai?

ADJOURN MORNING TEA

COMMITTEE RESOLUTION 2023/8

Moved: Cr Jane Erkens
Seconded: Cr Danita Potter

That the meeting adjourn for morning tea.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

RESUME MEETING

COMMITTEE RESOLUTION 2023/9

Moved: Cr Kirstie Schumacher
Seconded: Cr Gavin Jones

That the meeting resume at 10:41am.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At the resumption of the meeting, Manager Finance & Sustainability Kerri Anderson was present.

7 WATER & WASTEWATER

7.1 WATER AND WASTEWATER PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/10

Moved: Cr Gavin Jones
Seconded: Cr Danita Potter

That Councillor Jones's Water and Wastewater Portfolio Report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

7.1.1 QUESTION ON NOTICE - GORDONBROOK DAM WATER LEVEL

Question on Notice from Cr Schumacher:

Has any modelling of how long that water source will last been done and how long till we reach the 50% level?

8 PORTFOLIO - NATURAL RESOURCE MANAGEMENT, RURAL SERVICES, AGRICULTURAL INNOVATION, COMPLIANCE AND ENVIRONMENTAL HEALTH

Attendance:
At 10:46am, General Manager Liveability Peter O'May left the meeting.
At 10:47am, General Manager Liveability Peter O'May returned to the meeting.
At 10:51am, General Manager Infrastructure Aaron Meehan left the meeting.

8.1 NATURAL RESOURCE MANAGEMENT, COMPLIANCE AND ENVIRONMENTAL HEALTH PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/11

Moved: Cr Scott Henschen
Seconded: Cr Danita Potter

That Cr Henschen's Natural Resource Management, Compliance and Environmental Health Portfolio Report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At 10:56am, General Manager Infrastructure Aaron Meehan returned to the meeting.

8.2 NATURAL RESOURCE MANAGEMENT OPERATIONAL UPDATE

COMMITTEE RESOLUTION 2023/12

Moved: Cr Danita Potter
Seconded: Cr Kathy Duff

That the Natural Resource Management Operational update be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

8.3 ENVIRONMENT AND WASTE SERVICES OPERATIONAL UPDATE

COMMITTEE RESOLUTION 2023/13

Moved: Cr Danita Potter
Seconded: Cr Kathy Duff

That the Environment and Waste Services Update be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At 11:03 am, Cr Kathy Duff left the meeting.

8.4 ANIMAL MANAGEMENT

COMMITTEE RESOLUTION 2023/14

Moved: Cr Danita Potter
Seconded: Cr Jane Erkens

That the Committee recommend to Council that: -

1. Council undertakes community consultation on Council's animal management functions including:
    - Dog registration fees, categories, and registration areas
    - Potential introduction of an animal management charge in lieu of dog registrations
    - Responsible animal management initiatives
    - Cat registrations
2. A report be brought back to the October Infrastructure, Environment and Compliance Standing Committee Meeting after the community consultation process has been completed.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher and Scott Henschen

Against: Nil

CARRIED 5/0

Attendance:
At 11:05 am, Cr Kathy Duff returned to the meeting.

9 DISASTER MANAGEMENT

9.1 LOCAL DISASTER MANAGEMENT PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/15

Moved: Cr Danita Potter
Seconded: Cr Kathy Duff

That Councillor Potter's Local Disaster Management Portfolio report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

10 WASTE & RECYCLING MANAGEMENT

Attendance:
At 11:11am, Manager Facilities & Parks Leanne Petersen entered the meeting.

10.1 WASTE & RECYCLING MANAGEMENT PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/16

Moved: Cr Danita Potter
Seconded: Cr Jane Erkens

That the Waste Management Portfolio Report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

10.1.1 QUESTION ON NOTICE - SELLING OF SECOND HAND MATTRESS

Question on Notice from Cr Henschen:

Is there a regulation or law about selling a second hand mattress?

11 PORTFOLIO - RURAL RESILENCE & DISASTER RECOVERY, PARKS & GARDENS, PROPERTY & FACILITY MANAGEMENT, FIRST NATIONS AFFAIRS

11.1 RURAL RESILIENCE & DISASTER RECOVERY, PARKS & GARDENS, PROPERTY & FACILITY MANAGEMENT AND FIRST NATION AFFAIRS PORTFOLIO REPORT

COMMITTEE RESOLUTION 2023/17

Moved: Cr Kathy Duff
Seconded: Cr Danita Potter

That Cr Duff's Rural Resilience & Disaster Recovery, Parks & Gardens, Property & Facility Management and First Nation Affairs Portfolio Report to Council be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At 11:30 am, Cr Gavin Jones left the meeting.
At 11:32 am, Cr Gavin Jones returned to the meeting.

12 PARKS & GARDENS

12.1 FACILITIES AND PARKS OPERATIONAL UPDATE

COMMITTEE RESOLUTION 2023/18

Moved: Cr Kathy Duff
Seconded: Cr Danita Potter

That the Facilities and Parks Operational update be received for information.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

13 QUESTIONS ON NOTICE

13.1 QUESTION ON NOTICE - MURGON SHADE SHELTERS

COMMITTEE RESOLUTION 2023/19

Moved: Cr Kathy Duff
Seconded: Cr Jane Erkens

That the response to the question on notice – Murgon Shade Shelters lay on the table until the August Standing Committee.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

13.2 QUESTION ON NOTICE - POOL CONTRACTS

COMMITTEE RESOLUTION 2023/20

Moved: Cr Gavin Jones
Seconded: Cr Jane Erkens

That the response to the question regarding Pool Contracts raised by Councillor Gavin Jones be received and noted.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

13.3 QUESTION ON NOTICE - POOL COMPARISONS

COMMITTEE RESOLUTION 2023/21

Moved: Cr Jane Erkens
Seconded: Cr Danita Potter

- That the response to the question regarding Pool Comparisons raised by Councillor Jane Erkens be received and noted.
- A further report be brought back to the September Standing Committee regarding business review of Council pool operations and costs.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

Attendance:
At 11:54am, Manager Facilities & Parks Leanne Petersen left the meeting.

13.4 QUESTION ON NOTICE - INFRASTRUCTURE

COMMITTEE RESOLUTION 2023/22

Moved: Cr Danita Potter
Seconded: Cr Gavin Jones

That the response to the questions raised, be received and noted.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

13.5 QUESTION ON NOTICE - WILD DOG MANAGEMENT - BUNYA MOUNTAINS

COMMITTEE RESOLUTION 2023/23

Moved: Cr Kirstie Schumacher
Seconded: Cr Jane Erkens

That the response to the question regarding wild dog management at the Bunya Mountains raised by Councillor Schumacher be received and noted.

In Favour: Crs Gavin Jones, Jane Erkens, Danita Potter, Kirstie Schumacher, Kathy Duff and Scott Henschen

Against: Nil

CARRIED 6/0

14 CONFIDENTIAL SECTION

Nil

15 CLOSURE OF MEETING

The Meeting closed at 12:00pm.

The minutes of this meeting were confirmed at the Infrastructure, Environment and Compliance Standing Committee Meeting held on 2 August 2023.

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CHAIRPERSON

6 PORTFOLIO - INFRASTRUCTURE PLANNING, WORKS (CONSTRUCTION & MAINTENANCE), WATER & WASTEWATER, PLANT & FLEET

6.1 INFRASTRUCTURE PLANNING, WORKS (CONSTRUCTION & MAINTENANCE) PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Infrastructure Planning and Works (Construction & Maintenance) Portfolio Report

SUMMARY

Councillor Jones presents his Infrastructure Planning and Works (Construction & Maintenance), Portfolio Report to Council.

OFFICER'S RECOMMENDATION

That Councillor Jones's Infrastructure Planning, Works (Construction & Maintenance), Portfolio Report to Council be received for information.

BACKGROUND

N/A

ATTACHMENTS

1. Infrastructure Planning and Works (Construction & Maintenance) Portfolio Report

ROADS AND DRAINAGE PORTFOLIO REPORT

Current Design and Planning Projects

Name	Description	Status
Alford Street, Kingaroy	Detailed Design Watermain renewal	Design 80% complete
River Road & Kingaroy Street Roundabout	Detailed Design Pavement Rehabilitation	Design 50% complete
Markwell Street (STIP)	Detailed Design for Bus Interchange	Design 90% complete
Frederick Street, Wooroolin (SafeST)	Bus set down and car parking	Design 90% complete
Birt Road, Booie	Drainage Improvements and pavement rehab	Design 80% complete
Wondai CBD Streetscape	Streetscape – Detailed Design	Design 10% complete

Current / Planned Works for August

As of 19 July 2023

Capital Works

Name	Description	Expected Start	Expected Completion	Budget Amount	Actual as at 19/07/2023
Denmark Road, Wooroolin	Shoulder Resheeting	August	September	$91,839	$0
Liesegangs Road, Crawford	Shoulder Resheeting	August	November	$86,210	$0
North Street, Kingaroy	Install kerb and channel	July	September	$121,500	$0
Parker Road, Ellesmere	Shoulder Resheeting	August	October	$64,159	$0
Reedy Creek Road, Benair	Shoulder Resheeting	August	October	$91,317	$0
Kingaroy State School/Kingaroy State High School	Intersection and Parking Upgrade	August	October	$143,308	$0
Birt Road, Corndale	Gravel Resheeting and Drainage	August	October	$180,000	$0

Bitumen Resealing

Name	Description	Expected Start Date	Expected Completion Date	Budget Amount	Actual as at 19/07/2023
Haly Street, Kingaroy	Bitumen Resealing	August	October	$123,000	$24,112
Old Esk Road, Taromeo	Bitumen Resealing	August	October	$140,480	$83,992
Runnymede Road, Runnymede	Bitumen Resealing	August	October	$217,980	$30,325

Patrol Grading

Locality	Description	Expected Start	Expected Completion
Abbeywood	Farmers Road, Gayndah Abbeywood Road	July	July
Alice Creek	Tuckers Road, Glencliffe Road, Alice Creek Road	August	August
Benair	Winters Road, Kumbia Minmore Road, Woodenhut Road, Benair Road	August	August
Boyneside	Ironpot Road	July	July
Brigooda	Rankins Road, Alexander And Lawson Road, Weber Lane	August	August
Coverty	Ivanhoe Road	July	July
Goodger	Neale Road	July	July
Gordonbrook	Half Mile Creek Road, Smiths Road	August	August
Inverlaw	Deep Creek Road, Inverlaw School Road, Minmore Road, Barrons Road North	August	August
Ironpot	Jumma Road	July	July
Kinleymore	Basin Road, Kilgour Lane	July	July
Kumbia	Hays Road, Dicks Road, Enderby Street, Roberts Road, Collier Street, Janetzki Street, Francis Road, Maize Company Road, Nollers Road, Kumbia Back Road	July	August
Maidenwell	Maidenwell Pimpimbudgee Road	July	July
Okeden	Trentham Lane	July	August
Pimpimbudgee	Clapperton Road, Cause Road, Behan Road, Pimpimbudgee Road	July	July
Stalworth	Reservoir Road	July	July
Wengenville	Dugdell Road, Saddle Tree Creek Road, Red Cedar Drive, Silky Oak Drive, Maidenwell Glencliffe Road, Wengenville Glencliffe Road	July	August

Roadside Slashing

Locality	Description	Expected Start	Expected Completion
Barkers Creek Flat	McNamara Road	July	July
Brooklands	Langan Road, Darley Crossing Road, Boldery Road, Brooklands Pimpimbudgee Road	July	August
Kingaroy	West Street, River Road, Kingaroy Burrandowan Road	July	July
Kunioon	Kunioon Road	July	July
Maidenwell	Coomba Waterhole Road, King Road, Maidenwell Upper Yarraman Road, McConnell Road, Tanduringie School Road, Beare Road, Coleman Road	July	August
Nanango	Ironbark Place, GS Wilson Road, Oliver Road, Carbeen Crescent, Bushnells Road, Golf View Drive, Kurrajong Drive, Tara Avenue, Parsons Road, Camp Creek Road	July	July
Pimpimbudgee	Middle Creek Cooyar Road	August	August
Proston	Okeden Road	July	July
South Nanango	Majors Road, Kassulke Road, Allen Road, Andrew Road	July	August
Tarong	Norman Road, Raymond Road, Deveraux Drive, Tanduringie Drive	July	July
Wengenville	Saddle Tree Creek Road	August	August
Wondai	Wondai Proston Road	July	July

Flood Damage Restoration Works

Locality	Work Type	Description	Expected Start	Expected Completion
Blackbutt	Sealed Road Works	James Street , Janice Court, Margaret Street , Miller Street, Muir Street , Pine Street , Sutton Street, Boobir Dam Road, Chester Le Street, Allery Street, Crofton Street	August	August
Blackbutt	Unsealed Road Works	Miller Street	August	August
Blackbutt North	Sealed Road Works	Crumpton Drive, Anita Road, Enid Court, Myrtle Court, Packer Road, Gilliland Crescent	July	August
Blackbutt North	Drainage Works	Enid Court	July	August
Blackbutt North	Unsealed Road Works	Langton Road	August	August
Blackbutt South	Unsealed Road Works	Googa Creek Road	July	August
Brooklands	Unsealed Road Works	Fairbrother Road, Baker Road , Greenslade Road, Boldery Road, Buchholz Road	July	August
Brooklands	Sealed Road Works	Brooklands Pimpimbudgee Road	July	August
Chelmsford	Unsealed Road Works	Red Hill Road	July	July
East Nanango	Unsealed Road Works	Diggings Road	July	August
East Nanango	Sealed Road Works	Diggings Road	August	August
Fairdale	Unsealed Road Works	Baker Road	July	July
Fairdale	Unsealed Road Works	Springs Road, Bushnell Lane	July	July
Hivesville	Unsealed Road Works	Edward Lane, William Street , Main Street , Oberles Road	August	August
Hivesville	Unsealed Road Works	Ten Chain Road	August	August
Kinleymore	Unsealed Road Works	Kinleymore School Road, Dionysius Road, Middle Road	August	August

Kunioon	Unsealed Road Works	Farnows Road	July	July
Mount McEuen	Unsealed Road Works	Mt McEuen Road, Hoffmanns Road, The Bluff Road	August	August
Nanango	Unsealed Road Works	Lanes Road , Templetons Road	August	August
Nanango	Sealed Road Works	Carbeen Crescent, Racecourse Road , Fleming Street, Finlay Road, Templetons Road, Lanes Road , Kurrajong Drive	July	August
Nanango	Drainage Works	Racecourse Road	July	July
Neumgna	Sealed Road Works	Ridge Road	July	August
Neumgna	Drainage Works	Ryan Reagon Road	July	July
Nukku	Sealed Road Works	Nukku North Road, Nukku Road	July	August
Proston	Drainage Works	Drake Street	August	August
Proston	Unsealed Road Works	Back Road	August	August
South East Nanango	Unsealed Road Works	Oaky Creek Road	July	August
South East Nanango	Sealed Road Works	Old Esk North Road	August	August
South East Nanango	Drainage Works	Old Esk North Road	August	August
South Nanango	Unsealed Road Works	Whitaker Road, Majors Road, Jensen Road	July	August
South Nanango	Sealed Road Works	Izzards Road, Nanango Neumgna Road	July	August
South Nanango	Drainage Works	Hazeldean Road, Jensen Road	July	July
Taromeo	Sealed Road Works	Old Esk Road	July	August
Tarong	Unsealed Road Works	Tarong Railway Road, Pincott Lane, Tanduringie Drive, Pedler Road	July	August
Tarong	Sealed Road Works	Nobby Smith Way	August	August

Completed Works for Noting – as at 18 July 2023

Design and Planning Projects

Name	Description	Status
Glendon Street, Kingaroy	Detailed Design Watermain renewal	Design 100% complete
Jubilee Street, Kingaroy	Detailed Design Watermain renewal	Design 100% complete
Markwell Street, Kingaroy	Detailed Design Watermain renewal	Design 100% complete
Tessmanns Road, Kingaroy	Detailed Design of Footpath	Design 100% complete
Gore Street, Murgon	Detailed Design of Pavement Rehab	Design 100% complete
Gore Street, Murgon (STIP)	Parking Upgrades	Design 100% complete
Angel Avenue, Murgon (STIP)	School Crossing	Design 100% complete

Capital Works

Name	Description	Budget Amount	Actual (as at 18/07/23)
Campbells Road, Byee	Pavement Rehabilitation	$267,187	$60,801
Campbells Road, Byee	Bitumen Resealing Works	$111,115	$73,199
Corndale Road, Corndale	Road Widening	$1,589,866	$1,432,459
Elbow Road, Merlwood	Bitumen Reseal Works	$101,120	$162,985
Flats Road, Chelmsford	Bitumen Reseal Works	$20,020	$38,582
Hetheringtons Road, Manyung	Bitumen Reseal Works	$53,200	$59,868
Kawl Kawl Road, Kawl Kawl	Bitumen Reseal Works	$98,012	$64,416
Nanango CBD PWD Construction	Disabled Parking Bays	$80,000	$69,050
Pauls Parade, Ellesmere	Bitumen Reseal Works	$35,000	$47,914

Reifs Road, Manyung	Bitumen Reseal Works	$204,800	$137,035
Webbers Bridge Road, Wooroonden	Bitumen Reseal Works	$32,760	$58,638

Patrol Grading

Locality	Description
Barker Creek Flat	McNamara Road
Benair	Reedy Creek Road, Strongs Road
Benarkin	Steven Street
Boyneside	Quires Road
Dangore	Wilsons Road
Ellesmere	Oaky Creek Back Road
Gordonbrook	Wyuna Road
Hivesville	Wilson Road
Ironpot	Jarail Road
Keysland	Dip Road
Kinleymore	Dionysius Road, Stumckes Road, Kinleymore School Road, Meyhar Road, Middle Road
Maidenwell	Trapp Road, Maidenwell Upper Yarraman Road
Mannuem	Glenrocks Road, Johnstons Road, Wolskis Road, Hancocks Road, McMurdys Road
Mount McEuen	Mt McEuen Road, Hoffmanns Road, The Bluff Road
Neumgna	Hobdell Road
Okeden	Parishs Road
Pimpimbudgee	Rocky Glen Road, Soldier Settlement Road, Connolly Road, Tanduringie School Road, Copper Creek Road, Middle Creek Cooyar Road
Proston	Back Road, The Weir Road, Blanchs Road, Moloneys Road, Okeden Byanda Road
Speedwell	Mantheys Road, Byanda Road, Speedwell Road, Speedwell School Road, Roberts Road, K Hansens Road, Howard Road
Stalworth	Fitzgerald Road
Wigton	Foxs Road

Roadside Slashing

Locality	Description
Abbeywood	Cridlands Road
Booie	Malar Road, Burtons Road , Radunzs Road, Siddans Road, Hillsdale Road, Booie Crawford Road , Burkes Road, Mount Hope Road , Faughnans Road , Harchs Road, North Branch Road , Haydens Road , Jorgensens Road
Boondooma	Brownless Road, Krugers Road, West Boondooma Road, Pincotts Road
Brooklands	Nanango Brooklands Road
Byee	Friebergs Road, Sempfs Road
Chelmsford	Jacksons Road
Cloyna	Bicks Road
Coolabunia	Sommerfelds Lane, Mary Street , Peterson Drive, Royles Road , West Coolabunia Road, Franklins Road, Barsbys Road, Coolabunia Road, Reagon Road
Corndale	Birt Road, Corndale Road
Crawford	Wingfields Road, Liesegangs Road, Siefert Street
Durong	Aberdeen Avenue, Shellytop Road, Stubbs Armstrong Road, Woolletts Road, Swains Road
East Nanango	Brights Road, East Nanango Road, Lowry Road, Mt Stanley Road, North Kerton Road, South Kerton Road, Greenwood Creek Road, Mercer Springate Road, Diggings Road
Ellesmere	Acacia Drive, Parker Road, Pauls Parade, Gannon Drive, Hilltop Drive, Lilian Avenue
Glan Devon	Locke Lane
Goodger	Cairns Road, Weeks Road
Haly Creek	Ellesmere Road, Haly Creek Road, Stuart Valley Drive
Hivesville	Hivesville Road
Hodgleigh	Bellbird Road, Semgreens Road, Coolabunia Malar Road, Roberts Road
Kingaroy	Clark & Swendson Road, Edenvale North Road, Harris Road, Redmans Road, Curtis Road, Schellbachs Road, Taylors Road, Belair Drive, Weens Road
Kinleymore	Kinleymore School Road
Kumbia	Kearneys Road
Memerambi	Couchmans Road
Mondure	McConnel Way
Murgon	Silverleaf Road , Silverleaf Road
Nanango	Rural Road, Hicken Way , Old Rifle Range Road, Templetons Road, Finlay Road, George Street , McEwans Road, Behs Road, Ironbark Place, Millis Way
Proston	Okeden Byanda Road
South East Nanango	Hamilton Road, Muir Drive, Old Esk North Road
South Nanango	Izzards Road, Old Yarraman Road, Pitts Road, Anderson Road, Bochmann Road, Elouera Drive, Tom Smith Drive, Weeronga Place, Berlin Road, George Green Road, Nanango Neumgna Road, Reeve Road, Hazeldean Road, Hohnke Road, Embrey Road, W Dugdell Road
Speedwell	Speedwell Road

Stalworth	Range Road, Speedwell Abbeywood Road, Proston Abbeywood Road, Back Creek Road, Stalworth Road
Taabinga	Boonenne Ellesmere Road , Lankowskis Road, Boonenne Ellesmere Road , Edenvale South Road, Geoff Raph Drive
Wattle Camp	Memerambi Barkers Creek Road
Wheatlands	Wheatlands Loop Road, Mondure Wheatlands Road, Kangaroo Yard Road, Flats Road

Flood Damage Works

Locality	Roads	Completed works
Benarkin	Bygrave Street, Service Road, Staines Road , Steven Street	Unsealed Road Works
Benarkin	Scott Street	Sealed Road Works
Benarkin North	Gibson Road	Unsealed Road Works
Benarkin North	Martin Crescent, Hardgrave Road, Hilary Road, Williams Road	Sealed Road Works
Blackbutt	Blackbutt Crows Nest Road	Drainage Works
Blackbutt	Morris Street, Railway Street	Unsealed Road Works
Blackbutt	Creek Street, Greenhills Drive, Blackbutt Crows Nest Road, Railway Street, Susan Close	Sealed Road Works
Blackbutt North	Cameron Road, Bowman Road	Sealed Road Works
Blackbutt South	Corcoran Road, Ogilvie Road, Ness Wilson Road, Haynes Kite Millar Road	Unsealed Road Works
Blackbutt South	Haynes Kite Millar Road	Sealed Road Works
Boyneside	Nords Road, Red Tank Road	Drainage Works
Boyneside	Boyne River Road, Nords Road, Red Tank Road	Unsealed Road Works
Brooklands	Darley Crossing Road, Brooklands Peron Road	Unsealed Road Works
Brooklands	Brooklands Pimpimbudgee Road, Markwell Street , Lord Street , Darley Crossing Road, Kumbia Road	Sealed Road Works
Chahpingah	Broad Creek Road	Drainage Works
Chahpingah	Hodges Dip Road, Broad Creek Road	Unsealed Road Works
Chahpingah	Hodges Dip Road	Sealed Road Works
Greenview	Rex Schultzs Road	Unsealed Road Works
Kingaroy	Rogers Drive	Drainage Works
Kunioon	Darley Estate Road	Sealed Road Works
MP Creek	MP Creek Road, Beutels Road	Unsealed Road Works
Nukku	Nukku North Road, Ulampa Creek Road, Nukku Road	Unsealed Road Works
Runnymede	Runnymede Road	Sealed Road Works
South East Nanango	Old Esk North Road	Unsealed Road Works

Taromeo	Harper Road, Wild Deer Drive, Pamela Drive	Unsealed Road Works
Taromeo	Sutherland Drive, Franks Road, Wild Deer Drive	Sealed Road Works
Teelah	Stretton Drive	Unsealed Road Works
Wattle Grove	Wattlegrove Road	Unsealed Road Works

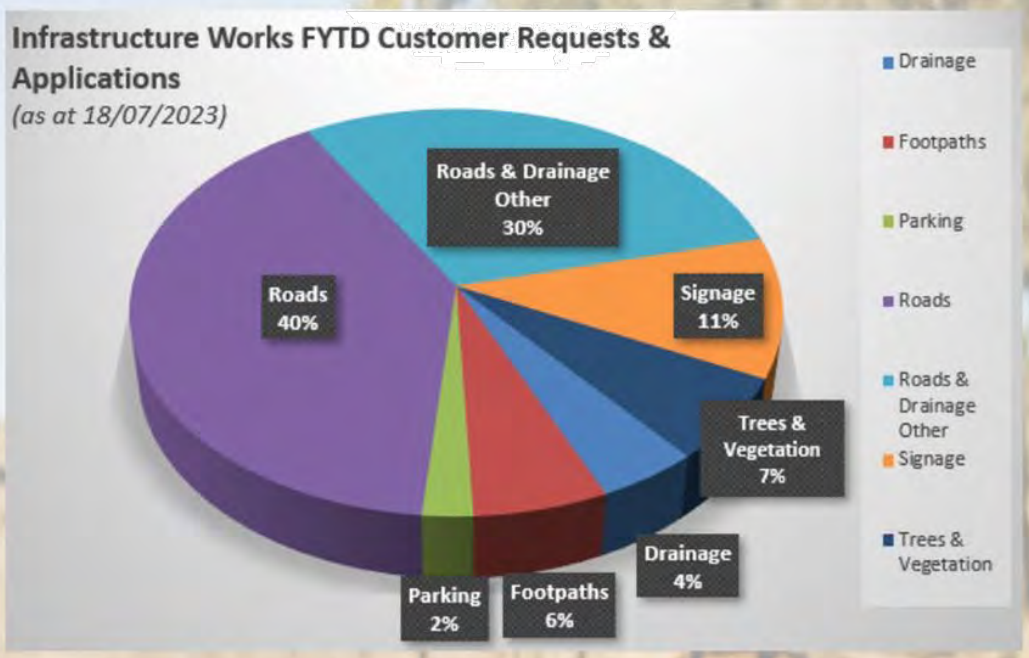
2022/2023 FY Maintenance Snapshot

During the 2022/23 financial year, Councils maintenance team performed various maintenance works across 1324 South Burnett Regional Council local roads. This work was carried out in addition to the State Controlled network road maintenance contract and flood related emergency, immediate reconstruction and reconstruction works.

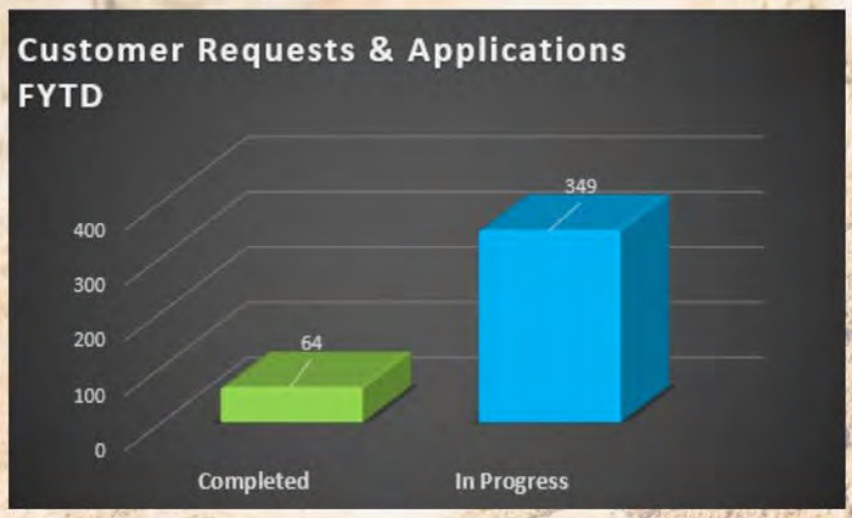
Our maintenance management software, Reflect, is beginning to allow interrogation of maintenance activities completed across the local road network. Through this information, we can report the following maintenance for the 2022/23 financial year:

The inspection team conducted 991 corridor safety inspections and a further 1044 programmed road inspections across the sealed road network, recording more than 6300 defects into the system. Maintenance drainage works were conducted on 115 local rural roads and 65 urban streets. Pothole or edge repairs were conducted across 524 sealed roads, with 2036 recorded accomplishments. Rural slashing occurred on more than 430 roads and exceeded the normal service level of two rounds per year with teams nearing completion of three rounds on most local roads. More than 40 roads had line marking works conducted. Crews repaired, reinstated, or replaced signage across 389 locations. 120 roads had the boom mower attend to address roadside vegetation.

The maintenance teams recorded over 9200 accomplishments in the maintenance management system and completed over 3500 recorded defects, with over 400 of these directly related to customer requests. Many requests related to defects already captured in the system, routine works, RMPC or REPA related enquiries. The team received over 4100 customer requests and applications for the financial year.



Roads and Drainage Other- *includes Street furniture, animals, bridges, gates and grids.*
Other *– includes airports, buildings, council buildings, dams, economic development, mowing, disaster management, parks and gardens, rates valuation, telecoms, toilets, waste and weeds.*



These figures are inclusive of Infrastructure Works only, excludes Water & Waste Water Requests.

6.2 MINUTES OF THE TRAFFIC ADVISORY COMMITTEE MEETING HELD TUESDAY 13 JUNE 2023

File Number: **02.07.2023**

Author: **Manager Infrastructure Planning**

Authoriser: **General Manager Infrastructure**

PRECIS

Minutes of the Traffic Advisory Committee Meeting held Tuesday 13 June 2023

SUMMARY

The minutes of the Traffic Advisory Committee meeting held in Warren Truss Chambers, Kingaroy of the South Burnett Regional Council on Tuesday, 13 June 2023 are provided to note and consider.

OFFICER'S RECOMMENDATION

That the Committee receive and note the attached minutes and recommendations of the Traffic Advisory Committee held Tuesday, 13 June 2023.

BACKGROUND

N/A

ATTACHMENTS

1. Minutes of the Traffic Advisory Committee Meeting

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes

Infrastructure

Chair: Councillor Jones

Minutes: Donna Brown

Date: Tuesday 13 June 2023, 12.30pm

Venue: Warren Truss Chambers, Kingaroy

Committee Attendance:

Kate Wyatt (SBRC), Pawan Gautam (SBRC), James D'Arcy (SBRC), Cr Scott Henschen (SBRC), Cr Gavin Jones (SBRC), Michelle Hoffman (TMR Road Safety), Craig Whittaker (TMR Road Safety), Andrew Goatham (TMR), Renee Taylor (TMR), Jade Miller (QPS), Donna Brown (SBRC), Lupita Arrevillaga (Translink), Brad Fewtrell (QPS), David Tierney (QPS), William Gersekowski (QAS)

Agenda Item	Action Summary	Responsible Officer	Due Date
Welcome and Apologies (Chair)	Cr Jones chaired the meeting. All members welcomed. Apologies recorded. Meeting opened 12.33 pm Apologies: Senior Constable Brendan Seymour (QPS), Cr Jane Erkens (SBRC)	N/A	N/A
Confirmation of previous minutes (Chair)	Previous minutes of meeting held on Tuesday 7 March 2023 were confirmed. Moved: Cr Henschen Seconded: Michelle Hoffman Vote: All in favour	N/A	N/A
Business Arising from Minutes of Last Meeting	**Action: Request for reduction of speed limit on Bunya Highway, Wondai** - TMR – Further training on how to implement new speed limit standards. Further advice as to how it is to be implemented. - Capital upgrade occurring at Wondai – recognised importance of changes happening concurrently. Preliminary streetscape and speed reduction to be looked into collectively. - QPS - Ivory, Hodge Street North, Moreton Street & Edward Street intersections need to be addressed at same time.	SBRC/TMR	12/09/2023

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes
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	Status: SBRC sent concept designs to TMR. TMR to investigate against new MUTCD guidelines and provide response to September meeting		
	Action: St John's Lutheran School bus operations - Concern from school regarding buses turning down narrow side streets from Ivy Street - Translink has discussed with bus operator agreed to do a trial, sending the bus via Haly St. and Tessmanns Rd, to gauge impact on timetable. - Work with Translink and bus operator to use Tessmans Road. - Translink spoke to operator. Not a lot that can be enforced from Translink. - Parking concerns at the school. St Johns constructing new building. **Status: SBRC to liaise with bus operator via Translink**	SBRC	12/09/2023
	Action: Swickers safety issue with employees exiting site - Swickers want to provide designated facility for staff to access footpath on other side of Kingaroy Barkers Creek Road. - SBRC presented concept design. Sent to Main Roads for feedback. - Requires discussion with TMR & Road Corridor team. - Once feedback is received will liaise with Swickers. **Status: TMR to report back to September TAC meeting**	TMR	12/09/2023
	Action: QPS – Bunya Highway, Kingaroy to Crawford – No turn in lanes / road shoulders - SBRC met with landowner to discuss business's operational functions/movements. - No further action at this stage. Will provide feedback to Main Roads Corridor team. **Status: Complete**		

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes
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	Action: QAS - Nanango Traffic Lights - Light timing has improved and no longer experiencing excessive wait times. **Status: Complete**		
	Action: SBRC - Siefert Street, Crawford – Speed Reduction - Customer request received requesting 100 km sign to be moved South. Inconsistent - Travelling south 100 travelling north 80. - SBRC to investigate further in accordance with new guidelines. **Status: SBRC to carry out speed review and bring back to September TAC**	SBRC	12/09/2023
	Action: DTMR - Parking, Kingaroy - TMR have relocated from next to Court house to Alford Street. No off street parking to support learn-to-drive vehicles. - Discussion held regarding options of utilising loading zone. - Meeting held with SBRC and TMR. Suggested ideas including loading zones for practical driving test being utilised. Working well. **Status: Complete**		
	Action: SBRC - Blackbutt School Crossing – D'Aguilar Highway - Concerns about speed and visibility of sign. - TMR to investigate possibility of having signage on both sides of highway - TMR to review speed zone through Blackbutt - QPS to monitor location - TMR to look at next round of STIP funding to treat risks. **Status: SBRC to continue working with TMR**	TMR	12/09/2023

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes
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	Action: QPS – Kindergarten on Gipps Street, Nanango - SBRC met with Kindergarten to discuss traffic movement and concerns. - STIP application for St Pats around pedestrian crossing. Footpath interconnection. **Status:** Complete		
	Action: QPS – Kingaroy Bus Exchange - SBRC to facilitate meeting with High School / QPS and report back to September TAC **Status: SBRC to facilitate meeting with High School / QPS and report back to September TAC**	SBRC	12/09/2023
Fatal Car Crashes	**Discussions held surrounding recent car crashes in the South Burnett** - No reports to discuss.		
General Business	**Item 1 – SBRC – Speeding and dangerous driving on Couchmans Road** - Rural residential. Currently 60 km zone – turns into 100 after Birt Road. Curves and incline. Vegetation on shoulders. Issue is simplicity of vehicles speeding from North. - Active speed camera site. Previous crash history. Road is quite narrow with heavy vegetation. - Maintenance team to review warning and advisory signage. **Status: SBRC to review warning and advisory signage report back to September TAC**	SBRC	12/09/2023
	Item 2 – SBRC - Update to School zone speed signs on Mundubbera Durong Road – Durc State School - Speed zone signs. Can flashing lights be looked into for Durong School. TMR to investigate and report back to September TAC. - No parking on South of Durong School.	TMR	12/09/2023

SOUTH BURNETT REGIONAL COUNCIL

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	Status: TMR to bring back to September TAC		
	Item 3 – SBRC – Murgon State High School – Gore Street entrance, drop off parking bays - Short term drop down facilities being requested. - Should be looked as through part of STIP project. - Linemarking and parking will be looked at through design. - SBRC to meet with Principal once design is completed. **Status: Report back to September TAC**	SBRC	12/09/2023
	Item 4 – SBRC – Bunya Highway, Wooroolin – pedestrian crossing/refuge - Café witnessed an accident on Bunya Highway. - Previously had pedestrian crossing approved by TMR. - TMR - what is the community sentiment. Due to previous history of funding available and the project being rejected by the community would need to gauge the community sentiment. **Status: Complete**		
	Item 5 – QPS – Introduction of new speed camera sites – D'Aguilar Highway in Blackbutt/Benarkin & King Street, Kingaroy - Previous traffic crashes recorded in last 5 years. - Both sites approved and endorsed. **Status: Complete**		

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes

Infrastructure

	Item 6 – SBRC - Parker Road & Brooklands Road – speed, school bus & heavy vehicles - Kumbia Road – issue is around operations on Parker Road. - Traffic counts to be undertaken to understand speed behaviour. - Report back to the September TAC meeting if concerns raised from traffic counters. - Cr Jones requested speed on Parker Road be reduced to 80km. - Cr Henschen said people are detouring to flood damage to Kumbia Road. **Status: SBRC to carry out speed review - report back to September TAC**	SBRC	12/09/2023
Report from Agencies	**QPS** - No reports.	N/A	N/A
	TMR Road Safety - South Burnett was successful in STIP funding. Any updates of when they are going to commence Gore Street/Angel Avenue. - SBRC - Design is currently underway for delivery next financial year. Spray sealing and line marking will need to be outsourced. - Michelle is transferring to QFES (3/7/2023). Craig will be contact. - QLD Road Safety week in August. Media campaign to be done.	N/A	N/A
	TMR - Nothing to report. - Potential for speed limit change at Bunya Mountains on Bunya Mountains Road. High active transport user around Bunya Avenue. 40 km hour for 200 m. - SBRC to investigate on 14 July and look at start and finish and current warning signs. **Action: Bunya Mountains Road – Speed reduction - SBRC to report back to TMR**	SBRC	12/09/2023

SOUTH BURNETT REGIONAL COUNCIL

Traffic Advisory Committee Minutes

Infrastructure

	QAS - Nothing to report.	N/A	N/A
Further items for discussion	Division 6 – Ironpot – large amount of traffic movement due to Tarong West Windfarm.		
Next Meeting	Date: 5 September 2023 at 12.30 pm Location: Warren Truss Chambers, Kingaroy	N/A	N/A
Meeting Closed	Meeting Closed: 2.10 pm		

6.3 GORDONBROOK DAM OFF STREAM STORAGE DESIGN - FUNDING PROGRAM MILESTONE REQUIREMENT

File Number: **02-08-2023**

Author: **Manager Water & Wastewater**

Authoriser: **General Manager Infrastructure**

PRECIS

Gordonbrook Dam Off Stream Storage Design – Funding Program Milestone Requirement

SUMMARY

Council has been successful in receiving funding approval supporting the detailed design of the Gordonbrook Dam off-stream storage project. Under the conditions of the funding agreement, Council is required to confirm its commitment to the design project and Council's component of funding of the project.

OFFICER'S RECOMMENDATION

That the Committee recommends to Council that, in line with requirements of the approved funding agreement under Round 6 of the Building our Region Program:

1. Council confirms that it has budgeted the Recipient's financial contribution to the approved Building our Region Round 6 funding application for the Gordonbrook Dam Off-stream Storage for Boondooma Water Detailed Design Project;
2. Council is committed to deliver the detailed design for the Gordonbrook Dam off-stream storage and ancillary works; and
3. Council acknowledges the responsibility for any funding shortfall if costs or other contributors change.

BACKGROUND

As a key funding recommendation of Council's Regional Total Asset Strategy-Water 2021, delivered under the MIPP (Managing the Infrastructure Pipeline Project), an off-stream storage for Boondooma Dam sourced raw water is a critical component of Council's water security planning for Kingaroy. The off stream storage provides a significant increase in the reliability of raw water supplied from Boondooma Dam enabling Council to address both water security and water quality objectives. The proposed raw water storage would store 150ML of raw water sufficient to meet the full capacity of the Gordonbrook Treatment Plant for a (2) two-week maintenance closure of the Sunwater operated pipeline from Boondooma Dam.

Preliminary planning and investigations have been undertaken by Council. Council has identified a potential site and agreement is in place for the acquisition of the required area for the storage on the access road near the plant.

Detailed investigation and design of the storage is programmed for the current financial year and Council has been successful in its application for funding under Round 6 of the Building our Regions Program to support the detailed design of the storage and pipeline connection to the treatment plant. As part of Council's capital works budget for the current financial year, a budget of $278,721 has been adopted to fund Council's component of the detailed design project, in addition to planning and site acquisition costs for the off-stream storage and associated works.

The anticipated budget for the detailed design project totals $315,000 (ex gst), including approved BoR funding of $290,000 and a Council contribution of $25,000.

A resolution from Council, as the funding Recipient, is a requirement for Milestone 1 of the approved funding agreement. The funding authority seeks confirmation that Council:

- has budgeted the Recipient's financial contribution to the design project;
- is committed to delivering the design project; and
- acknowledges responsibility for any funding shortfall if costs or other contributors change.

ATTACHMENTS

Nil

7 WATER & WASTEWATER

7.1 WATER AND WASTEWATER PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Water and Wastewater Portfolio Report

SUMMARY

Councillor Jones presents his Water and Wastewater Portfolio Report to Council.

OFFICER'S RECOMMENDATION

That Councillor Jones's Water and Wastewater Portfolio Report to Council be received for information.

BACKGROUND

N/A

ATTACHMENTS

1. Water and Wastewater Portfolio Report

WATER & WASTEWATER BRANCH STANDING COMMITTEE REPORT

The following are Current/Planned Works
Updated as of 18 July 2023

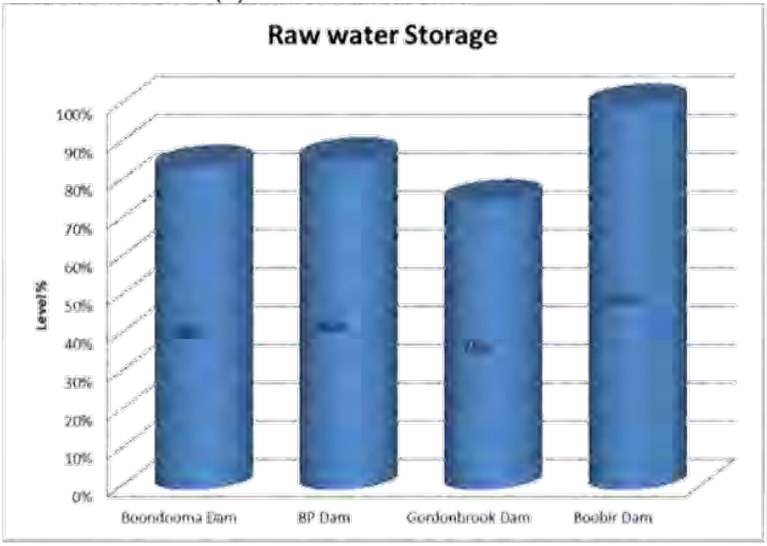
Capital Works 22/23 and Current Water Main Replacements

Name	Description	Expected Start	Expected Completion	Budget Amount	Actual
Blake St, Proston (Drake-Rodney St)	Watermain Replacement	July 2023	August 2023	$105,000	$5,630
Mackenzie St, Wondai (Osborne-End St)	Watermain Replacement	August 2023	September 2023	$211,400	$2,826
Mackenzie St, Wondai (Osborne-Scott)	Watermain Replacement	August 2023	September 2023	$140,000	$1,884
Cadell St, Wondai (Scott - Kent St)	Watermain Replacement	June 2023	July 2023	$292,600	$58,735

All bulk water reports recorded at end of 22/23 financial and water calendar year.

Restriction & Dam Levels

All towns remain on level three (3) Water Restrictions.



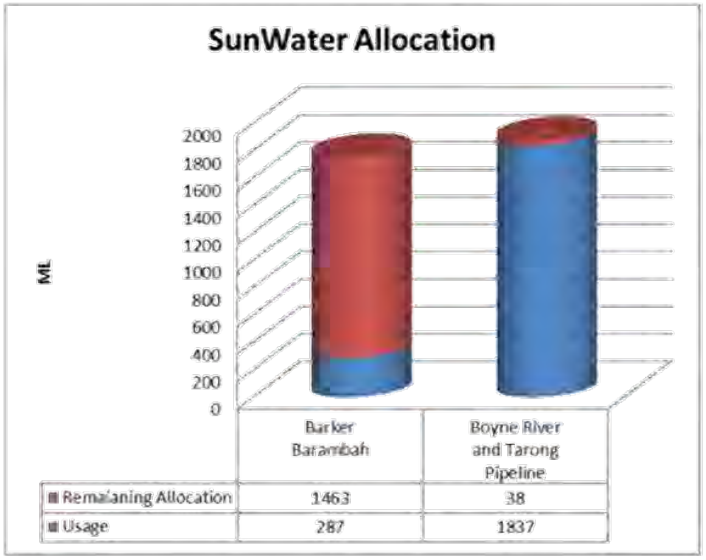
SunWater supply scheme	Water storage	Schemes supplied	FSL (m)	Current level	FS Volume (ML)	Current Volume (ML)	Current capacity (%)	High Priority water Allocation	Medium Priority Allocation
Boyne River & Tarong	Boondooma Dam	Boodooma Scheme, Proston Rural scheme, Kingaroy, Blackbutt	280.4	278.4	204,200	171,651	84%	100%	100%
Barker Barambah	BP Dam	Wondai, Murgon	307.3	306.4	134,900	115,993	86%	100%	100%
	Gordonbrook Dam	Kingaroy	391.5	390.75	6,800	4,958	75%	N/A	N/A
	Boobir Dam	Blackbutt	434	434	170	170	100%	N/A	N/A

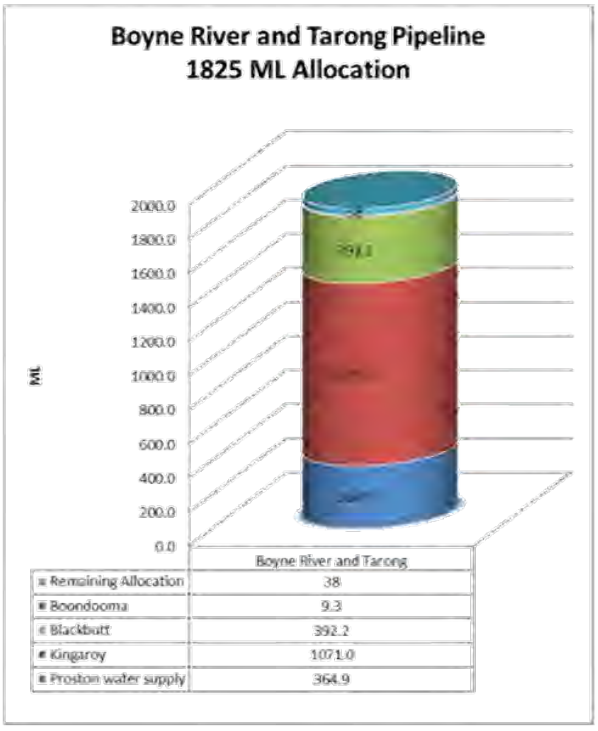
Council continues to monitor water storage throughout the region. Current levels are:

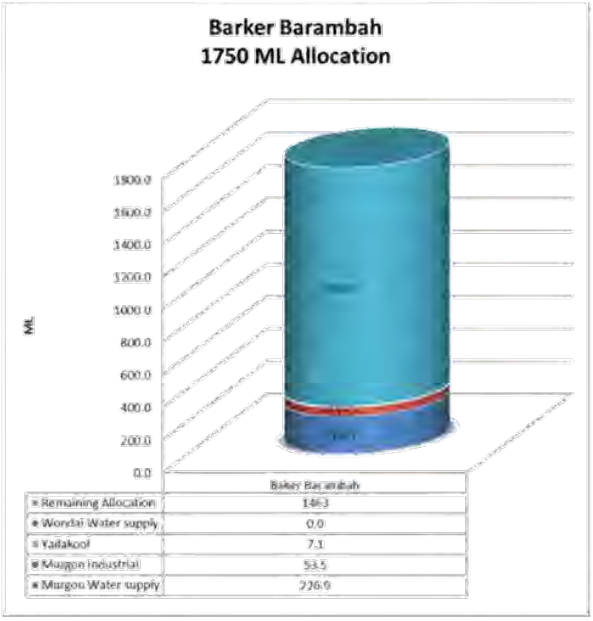
- Boondooma – 84%
- BP Dam – 86%
- Gordonbrook Dam – 75%
- Boobir Dam – 100%

Water Allocations and Financial Year Consumption

Water allocation SunWater scheme	Location / Allocation	Usage to date (ML)	Annual Allocation (ML)	Remaining Allocation (ML)	Remaining Allocation in (%)	Year remaining in (%)
Barker Barambah	Murgon Water supply	226.9	1400	1112.6	79%	0%
	Murgon Industrial	53.5				
	Yallakool	7.1				
	Wondai Water supply	0.0	350	350	100%	
	Sub Total	**287**	**1750**	**1463**	**84%**	
Boyne River and Tarong Pipeline	Proston water supply	364.9	500	135.2	27%	
	Kingaroy	1071.0	1110	39.0	4%	
	Blackbutt	392.2	250	-142.2	-57%	
	Boondooma	9.3	15	5.7	38%	
	Sub Total	**1837**	**1875**	**38**	**2%**	



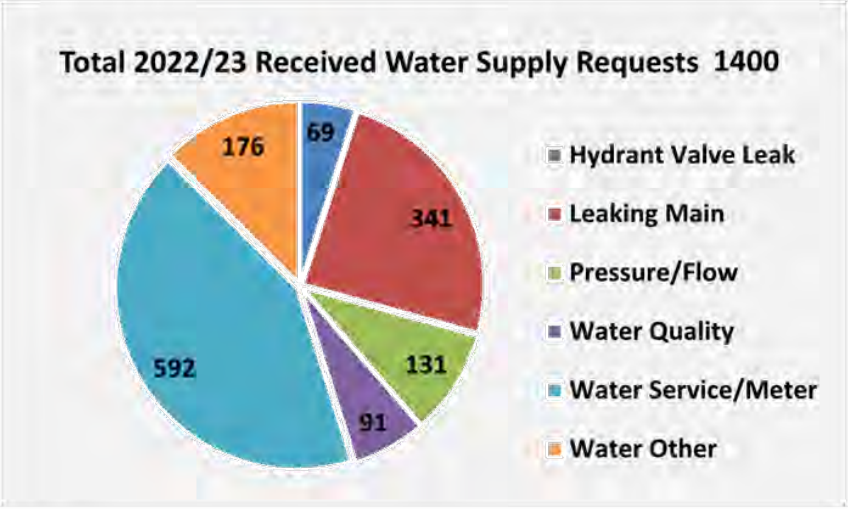




*Annual allocations are for the financial year.

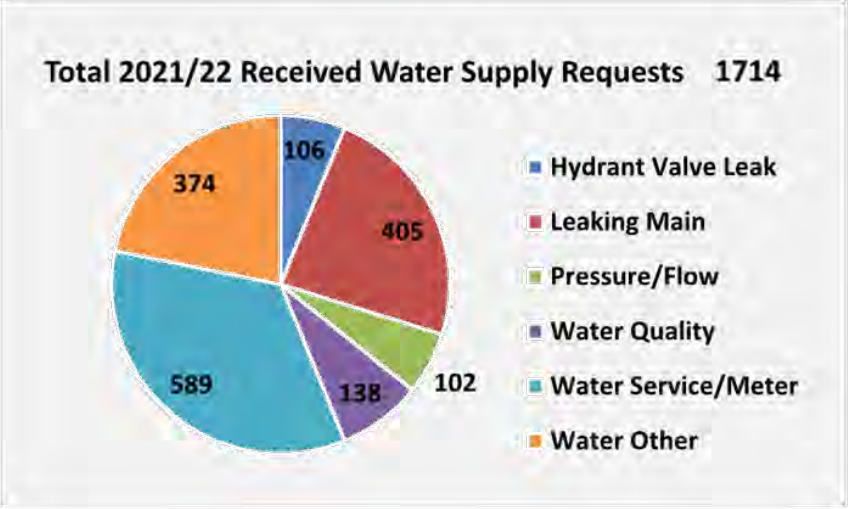
Reactive Work - Financial Year 2022/23

Town	Sewer Blockages	Other Sewer issues	Water Main Breaks	Other water issues
Kingaroy	17	26	29	533
Murgon	5	5	11	20
Wondai	2	5	11	19
Nanango	8	10	36	184
Blackbutt	0	1	11	87
Proston	1	1	6	4
Proston Rural	NA	NA	14	3
Kumbia	NA	NA	8	16
Wooroolin	NA	NA	6	11



Reactive Work - Financial Year 2021/22

Town	Sewer Blockages	Other Sewer issues	Water Main Breaks	Other water issues
Kingaroy	21	56	31	630
Murgon	2	15	8	57
Wondai	1	9	7	57
Nanango	3	29	42	190
Blackbutt	1	4	2	75
Proston	0	1	4	12
Proston Rural	NA	NA	13	18
Kumbia	NA	NA	0	22
Wooroolin	NA	NA	7	19



8 PORTFOLIO - NATURAL RESOURCE MANAGEMENT, RURAL SERVICES, AGRICULTURAL INNOVATION, COMPLIANCE AND ENVIRONMENTAL HEALTH

8.1 NATURAL RESOURCE MANAGEMENT, COMPLIANCE AND ENVIRONMENTAL HEALTH PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Natural Resource Management, Compliance and Environmental Health Portfolio Report.

SUMMARY

Cr Henschen presented his Natural Resource Management, Compliance and Environmental Health Portfolio Report.

OFFICER'S RECOMMENDATION

That Cr Henschen's Natural Resource Management, Compliance and Environmental Health Portfolio Report to Council be received for information.

Weed Management

Treatment of known Mother-of-Millions infestations continue in collaboration with K&S Contracting Qld. Mother-of-Millions is still prolific this winter due to favourable conditions suited to the growth of this dominant weed species.

NRM Officers have undertaken property and roadside inspections for both Mother-of-Millions and Parthenium weed. Small, isolated infestations of Giant Rat's Tail grass have continued to be treated in known areas across the Council road network due to earlier rainfall received in June and July.

It has been confirmed African Boxthorn is present in a limited number of locations and is currently being actioned by NRM Officers.

Feral Animal Management

The baiting program for 2023 continues with locations earmarked for September with 16 landowners booked in so far. To date 787 dog baits and 470 pig baits have been laid.

Fire Management on Council Reserves

Negotiations are continuing with the Department of Resources, as the responsible landowners, requesting approval to re-establish the firebreak along a 400m stretch of land behind the western side of Grant Crescent, Wondai. The Rural Fire Service have booked Saturday 5 August 2023 to conduct and complete the burn.

Strong Dog Laws – Discussion Paper – Department of Agriculture and Fisheries (DAF)

The Department of Agriculture & Fisheries (DAF) have invited submissions, closing on 24 August on feedback on proposed changes to the *Animal Management (Cats and Dogs) Act 2008* to better protect the community from dangerous dogs. Areas of interest in the response include:

1. Community education and awareness raising campaign

2. Banning restricted dogs
3. A new requirement to have all dogs effectively controlled in public places
4. Reviewing penalties for offences relating to regulated dogs
5. A new offence including imprisonment as a maximum penalty for more serious attacks
6. Clarifying when a destruction order must be made
7. Streamlining review processes

Resourcing

Frank Togiatama is the new Coordinator Regulatory Services and now supervises the Compliance, Environmental Health and NRM teams. Thanks to Teleisha Schuback and Ray McKay for covering the Senior NRM and Compliance roles. We also welcome Amy Donohoe from a casual role to a permanent position with Council.

Environmental Health

- Mosquito Notifiable Diseases Update from Queensland Health advised there has been no new cases of Ross River Virus or Barmah Forest Virus in June. To date there has been ten (10) cases of Ross River Virus and two (2) Barmah Forest Virus cases in the region for the 2022/2023 no other mosquito borne diseases detected.

- There has been an increase in June with new applications and change of licenses during this period with some taking time to finalise as the businesses are new fit outs and have required extensions to allow operators to complete all required works to meet the Queensland Food legislation.

- Final submission to Queensland Heath regarding the proposed changes to the Queensland Food Act 2006. These have been successful received and a number of these have been taken into consideration including one item that has been removed as it would had significant affect across all Local Governments in Queensland.

ATTACHMENTS

Nil

8.2 NATURAL RESOURCE MANAGEMENT, COMPLIANCE AND ENVIRONMENTAL HEALTH OPERATIONAL UPDATE

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Natural Resource Management, Compliance and Environmental Health Operational Update.

SUMMARY

Natural Resource Management, Compliance and Environmental Health Operational Update.

OFFICER'S RECOMMENDATION

That the Natural Resource Management, Compliance and Environmental Health Operational update be received for information.

ATTACHMENTS

1. July 23 - NRM Operational Update

NATURAL RESOURCE MANAGEMENT UPDATE
July 2023

Project Name	Project Status	Start Date	Expected Completion Date
Queensland Feral Pest Initiative Project	All 5 workshops have been completed.	August 2022	June 2024

Stats Item	Monthly 27/06/23-24/07/23	This month last year	Year to date Cumulative 01/07/22– 24/07/23
Wandering Livestock			
Attendance	10	12	149
Impoundments	1	1	48
Wild Dog & Feral Pig Program			
Landholders baiting	1	2	167
Doggone Baits	0	0	0
Pig Meat Injected 1080	0 kg	0 kg	2,431 kg
Dog Meat injected 1080	8 kg	30 kg	2,470.5 kg
Hectares baited	0	2270	115,392 ha
Bounties processed	14	0	93
Extension and Awareness			
Number of Samples sent for Identification	0	-	16
Number of Awareness Flyers	30	-	339
Number of Web Based Media Promotions	2	-	33
Number of Radio Based Media Promotions	2	-	18
Number of Print Based Media Promotions	27	-	502
Rabbit Control			
Landholders assisted	0	0	11
Carrots K5 Virus	0 kg	0	6 kg
Rabbits injected	0	0	3
Equipment Loaned			
Spray trailer, Splatter Guns, Portable Steel Yards, Camera, GPS, Dog Traps, Pig Traps, Cat Traps, tree spears	1 x Dog Trap – Booie Area 1 x Pig Trap – Chelmsford Area 1 x Camera – Bunya Mountains 2 x Hoggone bait feeders – Charlestown area =5	9	78
Agistment Permits	0	0	0
Travel Permits	0	0	0
Fire Management			
Prescribed burns	0	1	4
Fire trails maintained	0	10	16

Stats Item Environmental Assessments	Monthly 27/06/23-24/07/23	This month last year	Year to date Cumulative 01/07/22– 24/07/23
Environmental Assessment prior to roadworks	0	0	0
Fence line clearing and roadside burning applications	10	0	27
Weed Control			
Council Roadside Weed Management	Surveillance and control of Mother of Millions has occurred over the July period.		
State Controlled Roadside Weed Treatment	Surveillance and control of Mother of Millions and GRT over the July period.		
Cherbourg Parthenium Treatment	N/A		
Property Inspections	0	25	195
Number of Weed of the Month Promotions	0	0	20
Customer Requests	**Monthly 27/06/23-24/07/23**	**This month last year**	**Year to date Cumulative 01/07/22– 24/07/23**
Feral Animals	14	21	315
Wandering Livestock	17	15	169
Wildlife	0	2	27
Stock Routes	0	2	4
Weeds	9	9	225
Trees	0	5	7
Roads	0	0	0
NRM General / Other	8	1	58
Total	**48**	**55**	**805**

Animal Registrations				
New Animal Registrations	75	54	1145	981
CRM				
Animal to animal attack	3	7	49	85
Animal to person attack	1	6	49	58
Animal management	93	125	1929	1756
drum MUSTER requests	0	3	3	23
Environmental Enquiries	14	25	221	257
General Local Law, unsightly, signage	19	19	182	180
Overgrown allotments	5	56	306	467
Abandoned vehicles	7	1	54	43
Public Health Customer requests	24	28	343	230
Enforcements				
Abandoned Vehicles	0	0	0	0
Animal investigations	12	16	107	127
Animal investigations (finalised)	11	5	73	114
Declared Dog (new)	0	0	3	7
Environmental	0	0	0	0
Impounded Dogs	20	18	250	234
Impounded Cats	31	33	273	217
Overgrown	6	49	228	520
Infringements				
Animals	0	24	80	448
Non-comply of a Compliance Notice	0	0	4	19
Abandoned vehicles	0	0	0	0
Applications for Permits				
Excess Animal Applications	3	0	20	4
Footpath Applications Annual	0	0	7	13
Footpath Applications Short term	1	3	30	29

Stats Item	Month											
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
Environmental Health												
Current Food Licences	213	212	218	216	213	218	219	222	223	219	220	228
Current Non-Profit Licences	0	105	106	108	109	109	107	107	110	110	109	109
Current Personal Appearance Licences	6	6	6	6	6	6	5	5	5	5	6	6
Current Caravan Park Permits	7	7	7	7	7	7	7	7	7	7	7	7
Current Market Stall Licences										6	6	7
New Food Licences/Change of Licencee	2	4	6	3	1	2	7	6	2	2	2	10
New Non-Profit Licences	1	5	1	2	1	0	0	2	3	0	2	0
New Market Stall Applications	0	0	0	0	0	0	0	1	0	0	0	1
New Temporary Food Licences	5	6	0	0	0	6	3	1	3	2	1	3
Improvement Notices Issued (food Businesses)	2	4	0	2	1	0	0	1	0	1	1	0
Private Water Sampling Applications	0	2	2	0	0	0	2	2	2	1	3	1
Food Inspections Conducted	68	78	20	14	22	14	9	14	19	17	30	30
Health Searches (Food)	1	0	0	0	1	0	0	0	0	0	0	0
Total New Food Licences	8	17	9	5	2	8	12	12	10	5	2	10
Total Closed Food Licences	7	6	2	4	6	0	4	3	0	2	4	2
Total Active Food Licences	213	212	218	216	213	218	219	222	223	219	220	228

8.3 WASTE & RECYCLING MANAGEMENT OPERATIONAL UPDATE

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Waste and Recycling Management Operational Update

SUMMARY

Waste and Recycling Management Operational Update

OFFICER'S RECOMMENDATION

That the Waste and Recycling Management Operational Update be received for information.

ATTACHMENTS

1. State Waste Levy June 2023

State Waste Levy Stats	June 2023	Financial Yr. to date Cumulative 1/7/22 - 30/06/23
Waste		
Kingaroy MSW Tonnes Disposed to Landfill	442.54	6336.97
Kingaroy Commercial Tonnes Disposed to Landfill	458.77	5137.55
Murgon MSW Tonnes Disposed to Landfill	552.54	4767.46
Murgon Commercial Tonnes Disposed to Landfill	23.47	160.16
Wondai MSW Tonnes Disposed to Landfill	236.98	2552.64
Wondai Commercial Tonnes Disposed to Landfill	9.94	148.5
Nanango MSW Tonnes Disposed to Landfill	379.31	4919.4
Nanango Commercial Tonnes Disposed to Landfill	16.7	293.33
Total Domestic Waste Levy	$141,800.56	$ 1,634,729.36
Total Commercial Waste Levy	$ 44,781.44	$ 505,079.52
Total Waste Levy Payment Remitted	$186,582.00	$ 2,135,144.88

Stats Item	Monthly	Monthly Comparative	Financial Yr. to date Cumulative	Financial Yr. to date Cumulative Comparative
	1/6/23 - 30/6/23	1/6/22 - 30/6/22	1/7/2022 –30/06/2023	1/7/2021 –30/06/2022
Waste				
Waste Collection requests	91	136	1571	1301
Recycling Enquiries	2	0	159	0
General Waste Enquiries	24	60	449	606
Waste collection services conducted (recycling and general)	137529	57552	1088252	728908

9 DISASTER MANAGEMENT

9.1 LOCAL DISASTER MANAGEMENT PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Local Disaster Management Portfolio Report

SUMMARY

Councillor Potter presents her Local Disaster Management Portfolio Report.

OFFICER'S RECOMMENDATION

That Councillor Potter's Local Disaster Management Portfolio report to Council be received for information.

BACKGROUND

N/A

ATTACHMENTS

1. Local Disaster Management Portfolio Report

LOCAL DISASTER MANAGEMENT GROUP UPDATE

The South Burnett hosted the District Disaster Management Group meeting on Thursday 13 July 2023. Gympie, Cherbourg and South Burnett Chairs and Local Disaster Coordinators attended together with all of the representatives from the State agencies who sit on the Gympie District Disaster Management Group.

The Bunya Mountains Disaster Management Sub Group held their quarterly meeting on 14 July 2023. The actions from the exercise conducted in November 2022 were discussed and distributed for actioning.

10 WASTE & RECYCLING MANAGEMENT

10.1 WASTE & RECYCLING MANAGEMENT PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Waste & Recycling Management Portfolio Report

SUMMARY

Cr Potter presented her Waste & Recycling Management Portfolio Report to Council.

OFFICER'S RECOMMENDATION

That the Waste Management Portfolio Report to Council be received for information.

Waste Levy Compliance

Administration, gatehouse operators and landfill operation staff recently undertook legislative and regulatory training as part of the Department of Environment and Science non-compliance advice. The training was focussed on what Council must do in order to comply and why compliance is mandatory. This training will be repeated in October to ensure that all new contractors are aware of their obligations before the start of the contract period.

Waste Levy Payments

June saw $186,582.00 returned to the State Government as part of the domestic waste to landfill prepayment which is received from the State for the waste levy. For 2022/23 Council received $1,420,778.00 from the State Government to the end of June, Council has remitted $1,634,786.56 back to the state to the end of June.

Supervision and Landfill Management Contracts

Tender documents are being finalised and will be released to market by 31 August for both the Landfill Operations contract and the Operations and Supervision contract for all landfill and supervised transfer station sites. The new contracts will commence on 1 November 2023. As part of this process, updated Site Based Management Plans, training plans and procedural changes have been produced to help ensure a smooth transition for all parties.

Maidenwell Transfer Station

The Maidenwell Transfer Station is progressing with the onsite Ecological Assessment booked for the week of 24 July, expression of interest documents being released for fencing, gate, keypad and solar power supply and installation along with the Development Application being readied for submission.

Lockyer Valley Food Organic Green Organic (FOGO) Trial

The Co-ordinator Waste Management recently attended the Darling Downs and South-West Environmental Health Australia Meeting held in Gatton. The event featured a tour of the Lockyer Valley Regional Council's FOGO trial facility at the Gatton Landfill. The program has delivered a 50% reduction in the general waste volume of the 1000 homes participating in the trial. LVRC are

hoping to roll the program out to an additional 10,000 households during the course of this financial year.

Nanango Weighbridge Installation and Transfer Station Upgrade

To ensure compliance with legislative requirements under the *Waste Reduction and Recycling Act 2011*, all landfills are to have a weighbridge and associated software installed. Part funding has been gained from the Local Government Grants and Subsidies Program with the design and civil works due to start in August 2023. Total budget for these projects is $607,560 with the grant accounting for $486,048.

Recycling

Figures from the Cherbourg Material Recovery Facility (MRF) for the month of June show that:

- 81.58t of recycling was received at the MRF
- 65.54t of material was recovered
- Contamination delivered with recyclable materials was 16.04t
- The breakdown on the recovered materials are:
    - 39.43t Cardboard
    - 8.085t Paper
    - 6.599t Plastics
    - 2.821t Steel

ATTACHMENTS

1. **Memerambi Transfer Station**
2. **Bin Fire Kumbia Transfer Station**
3. **Commercial disposal of building materials at Hivesville**
4. **Bin on Fire from Cloyna**
5. **Bin on Fire from Cloyna**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8
TONNE
LOAD
LIMIT

10.2 STATE GOVERNMENT WASTE FUNDING

File Number: **02-08-2023**

Author: **Manager Environment and Planning**

Authoriser: **General Manager Infrastructure**

PRECIS

State Government's waste financial package.

SUMMARY

Correspondence has been received from the Minister for the Environment confirming State Government funding for waste levy and regional waste management plans.

OFFICER'S RECOMMENDATION

That the committee note the report.

BACKGROUND

Since the reintroduction of the waste levy, the State Government has provided Council's within the levy zone, annual payments to ensure that the waste levy has no direct impact on households. The Government has confirmed a prepayment to Council up to and including 2026-2027. This prepayment for the 2026-2027 year has been confirmed at $1,489,972.00.

Below is a table which indicates pre-payments that have been guaranteed and received:

	2022-2023	2023-2024	2024-2025	2025-2026
Annual Payment	$1,420,778.00	$1,365,692.00	$1,410,715.00	$1,470,746.00

The correspondence does indicate that this provides financial surety for Council's to plan and incentivise to meet and exceed targets for reducing waste to landfill and enable flexibility for Councils to make investment decisions. From experiences to date, this pre-payment does not adequately cover the financial liability of domestic waste to landfill, therefore is not utilised for various initiatives.

The correspondence also confirms that $94.4 million in 2026-2027 to support regional waste management plans which will reduce waste to landfill, boost recycling rates and create jobs.

Council has actively participated in the development of the regional waste management plans for the Darling Downs South West and Wide Bay Burnett regions. It is still unclear on the governance and financial model to further develop and implement actions from these regional plans and how best the South Burnett can position itself to gain benefit from these plans.

Whilst the correspondence does provide a positive outlook from the State Government providing financial support to Council's, additional financial support is required from the State Government to ensure Council's obligations with respect to the waste levy and capital investment required to ensure the targets set in the State Government's Waste Management and Resource Recovery Strategy are met.

Some of these targets include 25% reduction in household waste, 90% of waste is recovered and does not go to landfill and 75% recycling rates across all waste types.

ATTACHMENTS

Nil

10.3 WIDE BAY BURNETT REGIONAL WASTE AND RESOURCE RECOVERY PLAN

File Number: **02-08-2023**

Author: **Acting General Manager Liveability**

Authoriser: **General Manager Infrastructure**

PRECIS

Wide Bay Burnett Regional Waste and Resource Recovery Plan

SUMMARY

The Regional Waste and Resource Recovery Plan has now been completed and is put forward to Council for consideration.

OFFICER'S RECOMMENDATION

That the committee recommends to Council:

That Council notes and supports the Wide Bay Burnett Regional Waste and Resource Recovery Plan (WBB RWRRP).

FINANCIAL AND RESOURCE IMPLICATIONS

Whilst noting and supporting the WBB RWRRP this doesn't have an immediate financial implication to Council. Funding from the State Government (which may or may not require Council contribution) will assist in the further development and implementation of the Plan.

LINK TO CORPORATE/OPERATIONAL PLAN

OPL/13 Participate in Regional Wide Waste collaboration.

COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)

N/A

LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)

N/A

POLICY/LOCAL LAW DELEGATION IMPLICATIONS

National Waste Policy

Queensland's Waste Management and Resource Recovery Strategy

SBRC Waste Reduction and Recycling Plan

ASSET MANAGEMENT IMPLICATIONS

N/A

REPORT

Council has committed to the development of the WBB RWRRP, facilitated by LGAQ and funded by the Queensland Government. The Plan identifies a series of actions to be taken at a regional scale and for individual Councils to improve waste and resource recovery outcomes.

SLR Consulting were appointed to develop the Plan which included a series of meetings and workshops being held with the WBB Resource Recovery Working Group.

While the regional waste management plan provides the primary vehicle for accessing available funding from the Recycling and Jobs Fund, there may also be opportunities for initiatives to be funded that are outside the plan. For example, a pilot at a local level to 'test' the suitability of a model or infrastructure for the region (or sub-region). It is recognised that the plan needs to be a living document and that not all potential initiatives will have been identified in the plan.

However, it is expected that the bulk of the funding will come through the projects identified in the plan with a more streamlined pathway for funding approvals as it has already been identified in the plan. In the first instance any projects identified that are outside the plan would likely be discussed with the regional working and steering groups and the proposed regional support resource position that will be funded to support implementation of the plan, to assess suitability for funding under the plan or whether this would be considered under a separate funding process.

Councils, in participating in the development of this plan and subsequent endorsement of or support for its finalisation and publication, can do so in the knowledge that this consideration does not obligate individual Councils to any funding commitment. Subsequent business cases developed as part of implementing the plan and implementation decisions made by the region for implementing the plan would normally include that detail.'

Council also participated in the development of the Darling Down South West Regional Waste and Infrastructure Plan. A separate report to note and support this Plan will be provided to Council in the near future.

ATTACHMENTS

1. WBB RWRRP

REGIONAL WASTE & RESOURCE RECOVERY PLAN

Wide Bay-Burnett Region

Prepared for:

Local Government Association of Queensland
Local Government House
25 Evelyn Street
Newstead
Fortitude Valley 4006

PREPARED BY

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BASIS OF REPORT

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
620.31107-R04-v1.0	6 May 2022	SLR Consulting	SLR Consulting	SLR Consulting
620.31107-R04-v1.0	22 February 2022	SLR Consulting	SLR Consulting	SLR Consulting

EXECUTIVE SUMMARY

The Wide Bay-Burnett Regional Waste and Resource Recovery Plan

This Plan identifies a series of actions to be taken at a regional scale and for individual Councils to improve waste and resource recovery outcomes in the Wide Bay-Burnett region. Participating Councils are Wide Bay Burnett region. Participating Councils are Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council and South Burnett Regional Council. Under a working group established by councils, a series of workshops and interviews were undertaken to initially define current challenges and opportunities, to identify, refine and select preferred options, and to identify a pathway for implementation. Whilst this Plan sets the forward trajectory to improve waste and resource recovery outcomes in the Wide Bay-Burnett region, nothing in this Plan mandates Councils must deliver the actions identified in the Plan.

The population of the Wide Bay Burnett region was reported to be 310,728 in 2021 with a population density of 6.39 persons per square kilometre over a total land area of approximately 48,598 square kilometres.[1] Population is forecast to grow within the region to between 324,778 and 396,515 by 2041[2]. Growth across the region is forecast to be highest in Bundaberg (19%), Fraser Coast (21%), Gympie (15%) and South Burnett (12%) LGAs, with Cherbourg Aboriginal Shire Council to experience modest (6%) growth and North Burnett Regional Council expected to contract marginally by 2%. Land use within the region is predominantly rural, with rural-residential, residential, commercial, and industrial land uses in numerous urban centres and small townships. The Wide Bay Burnett Region's Gross Regional Product is estimated at $14.19 billion, which represents approximately 3.79% of the state's Gross State Product (GSP)[3] and contributes 109,360 local jobs.

Current state

Waste arisings and services

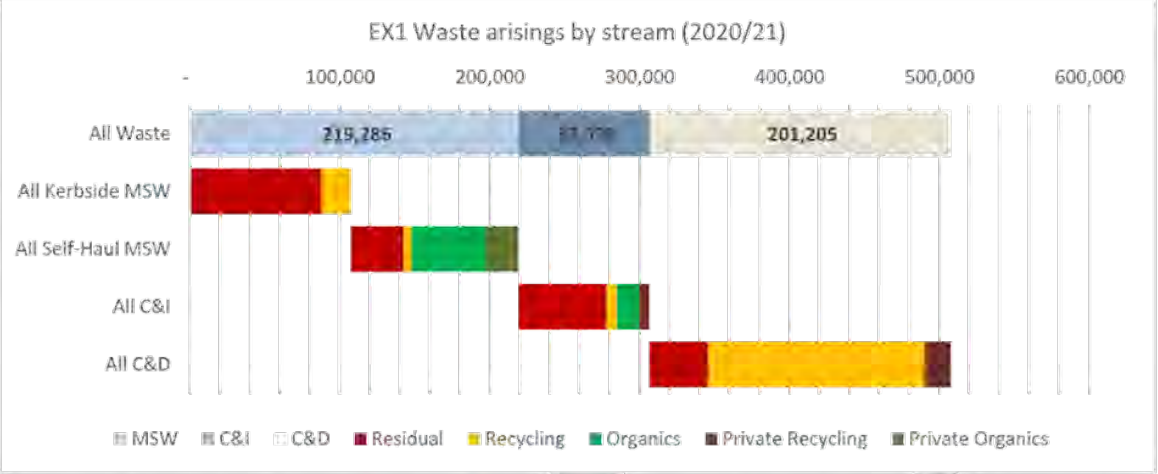
Councils in the WBB region managed a total of 461,269 tonnes of waste in the 2020-21 financial year (FY20-21). This included (see **Figure EX1**):

- 197,286 tonnes of household waste
- 80,378 tonnes of commercial and industrial waste
- 183,605 tonnes of construction and demolition waste

A further 46,300 tonnes of private sector waste was identified as managed in the region. Bundaberg Regional Council (42%) and Fraser Coast Regional Council (36%) manage the highest proportion of waste with Gympie Regional Council (9%), North Burnett Regional Council (4%), South Burnett Regional Council (9%) and Cherbourg Aboriginal Shire Council (<1%).

[1] Regional Development Australia, Wide Bay Burnett, 2023. RDA Wide Bay Burnett Region – Community Profile
[2] Queensland Government population projections, 2018 edition; Australian Bureau of Statistics, Population by age and sex, regions of Australia, 2016 (Cat no. 3235.0).
[3] Regional Development Australia, Wide Bay Burnett, 2023. RDA Wide Bay Burnett Region – Economic Profile https://economy.id.com.au/rda-wide-bay-burnett

EXECUTIVE SUMMARY



Without intervention, waste managed by councils in the region is forecast to grow to 545,000 tonnes in FY30-31, 582,000 tonnes in FY40-41 and 619,000 tonnes in FY50-51.

All Councils offer a kerbside residual waste collection service. Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, Fraser Coast Regional Council, Gympie Regional Council and South Burnett Regional Council currently provide a 2-bin collection system comprising residual waste and kerbside recycling.

All Councils offer a form of self-haul facility which receive householder, commercial and industrial, and construction wastes. This includes significant amount of garden organic waste managed at Council transfer and resource recovery facilities. Problematic wastes with limited currently available recovery options in the region include construction and demolition wastes (e.g., masonry, aggregates, and concrete), contaminated soils, e-waste, food and garden organics, timber, textiles, and tyres.

The plan identifies several regional or cross-regional solutions for these but acknowledges that Queensland or Commonwealth Government leadership and interventions will be needed for some of the more problematic waste streams.

Key issues

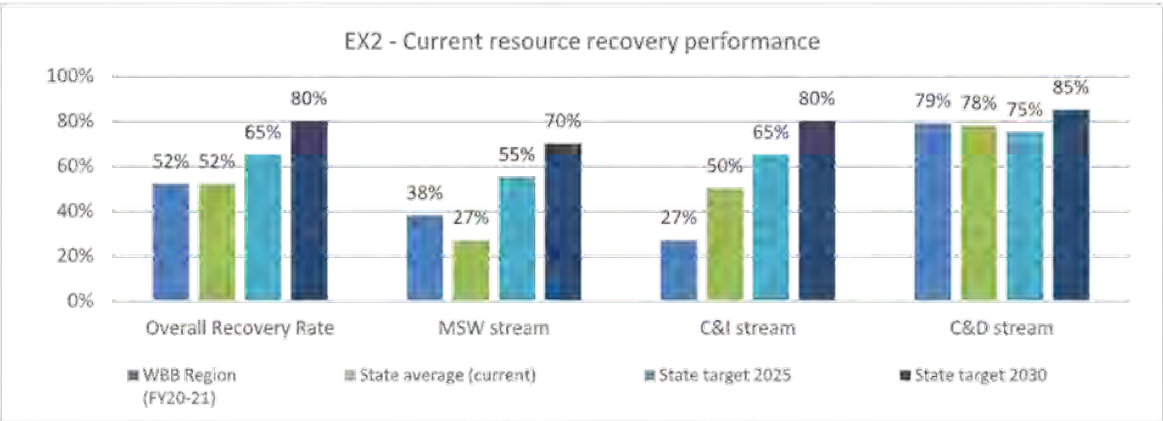
To inform the development of this Plan, several key issues identified that were considered to limit waste outcomes in the region including:

- Some landfills in the region are approaching capacity which may prohibit long-term future landfilling.
- Individual councils do not have sufficient scale for processing or remanufacturing recyclable materials or residual waste.
- There are insufficient current local end markets for recycled materials and secondary raw materials, except for organic waste, generally limiting the commercialisation of resource recovery.
- Community behaviour lacks understanding to support production of high-quality recyclable output.
- Current policy settings do not support greater recovery and recycling.

EXECUTIVE SUMMARY

Current performance against Strategy targets

The Wide Bay-Burnett region has a current recovery rate of 52% across all streams, compared to a current state average of 52% and 2025 state target of 65%. The MSW and C&D streams are consistent with the state average, whilst the C&I stream is performing poorly. Across all streams except C&D, the 2025 and 2030 targets are however challenging without intervention, as shown on **Figure EX2**.



Plan outcomes

Education as a primary focus

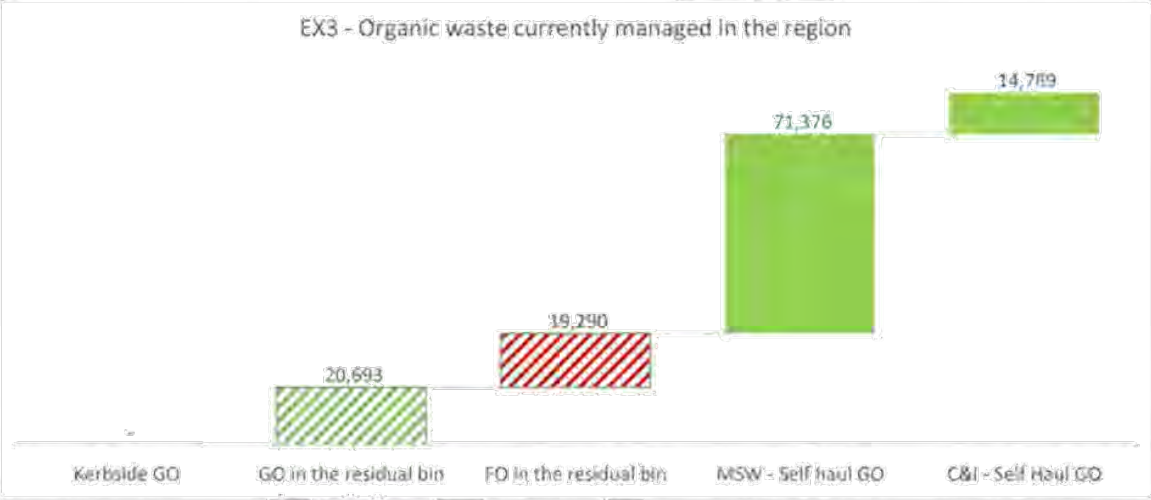
A regional waste and recycling education strategy has been identified by Councils to focus investment on education and behaviour change activities that promote better outcomes for the region. Education will focus on problem areas including reducing the kerbside recycling bin contamination rates, which diminishes the value of sorted material and can increase operational costs. Other areas of focus will include food waste avoidance programs, and other behaviour change activities which educate residents on the benefits of getting recycling right.

The regional education strategy will be developed through collaboration by Councils in the region however will require investment from the Queensland Government to prepare and implement. Through further investment, this Strategy, and the resources deployed could also target education of waste producers in the C&I stream to drive better resource recovery outcomes. Cherbourg Aboriginal Shire Council will develop its own community specific education plan to align with other education services in the area.

EXECUTIVE SUMMARY

Improved organic waste management

The Wide Bay-Burnett region already recovered and recycled 86,165 tonnes of organic waste in FY20-21 through material delivered to Council resource recovery facilities. A further 40,000 tonnes of food and garden organics is estimated to currently go to landfill (as show in **Figure EX3**) representing an opportunity in the region to divert some of this material from landfill and into organic waste recycling through composting, whether at commercial facilities, at home, or via community facilities. In the region, policy and economic settings suggest that Bundaberg Regional Council and Fraser Coast Regional Council have sufficient volume to introduce a separate kerbside collection for organic waste, to be processed in the region. For other councils in the region current policy settings may limit the potential establishment of kerbside organic waste services.



For those parts of the region that cannot access a kerbside organic waste collection service, the Queensland Government should establish mechanisms to participate in composting through community gardens or composting hubs, or by providing access to at-home compositing infrastructure such as compost bins or worm farms. These interventions will be implemented as soon as practically possible and dependent on availability of funding. Food waste avoidance education should also be rolled out across the region.

Economic analysis identified that the introduction of a new kerbside organics service would result in extra cost. The estimated cost for Bundaberg Regional Council and Fraser Coast Regional Council for a new organics collection service including recycling at a private sector organic waste processing is estimated at **$153.5 million** (present value) assuming councils procure a service from an existing organic waste processing provider and over the 30-year model period. This assumes that open windrow composting is the preferred technology. The estimated annualised cost increase compared to business as usual, allowing for increasing levy costs, would be an additional estimated **$55 per household** per year (present value, annualised) allowing for the residual bin collection being reduced to fortnightly where a kerbside organic waste collection is available. This includes:

- One-off-transition costs to purchase consumables and distribute to households including new bins, kitchen caddies, and compostable liners estimated at **$2.7 million** for Bundaberg Regional Council and **$3.1 million** for Fraser Coast Regional Council.[4]

[4] Assumes estimated 80% coverage of FOGO service across local government area. Actual number may vary.

EXECUTIVE SUMMARY

- An additional potential one-off cost of $11-$21 per bin may also be incurred to change current residual bin lids from green to the standardised red.
- Additional establishment education and ongoing annual organics diversion education costs just for FOGO implementation are included in the estimate of an initial at **$0.27 million per annum** for Bundaberg Regional Council and **$0.29 million** per annum for Fraser Coast Regional Council, expected to commence 2-years before a new service commences.

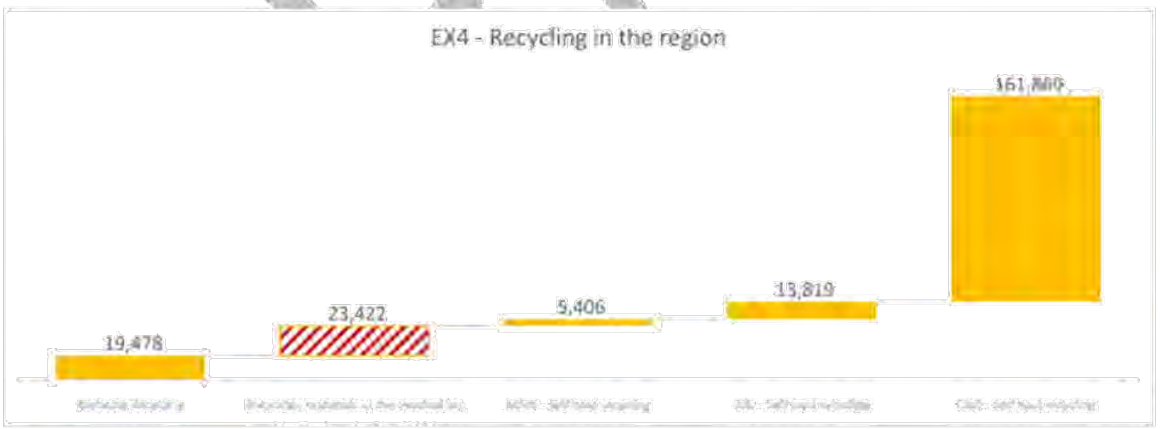
Whilst nothing in this Plan precludes other Councils from introducing a kerbside FOGO collection and processing solution, under current policy settings, the comparable cost per household would be higher due to 100% of landfill levy paid being returned to council in annual advance payments, in addition to the lack of scale and large distances required to transport waste for processing. Similar proportional costs may be incurred by other Councils progressing organic waste diversion.

It is estimated that the introduction of FOGO collection services in both Bundaberg and Fraser Coast Regional Council areas could capture an initial 28,000 tonnes of organic waste for recycling. At a regional scale this is forecast to improve the overall resource recovery rate from the existing 52% to an estimated 59% upon commencement in FY26-27. Between FY26-27 and FY30-31 this could divert an estimated additional 140,000 tonnes of organic waste from landfill into recycling.

Material recovery and recycling

Household kerbside stream

In FY20-21, 200,572 tonnes was reported as recovered in the region, of which the household kerbside collection of dry recyclables contributed 19,478 tonnes, and clean earth contributed 134,000 tonnes of the C&D recycled amount.



Contamination of the kerbside commingled bin in the region ranges up to 16-18%. It is estimated that there is also approximately 23,500 tonnes of dry recyclable material in the kerbside residual waste bin that could potentially be captured.

EXECUTIVE SUMMARY

Through focussed education campaigns as part of the regional education strategy it is expected that contamination will be reduced, and that there will be greater capture of recyclable material currently lost to landfill. There are material recovery facilities in Bundaberg and Cherbourg, with a new potentially regional scale facility to be operational in Maryborough in 2024. It is also proposed to install glass processing and washing equipment in Maryborough through implementation of this Plan.

There may be opportunities for the establishment of new recycling or reprocessing facilities in the region aligned with the Queensland Governments precinct approach, however this requires further refinement. Target reprocessers may access organic waste, C&D waste (clean earth, masonry, aggregates, and concrete), agricultural plastics, e-wastes, timber, and solar panels.

The estimated cost to implement the material recovery and recycling interventions is an incremental **$47 million** (present value) equivalent to an annualised cost of approximately $17 per household per year. This includes:

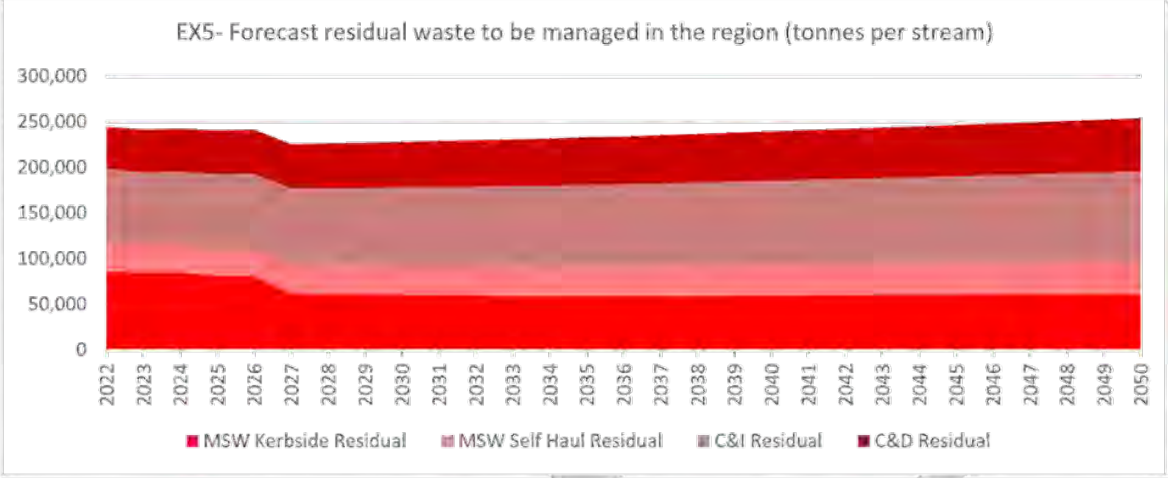
- Estimated capital expenditure of approximately **$6.5 million** for new glass processing and washing technology to be deployed, and ongoing operational costs for over the 30-year lifetime.
- Small-scale transfer infrastructure improvement indicative budget of **$7.5 million**.
- Allowances for funding supported improvements to provide household hazardous waste facilities, waste stream audit and other initiatives to support better segregation and understanding of waste flows in the region.
- The development and delivery of a regional education strategy that applies across all Councils to provide education priorities in collaboration with the Queensland Government, estimated to be **$1 million** per annum commencing immediately.

It is assumed that additional education costs are funded by the Queensland Government. These changes are focussed on improving the quality and quantity of material captured for recycling and educating. A separate education plan will be developed by Cherbourg Aboriginal Shire Council specific to community needs.

Residual waste management in the long-term

In FY20-21, approximately 221,000 tonnes of residual waste was managed, of which 123,000 tonnes was generated directly by households. With the interventions identified in this Plan, resulting residual waste is expected to be 229,000 tonnes by FY30-31, 241,000 tonnes by FY40-41 and 256,000 tonnes by FY50-51 (see **Figure EX5**). For the household derived MSW stream only, Councils are forecast to need to manage 92,000 tonnes of residual waste in FY30-31, 93,000 tonnes in FY40-41 and 97,000 tonnes by FY50-51.

EXECUTIVE SUMMARY



Gympie Regional Council has an immediate need for new landfill capacity. Other councils are running out of approved and constructed landfill capacity in the medium term. The cost of residual waste management is expected to increase as new capacity is required, or alternative solutions procured. The immediate cost of landfilling is also rapidly increasing for Bundaberg Regional Council and Fraser Coast Regional Council due to changes in annual advanced payments. In developing this Plan, councils did not expect to develop energy from waste (EfW) facilities within the region but recognised the potential to send residual waste from within the region to energy from waste facilities, if established outside the region. The estimated cost per household of diverting residual waste to an out of region EfW facility is likely to be significantly greater than continued landfilling. As technology evolves smaller scale regionally located facilities may be established by the private sector which could prove an alternative solution to sending out of region.

Other problematic streams identified in the residual waste stream include timber and contaminated soils. Long term solutions for these streams that avoid the need for landfill will be developed at a regional scale and implemented.

Expected recycling and resource recovery outcome of the Plan

To achieve an estimated regional resource recovery rate of approximately 60%, which amounts to an overall improvement of 8% for the region, and an estimated 22% improvement in recovery rate on the kerbside MSW stream, Bundaberg Regional Council and Fraser Coast Regional Council would need to introduce an organics diversion service targeting FOGO waste. This should be coupled with improvements to the existing yellow top bin recycling services through a combination of improved transfer facilities and education. Beyond this, significant improvements to the C&I stream are required, but only after data for non-council managed wastes are collected and assessed. Beyond this, the primary pathway to get closer to the Queensland Government's resource recovery targets of 90% of waste diverted from landfill by 2050 would require a significant proportion of residual waste to be sent to EfW. Under current policy settings this is expected to be more expensive than sending the same waste to landfill.

EXECUTIVE SUMMARY

Implementation

Cost to deliver the Plan

The estimated cost for implementation (excluding residual waste management) is **$84 million** over the period FY23-24 to FY30-31 as presented in **Table EX1**.[5]

Table EX1 Indicative Cost Estimate (costs in millions, p50 accuracy)

Item	2024	2025	2026	2027	2028	2029	2030	2031	Total to FY31
Regional Implementation									
Project Manager (RWG)	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21	1.57
Administrative & Legal	0.10	-	-	-	-	-	-	-	0.10
Develop detailed implementation Plan	0.05	-	-	-	-	-	-	-	0.05
Review RWWP	-	-	-	-	0.10	-	-	-	0.10
Meetings (Council FTE requirement)	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.43
Council contribution to actions	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.43
Sub Total – Plan Implementation	**0.43**	**0.28**	**0.29**	**0.30**	**0.41**	**0.31**	**0.32**	**0.33**	**2.67**
Regional Education Strategy									
Education Strategy (and updates)	0.05		0.02		0.02		0.02	0.00	0.10
FOGO implementation, BRC/FCRC only	Captured within organic implementation costs below								-
Kerbside Education & Other	Captured within material recycling & recovery costs below								-
Sub-Total – Regional Education	**0.05**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.10**
Regional Organics Solution[6]									
FOGO Implementation, BRC only									
Administration, business cases, PM	0.20	0.20	0.08	0.08	0.08	0.08	0.08	0.08	0.88
FOGO education costs (new service BRC)		0.26	0.27	0.27	0.28	0.29	0.29	0.30	1.97
One off investment (bins) (BRC)				2.74					2.74
Collection costs (new, BRC)				1.71	1.75	1.80	1.84	1.89	8.99
Processing Costs (new, BRC)				1.56	1.60	1.65	1.69	1.75	8.24
FOGO implementation, BRC only	**0.20**	**0.46**	**0.34**	**6.35**	**3.71**	**3.81**	**3.91**	**4.02**	**22.80**
FOGO Implementation, FCRC only									
Administration, business cases, PM	0.20	0.20	0.08	0.08	0.08	0.08	0.08	0.08	0.88
FOGO education costs (new service FCRC)		0.29	0.30	0.31	0.32	0.32	0.33	0.34	2.21
One off investment (bins) (FCRC)				3.08					3.08
Collection costs (new, FCRC)				1.92	1.97	2.02	2.07	2.12	10.11

[5] Costs are estimated to a maximum of p50 accuracy where presented in this Plan
[6] Costs for new services presented here do not include benefits (e.g., reduced levy, reduced use of landfill airspace) however these savings are represented in the economic analysis. These costs represent actual costs for implementation. Benefits may not be realised at the same time.

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Item	2024	2025	2026	2027	2028	2029	2030	2031	Total to FY31
Processing Costs (new, FCRC)				1.56	1.61	1.66	1.71	1.77	8.32
FOGO implementation, FCRC only	**0.20**	**0.49**	**0.38**	**6.95**	**3.98**	**4.09**	**4.20**	**4.32**	**24.59**
Organics Programs									
Community composting	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.80
Roll out of compost bin program		0.31						0.31	0.61
Material flow analysis - organics	0.01	0.02					0.02		0.05
Sub-Total – Organics Programs	**0.11**	**0.43**	**0.10**	**0.10**	**0.10**	**0.10**	**0.12**	**0.41**	**1.46**
TOTAL (Regional Organics Solution)	**0.51**	**1.38**	**0.82**	**13.40**	**7.79**	**8.00**	**8.23**	**8.74**	**48.86**
Material recovery & recycling solution									
Education Implementation (kerbside + other)	0.98	1.01	1.03	1.06	1.09	1.11	1.14	1.17	8.59
Education Plan (Cherbourg)		0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.18
Small scale infrastructure improvements		1.25	1.25	1.25	1.25	1.25	1.25		7.50
Community circular economy programs	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.40
Household Hazardous Waste CRCs			0.20	0.20	0.20	0.20	0.20	0.20	1.20
Glass processing & washing plant		0.20	7.00	1.00	1.03	1.05	1.08	1.10	12.46
Supplementary funding for Waste Audits	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.70
TOTAL (MRR Solution)	**1.11**	**2.64**	**9.64**	**3.67**	**3.72**	**3.78**	**3.83**	**2.64**	**31.03**
Residual Waste									
Progress & implement R&D into problematic wastes	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.80
TOTAL (Residual Solution)	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.80**
OVERALL TOTAL – IMPLEMENTATION COST FOR RWRRP TO FY30-31	**2.20**	**4.41**	**10.86**	**17.46**	**12.03**	**12.19**	**12.50**	**11.81**	**83.46**

All costs presented in Million $ based at 2023 rates, BRC-Bundaberg Regional Council, CASC-Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council. SBRC-South Burnett Regional Council

Access to supporting resources and funding

Evidence prepared in development of this Plan indicatives the cost of implementation will be significant compared to the current state. There is a need for support around the development of business plans and forecasting suitable for approval by the Queensland Government, particularly for infrastructure such as new or improved transfer facilities, new collections, or processing infrastructure. Access to regional facilitation / coordination support resources is essential for Councils implementation of the Plan, as would funding support to develop supporting documentation for funding applications. Implementation at the regional scale will also require funding to coordinate and liaise with the Queensland Government, and advocate for better waste outcomes in the region.

Funding for capital expenditure such as an organic waste processing facility (or enhancements to existing privately owned facilities), small scale infrastructure improvements, or potentially an energy from waste facility may also be facilitated by the Queensland Government, pending specific business case development.

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Regional collaboration and responsibilities

To support development of this Plan, the region has utilised a collaborative approach to strategy development and implementation by establishing a specific working group. To implement the Plan, the region is required to formalise a working group. This group will continue to collaborate on Plan implementation, and seek to undertake regional procurement where beneficial, as well as collaborate on the implementation of education and awareness campaigns. This is a critical action required to be commenced immediately following finalisation of the Plan. The Queensland Government will fund a project or program manager to deliver the Plan. Depending on procurement and ownership decisions around certain infrastructure, there may be a need to establish additional governance structures.

Responsibility for decision making for the implementation of interventions under this Plan will sit with individual councils facilitated by the RRWG. The RWWG will coordinate funding requests required to the Queensland Government for approval under the following proposed structure:

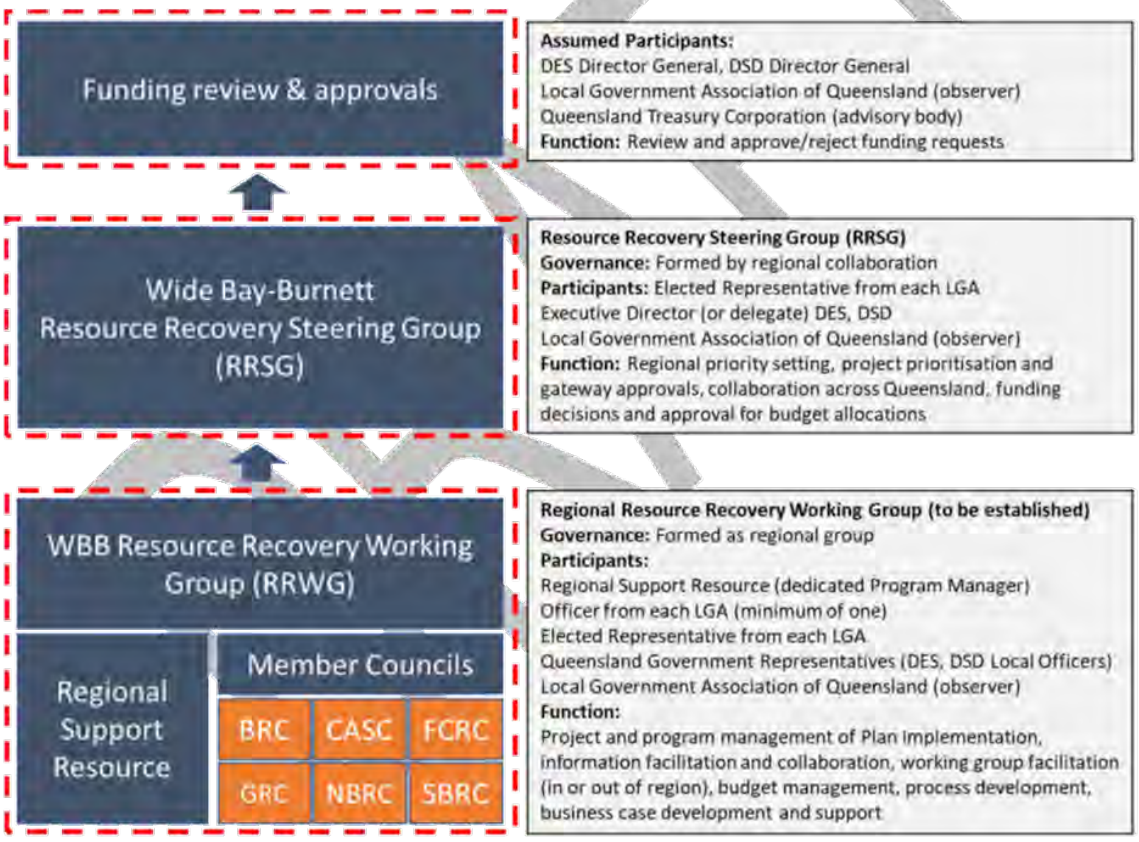

Figure EX6 – Regional governance structure

EXECUTIVE SUMMARY

Review and monitoring

Implementation of the Plan will be the responsibility of the regional steering group through the regional facilitation / coordination support assistance. Initial actions will be measured against progress, but longer-term review should be against metrics including delivery of specific services identified in the Plan and achieving levels of education, capture of types of waste (e.g., FOGO, GO, Dry Recyclables) and resultant change to recovery rates compared to forecast. The Plan will be scheduled for review and update every 5-years.

Implementation roadmap

An implementation roadmap has been developed identifying timing and activities to deliver this Plan, as show in **Table EX2**.

While the regional waste management plan provides the primary vehicle for accessing available funding from the Recycling and Jobs Fund, there may also be opportunities for initiatives to be funded that are outside the plan. For example, a pilot at a local level to 'test' the suitability of a model or infrastructure for the region (or sub-region). It is recognised that the plan needs to be a living document and that not all potential initiatives will have been identified in the plan.

However, it is expected that the bulk of the funding will come through the projects identified in the plan with a more streamlined pathway for funding approvals as it has already been identified in the plan. In the first instance any projects identified that are outside the plan would likely be discussed with the regional working and steering groups and the proposed regional support resource position that will be funded to support implementation of the plan, to assess suitability for funding under the plan or whether this would be considered under a separate funding process.

Councils, in participating in the development of this plan and subsequent endorsement of or support for its finalisation and publication, can do so in the knowledge that this consideration does not obligate individual Councils to any funding commitment. Subsequent business cases developed as part of implementing the plan and implementation decisions made by the region for implementing the plan would normally include that detail.

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Table EX2 Implementation Roadmap

Action	Responsibility	Next 2 years			Within next 5 years			Within next 10 years					To 2040	To 2050
General														
Establish regional waste working group to implement Plan	All													
Program management	RWWG													
Regional collaboration (e.g., RRWG meetings, action management, etc.)	RWWG, All													
Organic Waste Management														
Participate in Education and Behaviour Change Initiative (assumed continuation) as part of regional education strategy – incorporating a food waste avoidance component	All													
Review potential for behaviour change regulation (new services)	BRC, FCRC													
Roll out of at-home composting solutions	QGOV													
Develop business case for organics collection service for council approval including refinement of market price for recycled organics	BRC, FCRC													
Commence new organic waste collection service education	BRC, FCRC													
Procurement of organic waste collection solution	BRC, FCRC													
Procurement of organic waste processing solution	BRC, FCRC													
Commence and operate kerbside organic waste collection service (pending individual council approval)	BRC, FCRC													
Continuation of self-haul green waste receipt and processing	All													
Roll out of community composting solutions including guidance	QGOV													
Collaborate on regional solution for finding highest value market for green waste across region	RWWG													
Develop regional solution for biosolids and timber	RWWG													
Develop pathway to improve non-Council held data collection	QGOV, All													
Material Recycling & Recovery														
Participate in Education and Behaviour Change Initiative (assumed continuation) and develop regional education strategy, implement	RWWG, All													
Review & agree pathway for improved enforcement activity for poor household behaviours in kerbside bin service provision, and implement	RWWG, All													
Seek opportunities to collaborate on regional collections approach when contracts allow	RWWG													
Develop business case for funding of glass processing and washing solution	FCRC													
Procure, construct and commission glass processing and washing solution	FCRC													
Develop business case, designs for new or improved transfer facilities	All (as required)													
Construct and commission upgrades or new transfer facilities	All (as required)													
Collaborate on establishment of regional scale precinct and ancillary satellite sites in accordance with precinct guidelines	RWWG, All													
Construct enabling infrastructure for precinct	QGOV													
Establish new resource recovery processing facilities within precinct	GGOV, All support													
Work with Queensland Government agencies to improve uptake or recycled materials in procurement	QGOC, All RWWG													
Develop pathway to improve material flow data and knowledge across region for recyclable material	QGOV, All													
Collaborate to collect data on contamination within kerbside bins to improve education approach.	RWWG, All													

EXECUTIVE SUMMARY

Action	Responsibility	Immediate	2024	2026	2026	2027	2028	2029	2030	2031	2032	2033	2040	2050
		Next 2 years			Within next 5 years			Within next 10 years					To 2040	To 2050
Residual Waste Management														
Councils to consider individual landfill capacity needs in short-medium and long-term	All													
Consider long-term options and approach to managing residual waste in the long-term, pending availability of facilities out of region	RWWG, All													
Develop long-term approach to managing problem and emerging wastes	All													

Notes: BRC-Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council, SBRC-South Burnett Regional Council; ALL: Indicates collaborative activities for all councils to participate in.

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(DO NOT DELETE SECTION BREAK)

Glossary

Acronym	Details
Annual advance payment	A payment made by the Queensland Government as part of a commitment made to avoid there being a direct impact of the waste disposal levy on households. Councils receive a percentage (depending on levy zone) of the amount paid in waste disposal levy on household waste as an advanced payment.
Capital Expenditure (CAPEX)	An expense incurred through the additional of capital infrastructure works
C&D	Construction and demolition – Waste generated by demolition and excavation companies, builders, contractors, and property developers. The waste from these activities can include excavated material, waste asphalt, bricks, concrete, plaster, timber, vegetation, asbestos, and contaminated soils.
C&I	Commercial and Industrial – Waste generated by manufacturers, shops and business of all sizes and varieties.
Circular economy	A model of production and consumption that avoids waste and depletion of finite resources through the reuse of materials and assets.
Composting	Repurposing of organic waste to produce compost or other soil improver products, which are then sold into landscaping and agricultural markets
DES	Department of Environment and Science – A department of the Queensland Government driving sustainability, wellbeing, and scientific excellence.
Diversion	Diversion in the context of this report refers to diversion of waste from landfill to an alternative recovery pathway
EFW	Energy from waste: Interchangeably termed 'waste to energy'. A collection of treatment processes and technologies used to generate a usable form of energy, for example, electricity, heat, and fuels, from waste materials. The Queensland EfW Policy defines EfW under four categories: biological, chemical, mechanical, and thermal.
Expanded polystyrene (EPS)	A lightweight cellular plastic material, widely used in building and construction, and packaging.
FOGO collection	Food Organics and Garden Organics – Refers to a kerbside collection service of combined food and garden waste, mostly from domestic or municipal sources in one collection bin
Infrastructure	Infrastructure in the context of this report refers to waste and resource recovery infrastructure unless otherwise noted
In-vessel composting	Composting technology involving the use of a fully enclosed chamber or vessel in which the composting process is controlled by regulating the rate of mechanical aeration
Leachate	A form of wastewater that has percolated through waste such as that in landfills
Mixed recyclables	Comingled recyclable materials including plastic, aluminium, glass, steel, and paper
MRF	Material recovery facility – A Plant that separates and prepares recyclable materials to sell to end users as raw materials for new products.
MSW	Municipal Solid Waste – Primarily the waste and recyclables generated by households and collected by Councils but may also include other Council generated wastes
Operating expenditure (OPEX)	An expense a business incurs through its regular business operations.
Organics processing	The processing of organic materials into beneficial products such as soil conditioners and mulch
PEF	Process Engineered Fuel, also known as refuse derived fuel (RDF), is a solid fuel produced after processing of waste, for example in a dirty MRF, to increase the calorific value, homogenise the material, remove recyclable materials, remove inert materials, and remove hazardous contaminants

Acronym	Details
Processing facilities and infrastructure	Facilities which either receive materials directly from collection systems or from recovery facilities for further sorting and/or processing to provide material for use in the generation of new products.
PV	Photovoltaic- mechanism used in solar panels
Product stewardship	Recognition of the shared responsibility to reduce the environmental and human health and safety impacts of products and materials over their life from design to disposal.
QWDS	Queensland Waste Data System. The web-based data system used by the Queensland government to collect data from operators. Depending on reporting entity there are different reporting requirements. Data from QWDS has been utilised to inform this Plan.
Recyclate	Raw material transported to a waste recycling facility or a material recovery facility for processing into a new material or product
Reprocessing	Changing the physical structure and properties of a waste material that would otherwise have been sent to landfill to add value to the processed material and prepare it for reuse.
Resource recovery	The process of obtaining matter or energy from discarded materials
Secondary processing	Taking pre-sorted materials and changing their physical and/or chemical nature, adding value to the processed material so that it can become a feedstock for a manufacturing process or re-enter the economy
Single use plastic	Materials primarily made from petrochemicals to be disposed of directly after use. Commonly used for packaging and service ware, such as bottles. Wrappers, straws, and bags.
Sustainable procurement	Meeting the need for materials, goods, utilities, and services in a sustainable, environmentally friendly, responsible, and ethical way.
WBB	Wide Bay Burnett, refers to the collective region comprising Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council, and South Burnett Regional Council.

1 Introduction

Wide Bay Burnett (WBB) region and the Queensland Government recognise the importance of regional implementation in the delivery of Queensland's *Waste Management and Resource Recovery Strategy*[7] (WMRR Strategy). The Local Government Association of Queensland (LGAQ) is therefore supporting the development of the Wide Bay Burnett Regional Waste and Resource Recovery Plan (the Plan) on behalf of the Councils within the Wide Bay Burnett region. This plan details a clear path for the future of waste management, resource recovery and recycling in the region through providing strategies and actions to strengthen regional collaboration regarding the delivery and improvement of waste management and resource recovery services across the region.

The intention of the plan is to provide long-term direction to 2050 for the needs of the region in terms of critical waste streams, infrastructure, and the identification of a particular suite of levers required to achieve regionally specific targets. Specific activities and actions in the short- to medium-term are identified, where there is a relatively high degree of certainty in process and outcome. Longer-term activities and actions are expected to be implemented later in the program of works or require further refinement and development. It is anticipated that the plan will require a degree of flexibility.

The Plan aims to achieve a balance between a clear implementation plan for the best whole of system outcome for the region, while reflecting the needs and wishes of each individual council and their rate payers.

1.1 Purpose

The purpose of the Plan is to address any problems and opportunities with the current waste management in the region. The objectives of this Plan are to:

- Maximise the value of waste, including problematic waste streams.
- Deliver the best pathway for the region that identifies opportunities for government co-funding arrangements, and industry investment or co-investment.
- Provide councils with the data and options analysis required to make informed decisions about policy, location of infrastructure and optimal value for money investment, and non-infrastructure options
- Support improved waste management, resource recovery and recycling practices to contribute towards agreed regional and state targets
- Encourage and support opportunities to embed circular economy principles into business-as-usual practices, including through sustainable procurement principles
- Encourage and support job creation and economic and market development opportunities.
- Improve environmental outcomes for the community.
- Identify non-infrastructure and social and community benefits and
- Establish and maintain collaborative relationships with key stakeholders to drive long-term sustainable outcomes.

[7] Queensland Government, 2019. *Waste Management and Resource Recovery Strategy*

1.2 The region

This Plan is specifically for the Wide Bay Burnett region, comprising the Local Government Areas of Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council and South Burnett Regional Council. Where appropriate, the Plan may look outside of the region to neighbouring regions or individual Councils for benefit of Plan implementation. Neighbouring regions include Southeast Queensland, Central Queensland, and the Darling Downs. The region is show on **Figure 1**.

The population of the Wide Bay Burnett region was reported to be 310,728 in 2021 with a population density of 6.39 persons per square kilometre over a total land area of approximately 48,598 square kilometres.[8] Population is forecast to grow within the region to between 324,778 and 396,515 by 2041[9]. Growth across the region is forecast to be highest in Bundaberg (19%), Fraser Coast (21%), Gympie (15%) and South Burnett (12%) LGAs, with Cherbourg Aboriginal Shire Council to experience modest (6%) growth and North Burnett Regional Council expected to contract marginally by 2%. Land use within the region is predominantly rural, with rural-residential, residential, commercial, and industrial land uses in numerous urban centres and small townships. The main urban centres are Bundaberg, Gayndah, Gympie, Hervey Bay, Kingaroy, and Maryborough alongside the aboriginal community at Cherbourg.

The Wide Bay Burnett Region's Gross Regional Product is estimated at $14.19 billion, which represents approximately 3.79% of the state's Gross State Product (GSP)[10] and contributes 109,360 local jobs. The largest industry by employment is health care and social assistance. Rural land within the region is used largely for forestry, agriculture, and horticulture, particularly sugar cane, fruit, vegetable, cereal, and crop growing and cattle grazing. Tourism and the resources industry are also important contributors to the economy.

Several key projects are identified within the region which, when developed will contribute both to regional growth and potentially expansion of waste generated within the region including the manufacturing of new trains and associated supply chain in Maryborough, the Wide Bay Burnett minerals region activation, activities at the Port of Bundaberg and State Development Area, and facilitation to support the growth of food and beverage manufacturing. These are supported by the Queensland Government Department of State Development, Infrastructure, Local Government and Planning (DSDILGP).[11]

[8] Regional Development Australia, Wide Bay Burnett, 2023. RDA Wide Bay Burnett Region – Community Profile
[9] Queensland Government population projections, 2018 edition; Australian Bureau of Statistics, Population by age and sex, regions of Australia, 2016 (Cat no. 3235.0).
[10] Regional Development Australia, Wide Bay Burnett, 2023. RDA Wide Bay Burnett Region – Economic Profile https://economy.id.com.au/rda-wide-bay-burnett
[11] State of Queensland, 2023. Strengthening Wide Bay Burnett,

Figure 1 Regional Location Plan

1.3 Key issues to be addressed

Through an Investment Logic Mapping (ILM) process with WBB councils, elected officials and key plan stakeholders including the Queensland Government, the following needs for the plan to address (service needs) were identified:

- Some landfills in the region are approaching capacity, which will prohibit further landfilling and require further diverse investment to enable management of residual waste
- Individual councils do not have sufficient scale for processing and remanufacturing recyclable materials or residual waste, limiting the ability to achieve resource recovery at a commercial scale
- There are insufficient current local end markets for recycled materials and/or secondary raw materials, with the exception of recycled organic waste, generally limiting the ability to achieve commercial rates of return for resource recovery
- A lack of community understanding around the increasing cost of waste management and absence of incentives and benefits for households to improve behaviours is leading to inefficient waste management practices.
- There is an opportunity to develop and support new industries and create local economic and community benefits through collaborative waste management planning between WBB councils and outside the region.
- The objectives and targets in the Queensland Waste Management and Resource Recovery Strategy and National Waste Policy Action Plan cannot be met in the Wide Bay Burnett Region with existing infrastructure, initiatives, funding, resourcing, and supporting policy.

These key issues are explored further in **Section 3**.

1.4 Approach to plan development

This Plan has been developed through initial engagement between WBB Councils, the Queensland Government, and other key stakeholders. Engagement to inform this interim report has included:

- An investment logic mapping workshop with the WBB Resource Recovery Working Group including representatives from each member council and the Queensland Government.
- An options assessment workshop considering the key options available to councils as part of a regional collaboration or for individual council action with the WBB Resource Recovery Working Group including representatives from each member council and the Queensland Government.
- An implementation options workshop with the WBB Resource Recovery Working Group including representatives from each member council and the Queensland Government to identify roles and responsibilities, governance structures, funding needs and timeframes.
- A series of follow up sessions with individual councils to refine and improve on the understanding of workshop outcomes, capturing specific needs or to undertake editorial.
- Presentations to a working group comprised of elected representatives and waste officers from WBB Councils specifically to develop this Plan
- Presentations to individual Councils to update on scope, progress and overall outcomes as related to their specific Local Government Area.

- Additional follow up sessions with council teams and Department of Environment and Science (DES) relating to information and data provided to inform waste flow forecasting.
- Engagement with key non-Council or Queensland Government stakeholders in the region including peak bodies, local industry and other specialist businesses managing materials or waste.

1.5 Document map

This Plan is the result of a significant research, consultation, and collaboration effort by council representatives across the WBB region and draws together work undertaken by individual councils within the region. Key information utilised is referenced in the document. The following provides a document map to where information is presented:

Table 1 Document map

Detail	Section	Sub-section	Description / Relevance to Plan
Purpose of the RWRRP	1	1.1	The rationale and expected objectives of the Plan
Background information	1	1.2	Information on the Wide Bay Burnett Region
Policy setting	2	2.1, 2.2	The current policy setting in which this Plan is developed including approach to regional collaboration
Waste arisings, current baseline, and forecasting	2	2.4, 2.6	Analysis relating existing waste arisings in the region, current management, and processing infrastructure, and forecast arisings utilised to shape the plan.
Key issues & opportunities	3	1.3, 3.1-3.6	Description of strategic rationale and detail of key issues identified by stakeholders to be addressed by the Plan
Organic waste stream	4	Whole section	This section considers the role the region will play in diverting organic waste from landfill, whether by large scale intervention or community based non-infrastructure solutions, including estimated cost of the transition and role each Council will play.
Material recycling & recovery	5	Whole section	This section considers how material recycling and recovery can be improved in the region, including reducing contamination, improving transfer and segregation facilities, and identifying collaborative actions for MRF and precinct development.
Residual waste stream	6	Whole section	Following implementation of the outcomes of s4 and s5 this section considers how the residual waste stream will be managed in the context of reducing airspace and increasing cost for landfill disposal.
Plan implementation	7	Whole section	This section presents how the plan will be implemented, including key actions and agreements for collaboration, how the plan will be delivered, and where funding may make the impact on households lower or more meaningful.

1.6 Assumptions and limitations in preparing this Plan

The following assumptions and limitations have been used to develop this Plan:

- Data provided by the Queensland Government from annual returns is assumed to be free from errors. The data cut off allows the utilisation of data up to FY20-21 to inform the study. In some cases, Councils have provided additional data to supplement or reflect their own analysis, which may be inconsistent with the Queensland Government supplied data.
- Cost estimates provided in the cost benefit analysis and presented in the Plan are accurate at a p50 level. These estimates are built using proxy costs in the region (where available), from out of region or from benchmark data. It is a general assumption that any costed solution will require further definition during implementation of the Plan and to satisfy the needs of Local, Queensland and Commonwealth Government decision makers.
- The waste sector is highly dynamic. Over the duration of the Plan development changes have been captured, however the Plan should be reviewed on a regular basis during implementation to ensure it meets the needs of the current policy position.
- This Plan represents the inputs and requirements of Councils developed through an interactive process. Whilst decisions reflected in the Plan are current at the point of issue, these decisions require continued council involvement, authorisation, and funding (whether from Councils or other funding sources) to progress towards the targets and outcomes.
- This Plan identifies the pathway and the evidence base for the region to deliver on the objectives of Queensland's Waste Management and Resource Recovery Strategy, including suggested actions and costs to implement.

2 Existing Information

2.1 Policy & legislative drivers

The Plan is not prepared in isolation. There are a range of economic, environmental, policy and legislative factors that drive the need for a regional-scale response. The key policy and legislative drivers are:

2.1.1 National policy and legislation

The **National Waste Policy**, which was updated in 2018, and the **National Waste Policy Action Plan**, identify priority wastes and prioritises the increased diversion of organic waste from landfill. Under the policy, and the introduction of the *Recycling and Waste Reduction Act* 2020, a framework for the banning of export of certain waste materials (glass, plastic, tyres and paper and card). Reprocessers can now only export these materials under specific requirements[12], with a view to driving in Australia processing and remanufacturing. Support for the waste industry is provided by a partnership between the Commonwealth and State Governments under the Recycling Modernisation Fund. In relevance to this Plan, export bans provide a barrier to existing Material Recovery Facility (MRF) operators and likely, over time will lead to increased gate fees for users of these facilities (e.g., Councils who provide kerbside collected commingled recycling), particularly whilst onshore processing and secondary markets utilising the recycled material are catching up.

Under the National Waste Policy, the Commonwealth Government has initiated the **Ministers Priority List**[13]. This is a list of priority wastes and actions updated annually, with an aim to driving action through product stewardship to manage problematic or emerging wastes. From this list product stewardship schemes for photovoltaic (PV) systems (i.e., solar panels), electrical and electronic products (e-wastes), plastic oil containers, child car seats, clothing and textiles, and problematic and unnecessary single use plastics have been established or are in the process of being established. A series of national product stewardship schemes are established for oil, TVs and computers, plastics and packaging, mattresses, mobile phones, tyres, large plastic bags, batteries, aluminium cladding under mandatory schemes, co-regulatory arrangements, or government accredited industry-led voluntary schemes. In regional Queensland access to residents, whether directly or via Council operated resource recovery or transfer facilities can be variable.

2.1.2 Queensland policy and legislative environment

The Queensland Government's ***Waste Management and Resource Recovery Strategy*** (WMRR Strategy), released in 2019 provides a framework and series of actions for the Queensland Government, Local Government, and industry to move toward a Zero Waste Society by 2050. The state is required to have a waste management strategy under the *Waste and Recycling Act* 2008. The development of this Plan is an action under the Strategy, which sets specific resource recovery targets for 2025, 2030, 2040 and 2050. To support the implementation of the Strategy, the Queensland Government commenced a levy on the disposal of waste to landfill in 2019. The implication of this on this Plan is presented in Section 2.1.3. Under the strategy a series of action Plans and policies have been developed or are in progress.

[12] The regulation of export of paper and card will commence on 1 July 2024. Glass, plastic, and tyres are already regulated.
[13] Australian Government, 2022. Minister's Priority List, from https://www.dcceew.gov.au/environment/protection/waste/product-stewardship/ministers-priority-list

The Queensland WMRR Strategy points towards a **transition towards a circular economy**. Whilst the waste hierarchy and the traditional 3Rs of Reuse, Recycling and Recovery continue to dominate how waste is managed in the region, and will continue to do so, it is reasonable to expect over time the nature of waste will change as producers and consumers begin to adopt circular concepts. The 10Rs of the circular economy place (see **Figure 2**) a much greater emphasis on the use of design for consumers and producers to refuse, rethink and reduce waste. Consumption under the circular economy will support reuse, repair, refurbishment, remanufacturing, and repurposing to minimise the return of materials for recycle or recovery. This Plan attempts to find a balance between meeting existing needs and allowing for future changes.

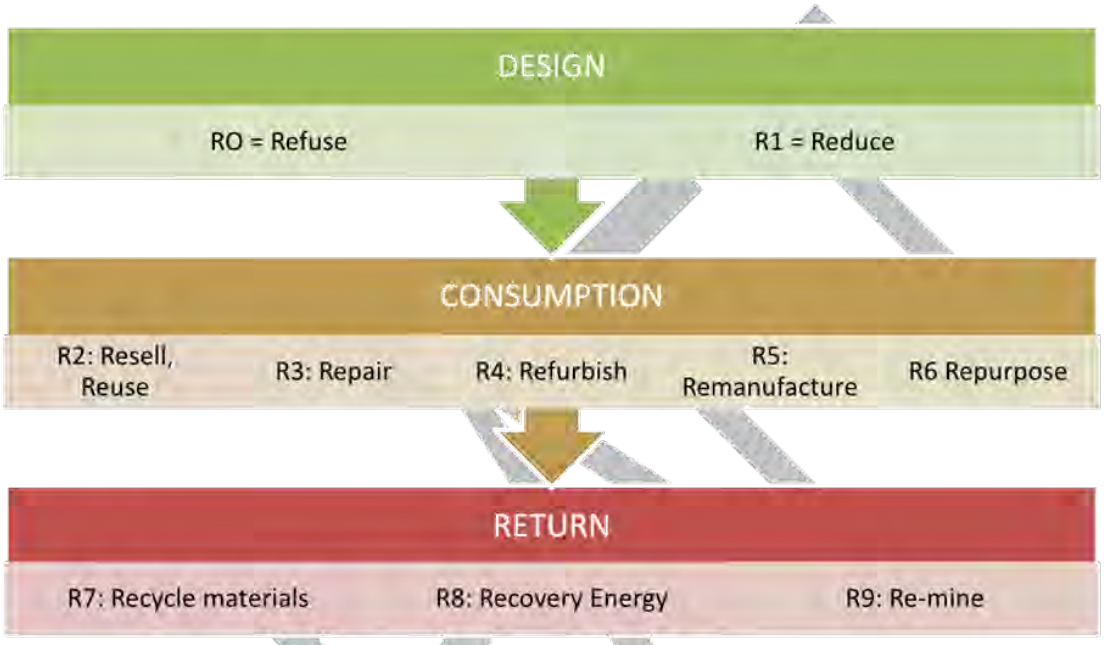


Figure 2 The 10 Rs of a Circular Economy[14]

[14] Vermeulen, W.J.V, Reike, D. and Witjes,S. 2019. Circular Economy 3.0 – Solving confusion around new conceptions of circularity by synthesising and reorganising the 3R's concept into a 10R hierarchy.

Table 2 Summary of relevant State legislation and policy

Document	Status	Relevance to regional Plan
Queensland Waste and Resource Recovery Infrastructure Report	Current	Statewide waste and resource recovery infrastructure report detailing stocks and flows, and locations and capacity of existing waste infrastructure. Used to inform baseline for this Plan
Queensland Resource Recovery Industries 10-Year Roadmap and Action Plan (2019)	Current	Action Plan under Waste Strategy Sets out a Plan to support industry growth and job creation in resource recovery, including framework for grant funding. Interaction with precinct planning provides for beneficial co-location of recycling and post-recycling
First Nation communities waste strategy and Action Plans	Current	Provides an innovative approach for Queensland's 17 Aboriginal and Torres Strait Island Councils in managing waste Is supported by regional Action Plans, in development, with three Councils included in Regional Waste and Resource Recovery Plan, Palm Island, Woorabinda, Cherbourg
Queensland Energy from Waste Policy (2021)	Current	Non-statutory policy sets framework for role of EfW in Queensland and key performance and compliance indicators. Implications for EfW projects proposed under this Plan, requirements may impact analysis
Queensland Organics Strategy and Action Plan 2022-2032	Current	The Organics Strategy provides the framework and actions for improved management of organic materials across the supply and consumption chain. Regional Planning must be consistent with the Strategy aims and objectives and allow for the impact of the successful implementation in forward projections. The Action Plan provides specific actions for delivery across the avoidance, landfill diversion and recycling themes in the short, medium, and long term. The regional Plan will seek to contribute to these actions to support the Queensland Government in achieving the objectives of the strategy.
Queensland Plastic Pollution Reduction Plan	Current	Presents the strategy for how Queensland will be part of the solution to plastic pollution, including prioritised actions along every step in the supply chain. Implementation of the strategy has included the ban on sale or supply of single-use plastic items in 2021, with additional bans on other problematic plastics to commence soon. Solutions for improving the management of plastic wastes and moving towards a circular economy delivered under the regional Plan should align with the Plastic Pollution Reduction Plan.
Single-use plastic items ban	Current	Implemented on 10 March 2021, the legislation bans the sale or supply of straws, cutlery, unenclosed bowls and plates, stirrers and expanded polystyrene takeaway food containers and cups. This ban and future bans should be considered when forecasting future supply of waste containers such as compostable packaging.
Plastic bag ban	Current	The ban on the supply of single-use lightweight plastic shopping bags came into effect on 1 July 2018, forming part of broader measures to reduce single use plastic.
Containers for Change – container refund scheme	Current	The current container refund scheme facilitates a 10-cent refund for eligible drink containers at approved container refund points. The availability of recycled material collected through the scheme may be relevant to feedstock supply for certain types of secondary processing, for example, aluminium, plastics, and others. Recently announced consultation on the addition of wine and spirit bottles in late 2022.
Queensland E-Products Action Plan	In development	This plan seeks to address waste avoidance, reduction, reuse, repair, and recycling for electrical and electronic products, collectively known as e-products.
Queensland Textile Waste Action Plan	In development	This plan seeks to address problematic and hard to recycle textile wastes. It may present new pathways or avenues for support to improving recycling.
Landfill Disposal Bans	In development	The Queensland Government is currently undertaking analysis of the potential to implement bans on the disposal of certain types of waste to landfill.
End of waste framework	Current	Framework that allows waste to be used as a resource under certain conditions, including a range of waste types relevant to council operations.

2.1.3 Queensland's Landfill Levy

The Queensland Government introduced a landfill disposal levy in 2019 through amendments to the *Waste Reduction and Recycling Act* 2011. The levy is payable on all waste (including waste generated in another state or territory) disposed to a leviable waste disposal site within the levy zone or if it has been generated within the levy zone and disposed of to a landfill outside the levy zone in Queensland.[15] In the Wide Bay Burnett region, Bundaberg Regional Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council and South Burnett Regional Council were all included within the levy zone. The waste levy does not apply to waste generated in the Cherbourg Aboriginal Shire Council area.

In late 2021 changes to the approach were announced. From 1 July 2022, the levy zone has been divided into two areas:[16]

- the metro zone—comprising 12 south-east Queensland local government areas.
- the regional zone—made up of the remaining 27 local government areas in the current levy zone.

The two zones have different rates. These changes reflect the differences between South-East Queensland and regional areas in terms of waste volumes and opportunities for recycling and resource recovery. The non-levy zone has not changed and as such, there is no change for Cherbourg Aboriginal Shire Council.

From commencement in 2019, 105% of the levy collected on household waste (the MSW stream) disposed of to landfill was returned to levied councils via annual advanced payments to meet the Queensland Government commitment of no direct impact on households.[15] The changes announced in late 2021 also have an implication on councils within the Wide Bay Burnett Region, in particular for Bundaberg Regional Council and Fraser Coast Regional Council, as outlined in the table below.

Table 3 Announced changes to annual advanced payment proportions

Council	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Bundaberg Regional Council	105%	95%	85%	70%	60%	50%	40%	30%	20%
Cherbourg Aboriginal Shire Council	0%	0%	0%	0%	0%	0%	0%	0%	0%
Fraser Coast Regional Council	105%	95%	85%	70%	60%	50%	40%	30%	20%
Gympie Regional Council	105%	100%	100%	100%	100%	100%	100%	100%	100%
North Burnett Regional Council	105%	100%	100%	100%	100%	100%	100%	100%	100%
South Burnett Regional Council	105%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Queensland Government[16]

From 1 July 2023 Gympie Regional Council, North Burnett Regional Council, and South Burnett Regional Council will receive 100% of the annual advanced payment, a reduction from the 105% received up to this point. The annual advanced payments for Bundaberg Regional Council and Fraser Coast Regional Council are different to other councils in the region, with a progressive reduction in the proportion of annual advanced payment received commencing from FY23-24 and reducing to an annual advanced payment of 20% by FY30-31. Four years' worth of payments were made to Queensland Councils at the start of the FY22-23 as summarised in **Table 4** and **Figure 3** below.

[15] State of Queensland, 2022 About Queensland's waste levy | Environment, land and water | Queensland Government (www.qld.gov.au)
[16] State of Queensland, 2022 Waste levy changes from 1 July 2022 | Environment, land and water | Queensland Government (www.qld.gov.au)

Table 4 Regulated annual advance payments – FY22-23 to FY25-26

Council	2022-23	2023-24	2024-25	2025-26	Four-year total
Bundaberg Regional Council	$3,723,443	$3,428,137	$3,168,400	$2,720,303	$13,040,283
Cherbourg Aboriginal Shire Council	$ -	$ -	$ -	$ -	$ -
Fraser Coast Regional Council	$3,946,415	$3,581,532	$3,310,172	$2,842,025	$13,680,144
Gympie Regional Council	$1,742,893	$1,639,022	$1,693,055	$1,765,100	$6,840,070
North Burnett Regional Council	$404,232	$422,550	$436,481	$455,054	$1,718,317
South Burnett Regional Council	$1,420,778	$1,365,692	$1,410,715	$1,470,746	$5,667,931

Source: as per Waste Reduction and Recycling Regulation, Schedule 4A

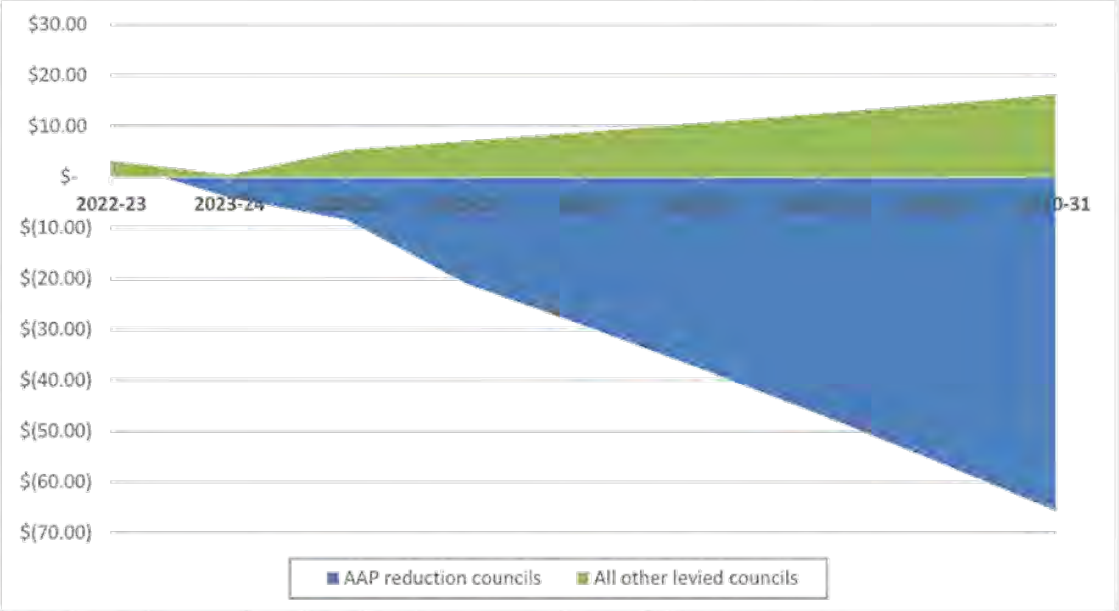
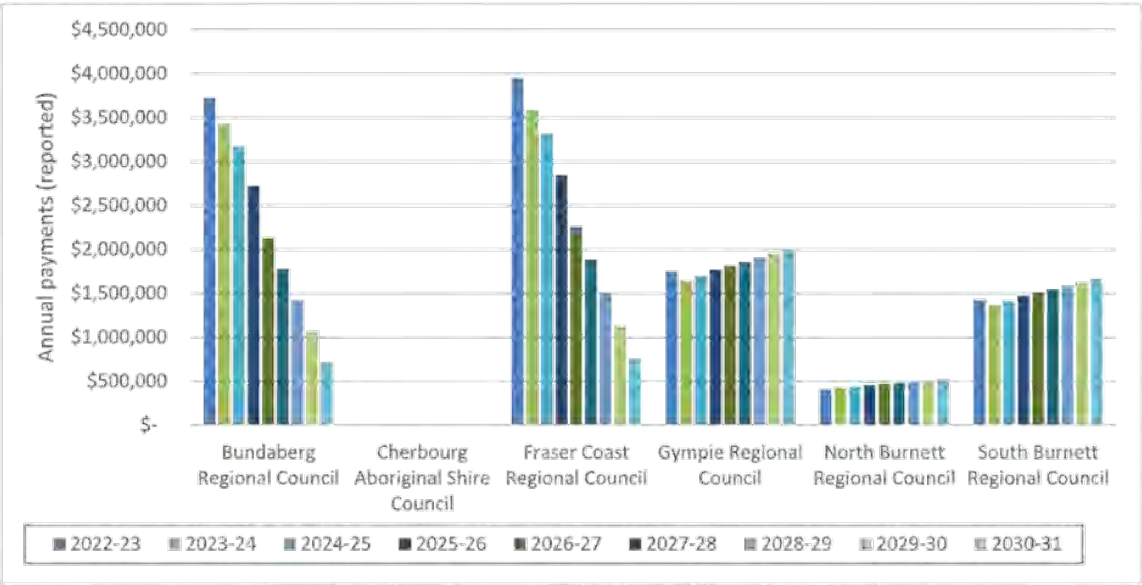


Figure 3 Impact of differential in annual advanced payment ($/tonne)

Beyond FY25-26 the regulated amounts of annual advanced payment have not been published; however, it is assumed they are based upon the same base year for calculating annual advanced payments through to FY30-31. Over this four-year period there may be changes to the amount of household waste that goes to landfill within some Councils. Based on current arisings, the regulated annual advanced payments have been extrapolated out based on the proposed changes to the annual advanced payments. Waste arisings are expected to be different to the base year, so there may be some variation across all councils.

For Bundaberg Regional Council over the period FY22-23 to FY30-31 it is estimated, based on forecasting to inform this Plan, that the cost of the landfill levy without any intervention would be $36 million. Over the same period Bundaberg Regional Council will receive an estimated $20.5 million in annual advanced payments, leaving a shortfall of $15.5 million over the 9-year period.

For Fraser Coast Regional Council over the period FY22-23 to FY30-31 the estimated cost of the landfill levy without any action is around $33 million. Over the same period Fraser Coast Regional Council will receive an estimated $21.5 million in annual advanced payments, leaving a shortfall of an estimated $20 million over 9 years. There may be some uncertainty beyond the 4-year reported annual advanced payments, including the ability for councils to receive higher payments to bridge the gap between forecast arisings and actuals. The estimated cost impact is shown on **Figure 4**.



Note: Bundaberg and Fraser extrapolated based upon FY22-23 at 105% estimated based on current data. Other Councils assumed to receive 100% over duration with annual advanced payment increasing by generalised CPI of 1.9%

Figure 4 Change in annual advanced payments – Wide Bay Burnett Councils

2.1.4 Queensland's Resource Recovery 10-year Roadmap and Action Plan

The Queensland Resource Recovery 10-year Roadmap and Action Plan was released in 2019 following the release of the WMRR Strategy. As a key action plan under the Strategy, the Roadmap and Action Plan intends to support industry growth and job creation in resource recovery industries over the 10-year plan period. The Roadmap and Action Plan targets the acceleration of project pipelines, market and supply chain development, updates specifically, where required, to the planning framework and supporting the advancement of new and emerging technologies.

Under the Roadmap and Action Plan funding has been provided to support the establishment of businesses and local government through the establishment of:

- The Resource Recovery Development Program (RRIDP) provided funding support to an additional $193.8 million of capital investment creating more than 360 jobs across Queensland and diverting 1.3 million tonnes of waste per annum from landfill. Within the region, funding was granted for:
    - Upgrade of the existing material recovery facility operated by Cleanaway Pty Ltd at Dundowran, Hervey Bay, within the Fraser Coast Regional Council area
    - The establishment of a construction and demolition waste processing centre by Horne Group Pty Ltd at Hervey Bay.

- To support a late-stage engineering report for Laminex looking at the potential for a cogeneration plant in Gympie.

- The Queensland Recycling Modernisation Fund (QRMF) – co funded $20 million from the Commonwealth Government and $20 million from the Queensland Government for investment to support sorting, processing, recycling, or manufacturing of waste and divert wastepaper and cardboard, plastic, tyres, or glass from landfill. This fund is now closed.
- The Regional and Remote Recycling Modernisation Fund (RRRMF) – provides grants of up to $500,000 for local governments, and their industry partners, to improve the viability of sorting, processing, recycling, or remanufacturing of waste in regional and remote Queensland. Funding is available for infrastructure projects that divert waste plastics, mixed and unsorted paper and cardboard, unprocessed glass, or whole used tyres from landfill in regional and remote areas of Queensland. This fund is now closed to new applications.
- Industry Partnership Program – this $350M program will invest in several priority industry sectors including resource recovery including financial and non-financial incentives or assistance packages. This program may be accessed to support implementation of this plan.
- The $1.1 billion Recycling and Jobs Fund announced late in 2021 seeks to deliver more opportunities for businesses and industry as resource recovery infrastructure is expanded and new markets for waste material are developed. A portion of this will be administered under the Roadmap and Action Plan.

2.1.5 Recycling Enterprise Precinct Development

Under Queensland's Resource Recovery 10-year Roadmap and Action Plan a key action was the development of enterprise recycling precincts. The Department of State Development, Local Government, Infrastructure and Planning (DSDLGIP) has undertaken a series of workshops during 2022 with the aim of engaging with local stakeholders, including local government and industry to identify opportunities and challenges, gain insight into how to progress and how the states approach to developing precincts for resource recovery and secondary processing can support local growth and existing initiatives. The expected outcomes of the workshops is the collation of feedback as well as the development of guidelines for precinct development and specific location strategies to be applied across Queensland.

A workshop was held in Bundaberg in August 2022[17]. During the workshop it was identified that:

- Wastes requiring most attention in the region were organic wastes including green wastes, sugar cane waste, timber waste, and food wastes. Other key wastes identified included agricultural plastics, mattresses, soft plastics, batteries, tyres, e-waste, cardboard, agricultural chemicals, and paint products.
- A precinct does not exist in the region. Transport infrastructure was identified as a critical element in addition to transport costs. The Port of Bundaberg State Development Area was identified as being able to support coastal shipping for end products which was supportable by the rail network.
- There was strong support for a hub-and-spoke approach to precinct development, with a larger precinct envisaged in one location with smaller "spokes" in other regional centres. Location close to existing facilities was considered desirable. There was also strong support biofuels and remanufacturing of agricultural plastics back into agricultural products or food grade plastics to be explored.

Two guiding documents have been released by the Queensland Government complementary to this Plan:

[17] E3 Advisory, 2022. Resource Recovery Precincts, Regional Forum Report, Bundaberg 3 August 2022

- Recycling Enterprise Precincts: A "How To" Guideline[18] – this document provides practical information to assist proponents seeking to establish a precinct including key actions, activities and matters to consider.
- Recycling Enterprise Precinct Location Strategy[19] – this document presents guidance on potential locations for the establishment of a network of Recycling Enterprise Precincts across Queensland to maximise locational opportunities for industry development and recovered materials-based activities.

2.1.6 Queensland's Organic Waste Strategy and Roadmap

Queensland's Organic Waste Strategy and Roadmap provides a series of actions and outcomes that are directly relevant to this Plan.

Table 5 Organic Waste Strategy and Roadmap targets relevant to this Plan

Ref	Title	Detail & relevance
A1	Halve the amount of food waste generated	Utilising existing programs provide materials to Queensland Councils with dedicated education officers to assist deliver messaging. Targeting a 10% reduction in household food waste in the residual waste bin by 2025.
A2	Understand food waste behaviours in Queensland	Design effective interventions for state-wide and targeted messaging.
A3	Commence education for future generations	Develop materials and deliver food waste education materials as part of sustainability curriculum to reach 80% of Queensland schools by 2030.
A11	Lead by example at Government events	Driving food waste avoidance through action at State and Local Government events.
D1	Review fit for purpose solutions	Local governments are required to conduct a business case to identify the best fit-for-purpose option to improve household organic waste management in their local government area, including consideration of Food organics, Vegetable Organics, Garden Organics or combined Food and Garden Organics systems; or to implement small scale solutions to process organics such as through community composting hubs or encouraging home-based approaches for organics processing (e.g., composting at home, bokashi bins, worm farms etc.,) Specific actions relevant to this plan including funding for additional council trials, this Plan is required to recommend improved organics management options by 30 June 2023, and 75% of councils within the levy zone have business cases for their solutions completed by 30 June 2023.
D2	Implement new household collection options which are consistent from the start	Based on D1 Local Governments are to implement solutions to improve household organic waste management in their LGA. The Queensland Government will provide support to better manage this material in a fit-for-purpose manner, including support for education and behaviour change, for consistency (bin lid colour harmonisation etc.,), to understand and enforce contamination levels, and incorporate sufficient data collection and auditing processes to monitor uptake and contamination levels. Performance measures include improved organics management services in place by 2026 in major regional council areas with 80% of households participating in services within 3 years of a service commencing, plus demonstration of an increase in the volume of organics captured and reprocessed over time.

[18] E3 Advisory, 2022. Recycling Enterprise Precincts, A "How To" Guideline
[19] E3 Advisory, 2022. Recycling Enterprise Precinct Location Strategy

Ref	Title	Detail & relevance
D3	Make the inputs clear	Develop, implement, and align household education and behaviour change tools in partnership with local government and industry to minimise contamination across all household kerbside bins, to maximise organic material being captured in organics bins and minimise contamination. Key metrics are that 65% of households in Queensland will have organics capture services by 2025, and 80% by 2030, with a 90% capture rate for Food and Garden Organics comprising 50% capture of Food Organics, 90% of garden organics and less than 1% contamination rate.
D6	Set a clear end goal	Queensland Government looking at the potential feasibility and options associated with undertaking landfill disposal bans for organic wastes, with a feasibility assessment to be completed by the end of 2022, with a view to progressive bans starting in South-East Queensland by around 2025. No information has been provided on this.

2.2 Regional collaboration

There is no formal collaboration in the region on waste and resource recovery issues, and no formal overarching local government collaboration structure. There is collaboration between councils on an informal basis. To support the co-development of this Plan Councils have agreed to collaborate. An expected outcome of the Plan is to provide a template for future regional collaboration on waste and resource recovery issues.

The WBB region RRWG has prepared several region-specific reports, feasibility studies and business cases which provide a high level of detail to support this plan. Involvement by Council decision makers is high, which gives legitimacy to the decisions made by each council in supporting the group, which in turn supports ownership of this plan. Several council specific documents are also available and utilised to inform this Plan.

Table 6 Regional strategy documents

Document	Status	Relevance to regional plan
Regional Strategy Documents		
Wide Bay Burnett Regional Organisation of Councils Waste Strategy 2015-2020	Released 2015 however ROC disbanded in 2021	• Seeks to minimise waste to landfill, maximise the potential of waste as a resource and explores innovative solutions in management, resource recovery and recycling of waste. • Provides short-, medium- and long-term actions and goals over the term of the five-year strategy. • Outlines population trends, waste data and projections, waste reduction and recycling goals and targets, and details strategic goals and targets.
Key documents for member Councils		
Bundaberg Regional Council Waste Management and Resource Recovery Strategy 2017-2025	Current	• The first waste management strategy developed for Bundaberg Regional Council • Details current facilities, services, and regional profile • Addresses waste avoidance, collection, treatment, resource recovery, final disposal, and remediation of site for post closure
Cherbourg Aboriginal Shire Council, Corporate Plan 2020-2025	Current	• Identifies waste management within the corporate plan, in particular maintenance of the existing waste management facility to an acceptable standard as an objective to develop and maintain a healthy living environment for the community and maintaining essential infrastructure for the community.

Document	Status	Relevance to regional plan
Fraser Coast Waste Strategy 2019-2029	Current	• Sets a clear path for the management of solid waste in the Fraser Coast region towards 2029. • Builds on the success of the Waste Management & Resource Recovery Strategy 2013- 2020 • Focus on resource leadership to deliver the greatest benefits to the local community in terms of resource recovery, environmental amenity, and economic development.
Gympie Regional Council, Regional Waste Management Strategy 2013-2020	Current (on GRC website)	• Prepared in 2013 so pre-landfill levy and current Queensland WMRR Strategy. Sets objectives, strategy development including levels of service required, and details around collection services for MSW, C&I and C&D within the region. • Presents a strategy implementation plan. • Presents records of consultation.
North Burnett Regional Council Waste Reduction and Recycling Plan 2021-2026	Current	• Sets out waste reduction and recycling target and recommends actions to improve waste reduction and recycling. • Details current and proposed waste infrastructure • Discusses the performance of local government in terms of management and monitoring. • Promotes continuous improvement
South Burnett Regional Council Waste Management Strategy 2015-2022	Current	• Provides overarching vision, objectives, and strategy framework for regional strategy. • Presents goals, level of service, waste reduction and resource recovery and infrastructure/network planning • Sets out measures for implementation of the waste hierarchy, strategy implementation and consultation undertaken.

At an individual council level all councils have undertaken an element of development of plans, typically around remaining capacity of existing facilities, potential options, and feasibility studies. In some cases, these have been extended into forward plans. The findings of these reports have been incorporated into the analysis undertaken to develop this Plan.

2.3 Existing services

Waste services provided by Wide Bay Burnett Councils are variable (see **Table 7**). All Councils provide a weekly residual or red lidded bin collection available to most households. Bundaberg, Fraser Coast, Gympie, and South Burnett offer a fortnightly commingled recycling bin collection, and only Cherbourg Aboriginal currently offers a kerbside weekly recycling bin collection. Self-haul to transfer station options are available across all Councils except Cherbourg Aboriginal Shire Council, with weekly bulky waste collections operated by Cherbourg Aboriginal Shire Council.

Table 7 Existing Services by Council

Council	Residual Waste	Recycling	Garden Organics	Bulky Waste
Bundaberg Regional Council	Weekly, 240L	Fortnightly, 240L	Self-Haul only	No kerbside service, transfer station drop-off
Cherbourg Aboriginal Shire Council	Weekly, 240L	Weekly, 240L	None	Weekly, 240L
Fraser Coast Regional Council	Weekly, 240L	Fortnightly, 240L	Self-Haul only	No kerbside service, transfer station drop-off

Council	Residual Waste	Recycling	Garden Organics	Bulky Waste
Gympie Regional Council	Weekly, 240L	Fortnightly, 240L	Self-Haul only	No kerbside service, transfer station drop-off
North Burnett Regional Council	Weekly, 240L	Self-haul only	Self-Haul only	No kerbside service, transfer station drop-off
South Burnett Regional Council	Weekly, 240L	Fortnightly, 240L	Self-Haul only	No kerbside service, transfer station drop-off

In addition to the Container Refund Scheme eligible materials captured through kerbside recycling, each LGA has at least container refund point to allow residents to participate in the state's container refund scheme, Containers for Change, as shown in **Table 8**.

Table 8 Container refund points

Local Government Area	Number of Container Refund Points	Commentary
Bundaberg Regional Council	7	Located at Childers (1), Qunaba (1), Bundaberg (3), Moore Park Beach (1), Burnett Heads (1)
Cherbourg Aboriginal Shire Council	1	1 Facility located in Cherbourg. Cherbourg Aboriginal Shire Council operate 4 further return points in South Burnett.
Fraser Coast Regional Council	13	Glenwood (1), Tiaro (1), Maryborough (2), Howard (1), Hervey Bay (8)
Gympie Regional Council	7	Gympie (3), Tin Can Bay (2), Rainbow Beach (1), Kilkivan (1)
North Burnett Regional Council	5	Biggenden (1), Gayndah (1), Mundubbera (1), Eidsvold (1), Mulgildie (1)
South Burnett Regional Council	4	Kingaroy (1), Nanango (1), Yarraman (1), Blackbutt (1)

2.4 Current performance

2.4.1 Overall waste managed

The total waste received at sites managed by or under contract to Wide Bay Burnett Councils in the 2020-2021 financial years was 461,269 tonnes. This includes kerbside MSW and self-hauled MSW, C&I and C&D waste streams as reported in the Queensland Waste Data Survey (QWDS). A further 46,300 tonnes of waste has been identified in the region as managed by the private sector. A breakdown of the regional waste by stream, and service type, residual, recycling, and organics, is shown in **Figure 5.**

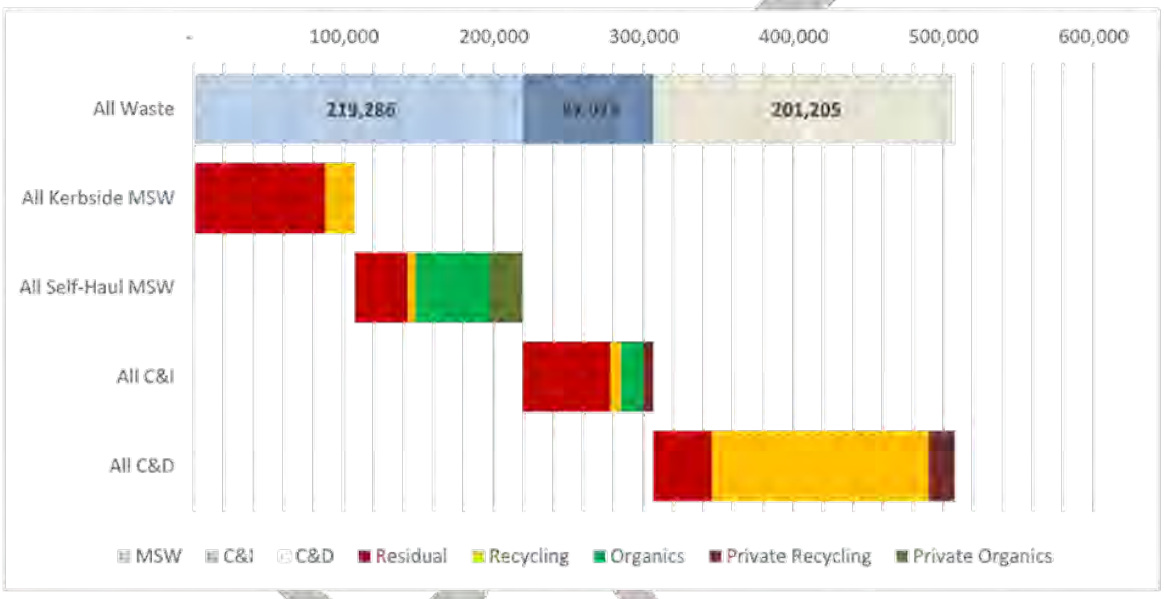


Figure 5 Regional waste summary by stream (tonnes, 2020/21)

A further 2,458 tonnes of other Council waste was recorded, including litter, street sweepings and public place waste. During the same period, no disaster waste was recorded, noting this can be variable depending on the nature of disasters. Biosolids totalled 3,822 tonnes reported as being disposed of to landfill during the period, however it is noted this data does not include biosolids deployed under the end of waste code under land application as the Queensland Government does not collect this data.

Table 9 provides a breakdown of the contribution of each council to the total regional waste quantities. Waste generated is dominated by the larger councils of Bundaberg Regional Council and Fraser Coast Regional Council, with smaller contributions from the others. At a regional scale the contribution of Cherbourg Aboriginal Shire Council is approximately 0.1%.

Table 9 Distribution of waste across the Wide Bay Burnett region

Council	Percentage of Regional Waste by Tonnes
Bundaberg Regional Council	42%
Cherbourg Aboriginal Shire Council	<1%
Fraser Coast Regional Council	36%
Gympie Regional Council	9%
North Burnett Regional Council	4%
South Burnett Regional Council	9%

2.4.2 Breakdown of waste arisings in Wide Bay Burnett

Figure 6 is a waste flow diagram showing the fates by waste stream and the material types managed by Councils in the region. The materials represent what has been reported through QWDS, additional private sector information provided, and with a reference composition applied to kerbside waste and self-haul waste.

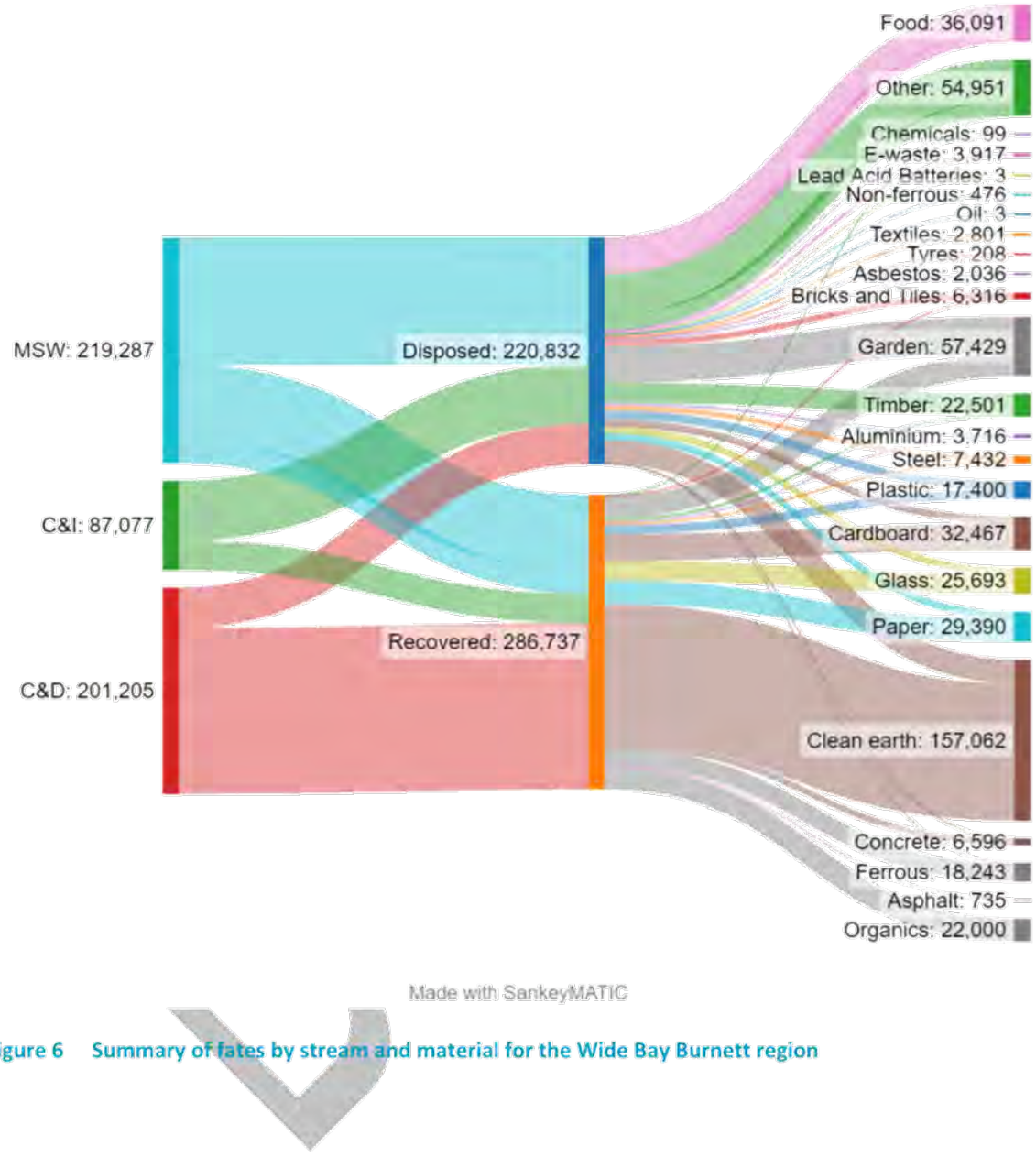


Figure 6 Summary of fates by stream and material for the Wide Bay Burnett region

A breakdown of all waste materials collected across the region is provided in **Figure 7** and shows the relative quantities that are recovered or disposed.

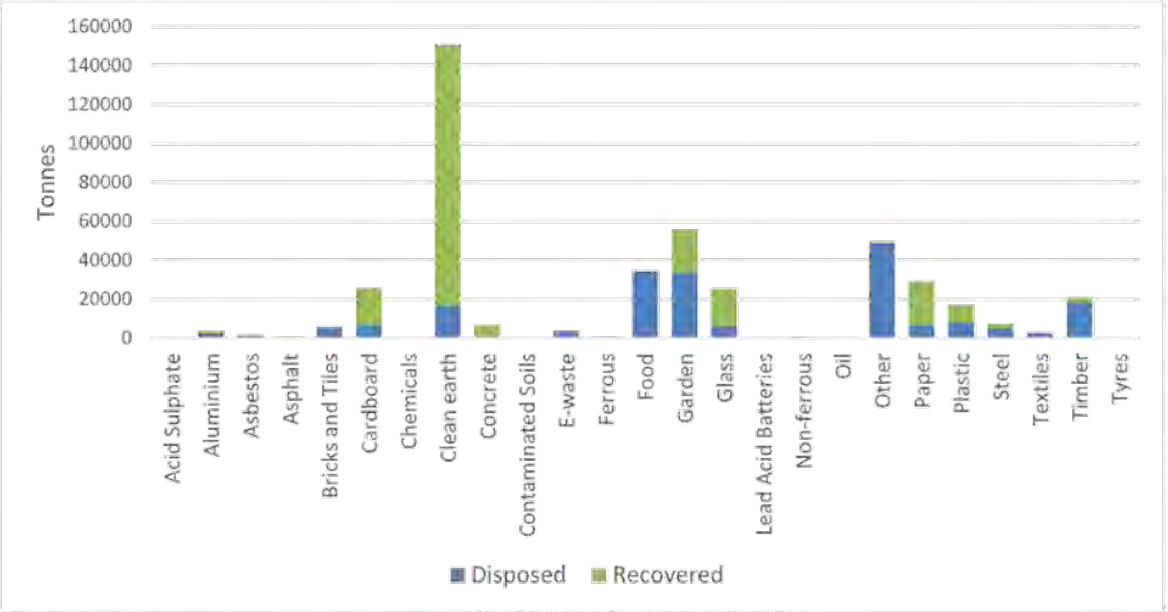


Figure 7 Waste materials by fate for the Wide Bay Burnett Region

The resource recovery potential of different materials can be observed in **Figure 7** with obvious opportunities for food and garden organic waste, plastic, timber and bricks and tiles, plus potential opportunities for e-waste and textiles that may currently go to landfill but for which the Queensland Government is currently developing Action Plans for.

2.4.3 Current resource recovery performance

Table 10 and **Figure 8** detail the Wide Bay Burnett regions' performance in comparison to the Queensland average and targets. The region has a current recovery rate of 52% across all streams, compared to a current state average of 52% and 2025 state target of 65%. The MSW and C&D streams are consistent with the state average, whilst the C&I stream is performing poorly. Across all streams except C&D, the 2025 and 2030 targets are however challenging without intervention,

Table 10 Wide Bay Burnett regional waste diversion target comparison

Waste Type	Diversion from landfill targets			
	WBB (FY20/21)	State average (current)	State target 2025	State target 2030
Combined waste (all categories)	52%	52%	65%	80%
MSW	38%	27%	55%	70%
C&I	29%	50%	65%	80%
C&D	83%	78%	75%	85%

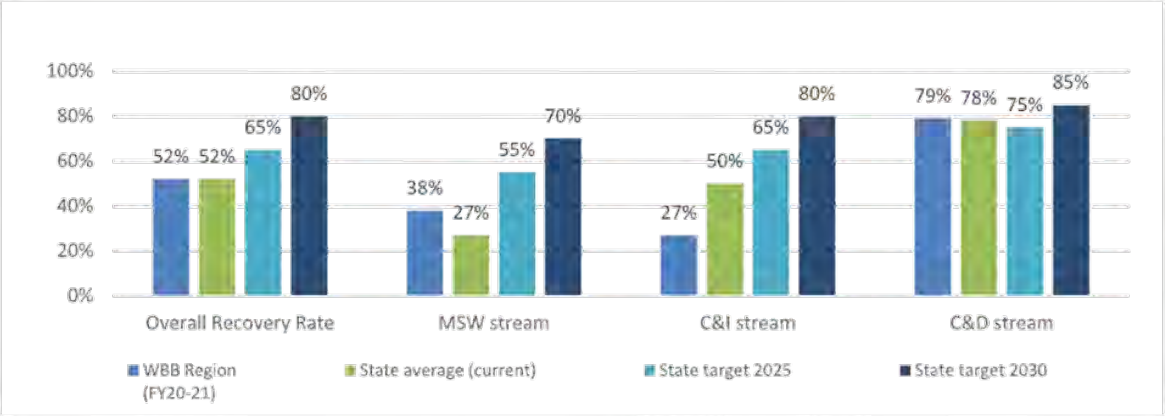


Figure 8 Current performance compared to state and 2025/2030 targets

2.5 Existing infrastructure

To accommodate all other potential destinations, waste can be broken down by materials. **Figure 9** shows the range of separate material streams reported, or where compositional data is known, and their destination. Infrastructure locations are shown on **Figure 10**.

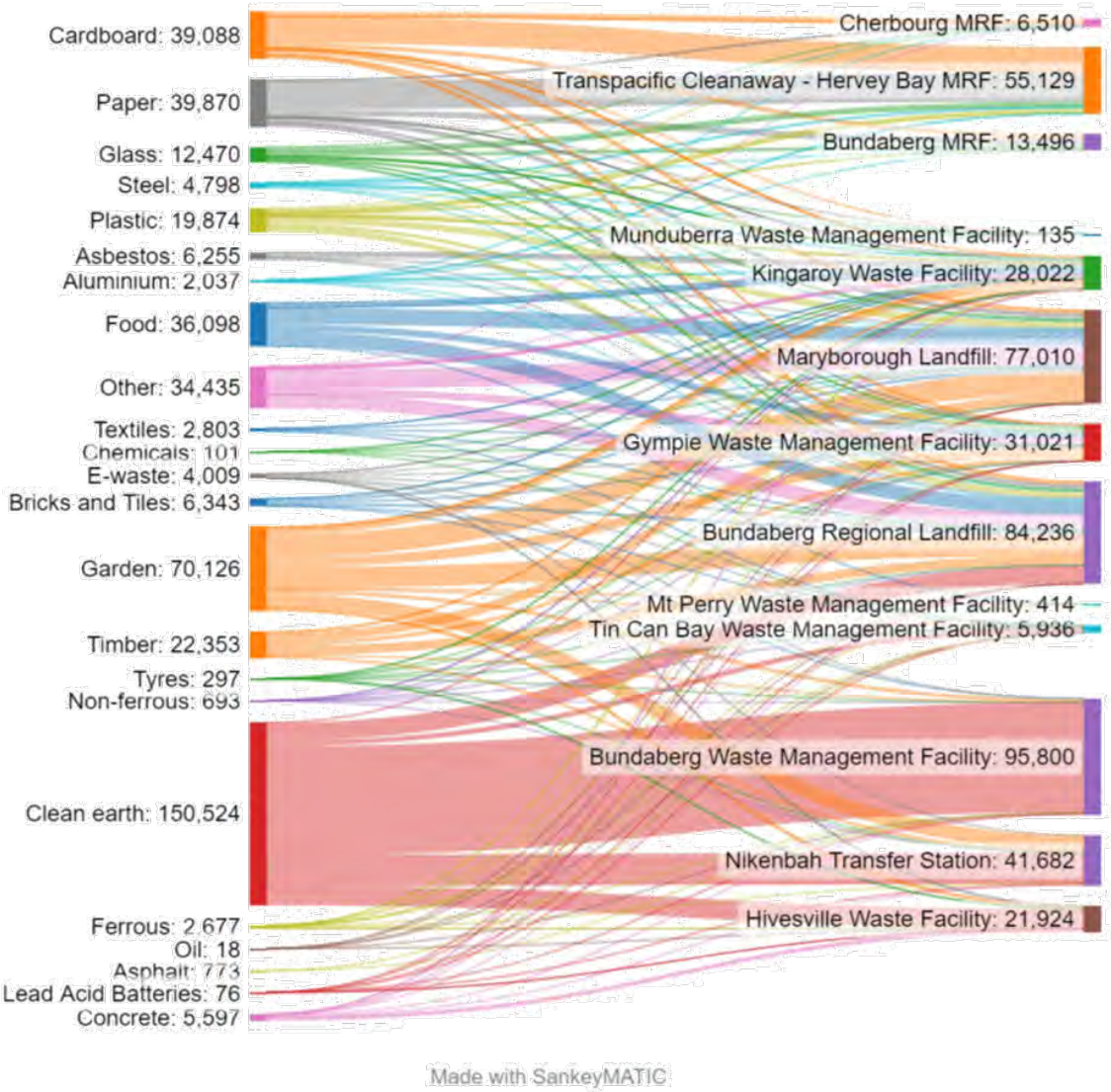


Figure 9 Current waste flow mapping by materials and destination for Wide Bay Burnett[20]

[20] Note end fate does not necessarily reflect final management point, however, is as reported in the QWDS data

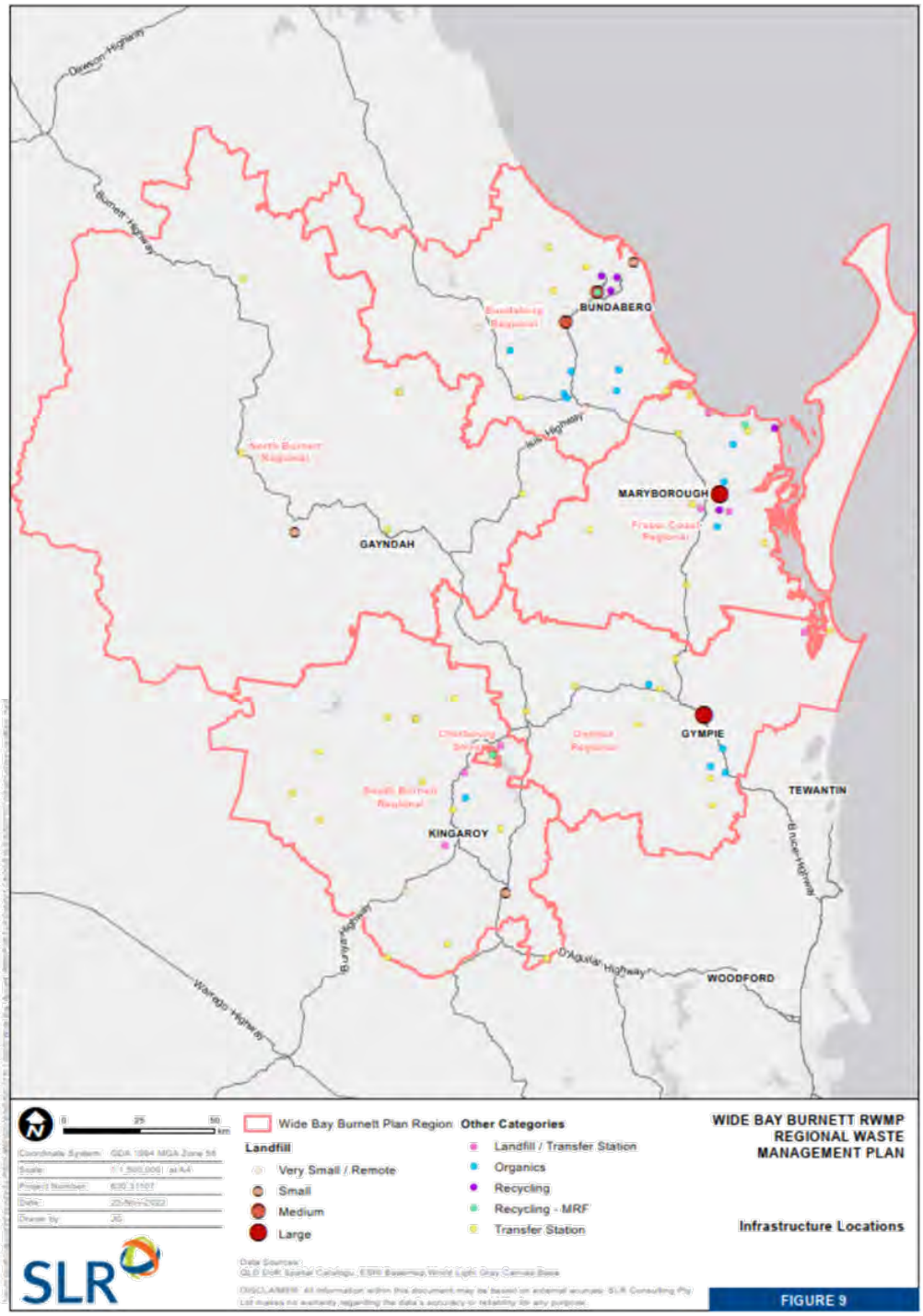


Figure 10 Regional Infrastructure Stocks

2.6 Forecast waste arisings

2.6.1 Regional waste growth projection

Figure 11 provides a 30-year summary of regional waste projections by waste stream, which indicates total waste is expected to increase to 545,000 tonnes in FY30-31, 582,000 tonnes in FY40-41 and 618,000 tonnes in FY50-51 without intervention.

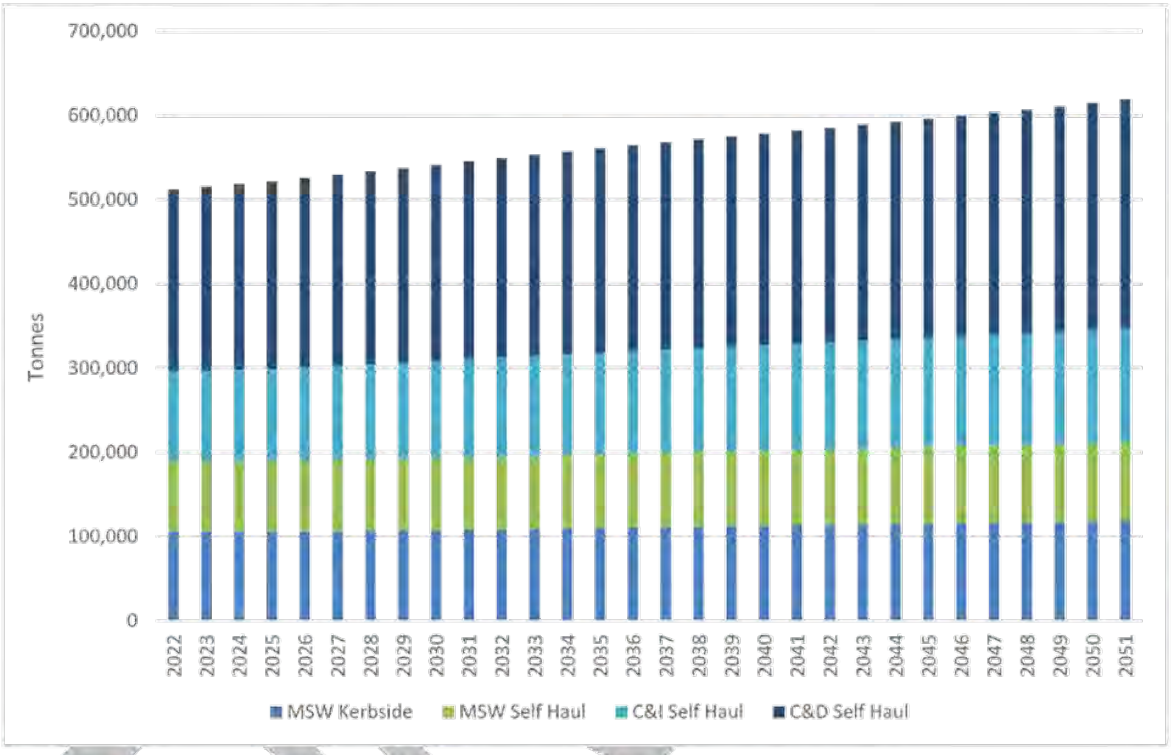


Figure 11 30-year waste projections for the Wide Bay Burnett region by waste stream

3 Key issues and Opportunities

3.1 Landfill capacity

Some landfills in the region are approaching capacity, which will prohibit further landfilling, and require further diverse investment to enable appropriate management of residual waste

Landfills are an essential component of Australia's waste management system. In the Wide Bay Burnett region, landfills receive approximately 45.6% of headline waste (based on FY20-21 reporting year) as reported by the Queensland Government and provide a final disposal solution for waste that cannot be recovered.[21] The WBB region contains nineteen identified active putrescible landfills that are all council-owned, of which fourteen are considered to be small or very small rural facilities.[22] The resource recovery infrastructure in the region includes eight composting, four mulching, three MRFs, two source separated recycling, and two metals recycling facilities. There are no existing C&D recycling facilities identified in the region. Each LGA has a principal landfill, with landfills in the region generally developed in existing holes, usually formed by quarrying or mining operations and as such, landfill lifespans are inherently finite.[23]

Landfill capacity is primarily defined in terms of remaining airspace, the volume of void which is available to fill with waste.[21] A landfill capacity assessment undertaken to support this Plan has identified that there is approximately 6 million tonnes of approved putrescible landfill capacity in the WBB region, with minimal potential for expansion of capacity. Gympie Regional Council has a need to develop a landfill solution with constructed capacity expected to expire early in 2024, noting additional capacity can be constructed at the existing landfill to give capacity through to approximately 2028. There are currently no inert landfills identified in the region. The landfill capacities and expected exhaustion years are presented in **Table 10.**

Table 11 Wide Bay Burnett Region landfill capacity

LGA	Landfill	Annual Disposal (2021-22 tonnes)	Current approved capacity (estimated tonnes)	Expected exhaustion of capacity
Bundaberg Regional Council	Bundaberg Regional Waste Management Facility	84,236	1,700,000	35 Years
Cherbourg Aboriginal Shire Council	Cherbourg Rubbish Tip	650	9,845	2030
Fraser Coast Regional Council	Maryborough Landfill	77,709	3,767,000	2052
Gympie Regional Council	Gympie Waste Management Facility	31,836	180,000	2028
North Burnett Regional Council	Biggenden Waste Management Facility	0	8,177	2025
North Burnett Regional Council	Eidsvold Waste Management Facility	0	518	2025
North Burnett Regional Council	Gayndah Waste Management Facility	0	8,221	2030

[21] Arcadis for Department of Environment and Science (2019). Queensland Waste and Resource Recovery Infrastructure Report. Accessed at https://www.qld.gov.au/__data/assets/pdf_file/0034/199249/qld-waste-resource-recovery-infrastructure-report.pdf
[22] Very small = < 2,000 tonnes to landfill p.a. Small = 2,000 to 10,000 tonnes to landfill p.a.
[23] Hyder for Department of the Environment, Water, Heritage, and the Arts (2009). Australian landfill capacities into the future. Accessed at https://www.dcceew.gov.au/sites/default/files/documents/landfill-capacities.pdf

LGA	Landfill	Annual disposal 20-21 (tonnes)	Current approved capacity (estimated tonnes)	Expected cessation of capacity
North Burnett Regional Council	Monto Waste Management Facility	0	14,861	2050
North Burnett Regional Council	Mt Perry Waste Management Facility	*0*	*0*	*2020*
North Burnett Regional Council	Munduberra Waste Management Facility	0	28,066	2200
South Burnett Regional Council	Kingaroy Waste Facility	35,091	158,543	2029
South Burnett Regional Council	Kumbia Waste Facility	0	TBC	2051
South Burnett Regional Council	Murgon Waste Facility	0	10,920	2031
South Burnett Regional Council	Nanango Waste Facility	0	39,338	2031
South Burnett Regional Council	Wondai Waste Facility	0	19,087	2030

The population of the Wide Bay Burnett Region is expected to grow by 18% between 2016 and 2041[9] with growth forecast in the Bundaberg (19%) and Fraser Coast (21%) regions, moderate growth for Gympie (15%), South Burnett (12%), Cherbourg (6%) and North Burnett Regional Council remaining static. Overall population is expected to grow by 54,000 people by 2024. Population growth is typically linked to growth in waste arisings, however, evidence in Queensland suggests that per capita waste generation is falling, however in the Wide Bay Burnett region marginal growth of waste per capita has been experienced. Other factors such as economic activity, house building, or other construction can also influence growth in waste. As waste generation grows, there is an ongoing need for effective, fit-for-purpose waste avoidance and resource recovery pathways and solutions to avoid the need for expanding landfills or to extend the lifetime. Major projects, such as new hydrogen, renewables, highways, or mining in the region will also increase population and create additional waste volumes during construction, and in some cases wastes which are challenging to manage.

Whilst there is significant landfill capacity at a regional scale, Bundaberg Regional Council and Fraser Coast Regional Council have the added constraint of the increasing cost of landfill disposal. At present there are no commercial scale energy recovery facilities in operation or planned within the region that could be used as a substitute for landfill. Outside of the Wide Bay Burnett Region, there may be opportunities to send some waste that would otherwise go to landfill to be converted into refuse derived fuel in South-East Queensland (e.g., at the in-construction ResourceCo facility in Brisbane) or as a coal substitute in the Cement Kiln at Gladstone.

3.2 Scale for processing and remanufacturing

Individual councils do not have a sufficient scale for processing and remanufacturing recyclable materials or residual waste (given the cost of transport and geographic size of councils), limiting the ability to achieve resource recovery at a commercial scale

Resource recovery is the process of creating value from waste materials, including by reusing, reprocessing, and re-manufacturing discarded materials for secondary purposes such as manufacturing or compost, or generating energy from waste. It excludes any processes that provide no value from waste, such as incineration alone. Resource recovery delays the need to use virgin materials in manufacturing processes that would eventually become waste, as quality recovered, or reprocessed materials can be used as a substitute.[24]

While resource recovery is established in metropolitan Queensland, barriers including scale, transportation, distance, and staff retention reduce the ability to implement commercially viable solutions in regional areas. Following the release of the *National Waste Policy* in 2010, the Australian Government established the Regional and Remote Working Group to better understand the challenges faced by dispersed communities. The working group indicated that the primary barriers to resource recovery for regional and remote areas were poor economies of scale, distances and road conditions between regional centres and limited waste collection services.[25] These barriers are prevalent for Wide Bay Burnett Councils, although relative proximity to South-East Queensland and potential new processing facilities may present new opportunities in the future.

The existing resource recovery facilities in the region include three separate small Materials Recycling Facilities (MRF) which includes the Council owned and contractor managed Bundaberg MRF, the Cleanaway owned and managed Fraser Coast MRF in Hervey Bay, servicing the Fraser Coast and Gympie Regional Councils, and the Council owned and managed Cherbourg MRF, servicing the Cherbourg, Gympie, Fraser Coast, and North and South Burnett regions. The MRFs process aluminium, steel, mixed paper, cardboard, HPDE, PET and mixed plastics for distribution to offtake markets locally and further afield.[26] Fraser Coast Regional Council will shortly have a new MRF in Maryborough.

Cost and scale are the key barriers to waste collection and recovery in the region. Most LGAs provide fortnightly recycling with four councils, Bundaberg, Cherbourg, Fraser Coast, Gympie, and South Burnett offering a conventional two bin service of waste and recycling.[21] All councils provide residents and local businesses with transfer facilities. Under current economic and policy conditions disposal of waste to landfill will remain the most viable solution unless a suitable and commercial alternative is available.

3.3 Insufficient end-markets

There are insufficient local end markets and demand for secondary raw materials, except FOGO/GO, where there is insufficient supply in the region, limiting the ability to achieve commercial rates of return.

The circular economy in Queensland, and Australia more broadly, is still developing. End markets for secondary raw materials are limited, however, national and state policies are prioritising the use of recycled materials in government projects. Generally, end markets are proximate to reprocessing and remanufacturing facilities to enable efficient and commercially viable outcomes.

[24] Queensland Government (2019). Queensland Resource Recovery Industries 10-Year Roadmap and Action Plan, https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0014/17204/resource-recovery-roadmap.pdf
[25] National Waste Policy Regional and Remote Australia Working Group. Solutions for waste management in regional and remote Australia
[26] Queensland Government. (2019). Cleanaway on track to achieve a more sustainable future for the Fraser Coast. Accessed at https://www.statedevelopment.qld.gov.au/news/cleanaway-on-track-to-achieve-a-more-sustainable-future-for-the-fraser-coast

Generally, private organisations are responsible for resource recovery processes and therefore investment attraction is critical to developing sustainable circular economies. Visy is one of Australia's leading resource recovery companies and in 2022, announced a $700 million investment in Queensland recycling and re-manufacturing. Included in the commitment is $500 million for a new glass food and beverage container recycling and manufacturing facility in Yatala, SEQ, a new $150 million corrugated box factory at Hemmant, SEQ, and $48 million towards major upgrades to the MRF on Gibson Island, SEQ.[27] Visy's product range covers food and beverage, commercial and industrial, retail and online and moving and storage, for which its major markets are located proximately in SEQ.

With local end markets concentrated in SEQ, the challenge remains for regional areas to achieve commercially viable local reprocessing and remanufacturing. All kerbside collected recyclable material is processed locally at one of the three MRFs, with the outputs transported out of region to SEQ end markets or exported which is assumed to increase prices and limit value for money outcomes. Investment in the development of end markets, such as manufacturing industries, in Wide Bay Burnett would be required to change this approach, and to support resource recovery facilities in the region and drive increased use of local recycled materials.

While regional areas currently struggle to compete with metropolitan areas, there is increasing support from governments at all levels to shift business to the regions to drive job growth and economic activity. In June 2022, the Queensland Government committed an additional $10 million to continue the *Manufacturing Hub Grants Program* for a further two years. Since its inception in 2017, the program has supported 104 advanced manufacturing projects across the state with 38 per cent delivered in regional Queensland.[28] Regional areas are attractive locations for large operations due to there being more space and fewer operation limitations such as transport and noise restrictions. Positioning Wide Bay Burnett as an attractive location for such activities would assist in creating end markets for recovered resources. There is a significant opportunity for the region as it aims to deliver increased regional wealth, as set out in the Wide Bay Burnett Economic Development Strategy 2019-2024,[29] with the strategy providing a strategic roadmap for the region whilst the Wide Bay Burnett Regional Plan (2011) is being reviewed to ensure it best reflects the Queensland Government's strategic direction for managing population growth and regional development.[30] Furthermore, attracting industry and increasing regional development will create additional end markets for recycled material making resource recovery processes more viable.

Despite these challenges, progress is being made in some regional areas through support from the Resource Recovery Industry Development Program. Initiatives include the development of a new MRF in Maryborough to increase the recovery of recyclables from kerbside collection, the establishment of a C&D waste processing facility in Hervey Bay to increase recovery rates, and a feasibility study to inform a final investment decision for an energy cogeneration plant in Gympie which will support operations of the Laminex Gympie (Toolara) plant, which processes medium density fibreboards.[31] There are a number of other established C&D and concrete reprocessers, and metal recyclers in the region although data is limited for volumes.

[27] Visy. (2022). Our $700 million investment in Queensland recycling and re-manufacturing. Accessed at https://www.visy.com.au/newsroom/2022/4/28/queensland-investments
[28] Queensland Government. (2022) Made in Queensland. https://www.rdmw.qld.gov.au/manufacturing/manufacturing-assistance-programs/made-in-queensland
[29] Wide Bay Burnett Regional Organisation of Councils (2019). Economic Strategy 2019-2024. Accessed at https://wbbroc.org.au/wp-content/uploads/2019/09/WBBROC-Economic-Strategy-2019-2024-Web-version.pdf
[30] Queensland Government (2022). Planning – Wide Bay Burnett regional plan. Accessed at https://planning.statedevelopment.qld.gov.au/planning-framework/plan-making/regional-planning/wide-bay-burnett-regional-plan#:~:text=The%20Draft%20Wide%20Bay%20Burnett%20Regional%20Plan%202022%20assists%20local,affordable%20and%20diverse%20housing%20choices.
[31] Queensland Government (2022). Resource recovery, Industry Development Program. Accessed at https://www.statedevelopment.qld.gov.au/industry/priority-industries/resource-recovery/industry-development-program

Despite a lack of end markets for reprocessed recycled materials, there are several composters in the region, such as Green Solutions Wide Bay who provide residents with free green waste drop-off for recovery. They operate an open windrow composting facility to process green waste where they screen the materials, ground, and form the materials in to windrows which are pasteurised and cured before being processed as a final product. NuGrow – Waste and Recycling operate the Bundaberg Composting and Recycling Facility which offers services for liquid, solid, and green waste, including garden organics from Fraser Coast Regional Council. This site has the potential to receive food organics in the future pending approval conditions and technology requirements. The compost products created both composting facilities are expected to comply with the Australian Standard for Soil Conditioners and Mulches AS4454.

Oreco Group manufacture high quality garden and animal care products through various processes using repurposed waste materials and organics sourced from their own products and from farms within the region. Operations of large-scale composters in the region would indicate a significant demand for garden waste and compost from within the region, most likely from agricultural producers who use the compost on their crops and farms.

3.4 Community understanding and behaviours

A lack of community understanding and concern around the increasing cost and environmental impacts of waste management and absence of incentives or disincentives for households to improve behaviours is contributing to inefficient waste management practices

There is a clear need and ambition to improve the resource recovery rate across Wide Bay Burnett to reduce environmental impact, optimise the life of the landfills, and manage cost pressures. However, much of the community do not understand the cost of managing their waste, or challenges faced by Councils and the value of resource recovery. There is a need for investment in long term community and industry education to improve resource recovery and add value to recyclables.

Contamination rates from audits undertaken by Councils range across the region from 16.3-18%.[32] The general community is not aware of the environmental problems caused by waste generation and find it difficult to connect individual actions to address those problems. Most people do not know where their waste goes, whether it is recyclable or if it can be recovered. Many people in the community are not sure what happens to their waste, or whether their actions make a difference. The lack of understanding across the region has led to high contamination rates in kerbside bins and low resource recovery rates, as potentially recyclable items are disposed rather than recovered. This exacerbates existing challenges regarding scale for reprocessing and remanufacturing in regional locations.

Illegal dumping is also a concern across the Wide Bay Burnett region, where low population density and distance from waste infrastructure leads to illegal disposal and dumping of large waste volumes in remote areas. Littered and illegally dumped wastes are a substantial source of environmental contamination. Waste in the environment can cause animal entanglement, injury and death, and the economic costs of litter and illegal dumping are nearly always borne by local councils.[33] Prevention of littering and dumping reduces or avoids these costs, demonstrating the importance of investment in litter and dumping prevention, targeted surveillance, and enforcement at identified illegal dumping hotspots, and efforts to modify behaviour.

[32] Combination of council provided information and that reported in QWDS.
[33] Queensland Government: Department of Environment and Science (2021). Keeping Queensland Clean: the litter and illegal dumping plan. Accessed at https://www.qld.gov.au/__data/assets/pdf_file/0024/176262/keeping-qld-clean-lid-plan.pdf

Better messaging, such as emphasising how waste can be transformed into new objects, may make a difference. However, information alone cannot always drive sustainable behaviours. The community must feel motivated, and the best motivations may be a combination of environmental benefits with personal incentives, such as economic rewards, increased status, or social connections.[34]

In the first instance, initiatives that encourage waste avoidance and product reuse should be prioritised to reduce end-of-life volumes. Waste education should be integrated into specific actions areas in each LGA and should be supported by regional campaigns such as consistent messaging across the region and shared resources and messages.

While education is valuable, behaviour change is often reliant on the choices available to the community. The provision of additional residential bin services, such as co-mingled recycling and FOGO, provides the community with a convenient alternative to standard disposal in the residual waste bin. While these services may be cost prohibitive to some Councils with low population density, resource recovery infrastructure such as MRFs and transfers stations may be feasible to further recover materials from the MSW stream.

3.5 An opportunity for local economic or community benefits

There is an opportunity to develop and support new and innovative resource recovery industries as well as create regional and local economic and community benefits through collaborative waste management planning between Wide Bay Burnett councils and the broader region

The Wide Bay Burnett region has a varied economic base and benefits from a diverse natural environment and range of industries, liveable cities, and its strategic position to provide goods and services to domestic and international markets. The region has access to these markets through the Port of Bundaberg, multiple intraregional highways, and numerous regional and local airports. The waste management and resource recovery sector is already an important contributor to the economy, however, there is further potential to grow the sector by improving recovery of resources and investing in the resource recovery industry.

The WBB Economic Strategy outlines a roadmap for WBB to deliver increased regional wealth to the region, and act as an enabler to facilitate businesses, the government, and stakeholders to grow the region's economy. For the waste management and resource recovery sector, this includes action relevant to this Plan such as planning and partnerships, circular economy development and regional infrastructure.

A focus on driving these outcomes through further industry growth presents opportunities for the development of downstream waste industries in the region. Economic value and jobs for Wide Bay Burnett residents can be created through the development of resource recovery industries, however, capacity for jobs requires scale of recovered waste. As identified in previous sections, this is a barrier at an individual council level in the Wide Bay Burnett region.

A key pathway to achieving economic growth in the Wide Bay Burnett region will be increased collaboration and knowledge sharing between Councils. Increased collaboration across policy planning, procurement and delivery of infrastructure will be necessary to respond to the State and national push towards a circular economy while ensuring solutions are right-sized and cognizant of regional economic drivers and community needs. This increased focus on collaborative planning can also provide opportunities to articulate and plan for challenges facing the region now and into the future.

[34] The Conversation (2019). How to boost recycling: Reward consumers with discounts, deals and social connections. Accessed at https://theconversation.com/how-to-boost-recycling-reward-consumers-with-discounts-deals-and-social-connections-124389

A key benefit of investment in the waste and resource recovery industry in the Wide Bay Burnett region is the opportunity to increase both skilled and unskilled employment. There is significant potential for economic growth in the waste management and resource recovery sector in Queensland. For every 10,000 tonnes of waste that goes to landfill, it is estimated that fewer than three jobs are supported, but where that waste is reused or recycled, it is estimated that there are more than nine jobs created. The higher job rate for recycling is due to the higher number of activities associated with the recycling process, and in particular the sorting, transfer, and transformation of materials into new products, and the labour-intensive nature of some of these processes compared with landfill-related employment.

3.6 Meeting state and Commonwealth waste objectives and targets for waste management

The objectives and targets in the Queensland Waste Management and Resource Recovery Strategy[7] and National Waste Policy Action Plan[36] cannot be met with existing infrastructure, initiatives, funding, resourcing, and supporting policy in Wide Bay Burnett

Recognising that a shift to a circular economy requires a national approach, the *National Waste Policy*[35] was updated in 2018 by the Federal, State and Territory governments. In 2019, the *National Waste Policy Action Plan*[36] was delivered, outlining several strategic priorities as a framework and guide to implement the National Waste Policy.

Details the Wide Bay Burnett regions' performance in comparison to the Queensland average and targets was presented in **Table 10**. Overall, the region is performing slightly above the current state average, with C&D recovery reported as the highest performer achieving the 2025 target.

The issue with targets is not that the waste diversion (or reduction, or recycling) targets cannot be met, the critical issue is that the cost of making the transition towards zero waste to landfill, and greater recycling is not necessarily well understood. Furthermore, where change is required from an existing system, the question of who pays is fundamental, although adopting the polluter pay principals, ultimately the cost of these changes is borne by the consumer or ratepayer, who is typically the same. The introduction of the levy in 2019 provided a safeguard measure to protect the cost to households from implementation of the levy. Whilst this is now being reduced for some Councils (Bundaberg Regional Council, Fraser Coast Regional Council), this now becomes a cost that Council must recover, although potentially supported by funding from the State or Commonwealth Government, or via services provided by private sector operators, however the question returns to how this cost is covered and the environmental and economic benefit from achieving the targets.

The 2025 targets will not be met, and this is consistent across the state. There is a need for pragmatism when considering the technical, economic, and environmental practicalities of pursuing a zero waste to landfill strategy, particularly when set within the context of the waste legislation and policy settings in Queensland.

[35] Australian Government (2018). National Waste Policy. Accessed at https://www.dcceew.gov.au/sites/default/files/documents/national-waste-policy-2018.pdf
[36] Australian Government (2019). National Waste Policy Action Plan 2019. Accessed at https://www.dcceew.gov.au/sites/default/files/documents/national-waste-policy-action-plan-2019.pdf

4 Organic waste

Organic waste is identified in both National and State guidance documents as a low hanging fruit when it comes to diverting more waste from landfill. There is significant support via the National Food Waste Policy to divert more food waste from landfill, supported by the establishment of research and roll out of the Food Waste behavioural change programs by the Queensland Government, alongside a series of actions in Queensland's Organic Waste Strategy and Action Plan. A key consideration of the options assessment for this Plan was the prospect of introducing regional or individual council scale organics collections. This section considers:

- The existing dynamics of the organic waste stream in the Wide Bay Burnett Region
- Potential levers and interventions
- Major options considered
- The expected outcomes of the preferred options
- What is required to support the change including cost; and
- What may change during the implementation of the Plan

4.1 Organic material stream dynamics

Organic waste across the region is managed via several collection pathways. All councils provide self-haul facilities where residents and local industry can drop off garden waste. In Bundaberg there is also a privately operated facility where residents can drop off garden waste for free which is composted and reused in agriculture. In general, self-hauled garden waste is processed locally by councils. Fraser Coast Regional Council sends its garden organic waste to a private composting facility at Gregory River, located between Maryborough and Bundaberg. Bundaberg Regional Council provides some self-hauled garden organics to a second private operator located near Bundaberg where it is processed into soil amendment products and used in agriculture.

Within the region, Councils and the private sector received and recovered a reported 86,165 tonnes of green waste in FY20-21. For organic waste this represented a recovery rate of 69% for organic material and contributed 10% to the overall region recovery rate. This is solely green waste received and is typically processed into a mulch or compost. Information provided by Councils indicated that there is strong demand for high quality organic waste derived product for reuse within agriculture, particularly in the Bundaberg Region.

A significant proportion of household food and garden organics are still disposed of in the residual bin across the region. **Figure 12** presents the estimated breakdown of organic waste based on audit information for organic waste managed at Council sites within the region.

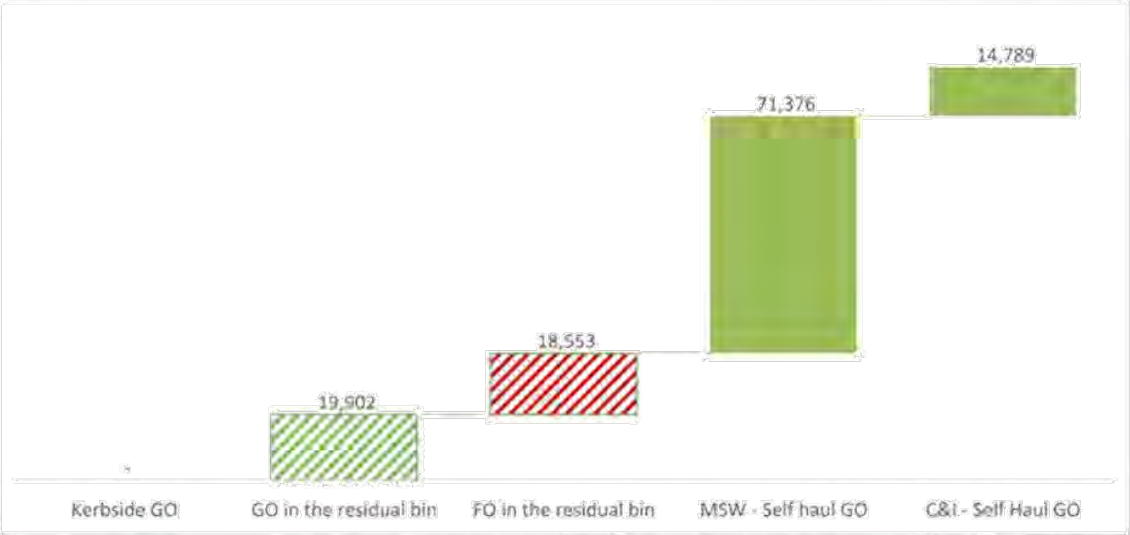


Figure 12 Estimated breakdown of organic waste managed by councils in region (tonnes)

Geographical diversity also influences organics collection and processing across the Wide Bay-Burnett region. For example, the Councils within the region with very low population density, and with households generally on larger blocks are more likely to have informal at home organics diversion solutions in place, such as compost heaps, chickens, or worm farms, compared to higher density parts of the region such as parts of the Bundaberg, Gympie, and Fraser Coast LGAs.

Away from reported kerbside organic waste, other organic waste streams are generated within the region. This includes a range of agricultural residues and wastes. Analysis undertaken by the Queensland Government in FY18-19 indicated that there was a combined total of 1,291,550 tonnes of food crop residues and 257,060 tonnes of organic wastes and other residues in the region. The latter includes material reported in the graph above. These values are significant although it is noted that a high proportion of this material is already managed and is not necessarily available for reprocessing.

4.2 Levers and interventions

4.2.1 Avoiding and reducing organic waste

Organic waste reduction or avoidance can be achieved through education with support from other levers, which may also link to regional or council landfill diversion solutions. Under Queensland's Organic Waste Strategy there are specific actions to support national objectives to halve food waste, including a reduction in food waste of 10% per household by 2025. The Queensland Government currently has the license to the Love Food Hate Waste branded education and engagement program developed by WRAP[37] in the UK. Fraser Coast Regional Council participates in Love Food Hate Waste already. Some existing councils within the region provide education packages that include composting at home[38,39,40] however the ability to commit resources to education varies across councils within the region.

The roll out of state-backed education or behaviour change campaigns such as deployment of Love Food Hate Waste materials is likely to require additional resources to have a significant impact. Education could be delivered at a regional scale for issues such as behaviour change to avoid food waste without impacting individual council service delivery. This could be delivered to commercial or industrial premises. Avoiding household generated food or garden organic waste being disposed of into a residual bin could be supported by the provision of at-home composting equipment such as compost bins or worm farms supporting education campaigns.

Some Councils in the Wide Bay Burnett region have implemented behaviour change initiatives to improve household practices, increase community knowledge of waste streams, and improve the potential for resource recovery. The Bundaberg, Fraser Coast, and Gympie Regional Councils have all implemented waste and recycling education programs, which are facilitated through educational tours of waste facilities and consultations, with the main target audience being primary and secondary school students. The educational programs aim to develop environmental values and encourage long-term environmental behaviours.[41] Utilising Queensland Government support these initiatives should include meaningful measures to avoid food waste.

4.2.2 Alternative pricing strategies / pay as you throw

Aligned with education and behaviour change is the development of a bin sizing and price incentive strategy. This approach, currently being considered by several councils in Queensland based on experience from elsewhere in Australia and overseas would seek to achieve higher landfill diversion by aligning bin volume pricing to the polluter pays principal and backing this up with targeted enforcement. This approach may also seek to include pricing mechanisms that prioritise recycling or organics collections over residual waste systems.

[37] WRAP, 2022. Love Food Hate Waste – Why we're here.
[38] Bundaberg Regional Council, 2023. Waste and recycling education: Waste minimisation – Bundaberg Regional Council. Accessed at https://www.bundaberg.qld.gov.au/waste-recycling/education-waste-recycling/5
[39] Fraser Coast Regional Council, 2023. Composting Workshop – Fraser Coast Regional Council. Accessed at https://www.frasercoast.qld.gov.au/events/event/410/composting-workshop
[40] South Burnett Regional Council, 2023. Introduction to Composting and Worm Farming Workshop – South Burnett Regional Council. Accessed at https://www.southburnett.qld.gov.au/events/event/211/introduction-to-composting-and-worm-farming-workshop
[41] Gympie Regional Council (2022). Waste Education Program. Accessed at https://www.gympie.qld.gov.au/waste-education-program

4.2.3 Levies and bans

4.2.3.1 Landfill levy and annual advanced payment

Organics managed within the residual waste stream and landfilled is subject to the landfill levy, except for waste generated in the Cherbourg Aboriginal Shire Council area. The current landfill levy applied to general waste in the regional zone is $88 per tonne disposed of, with the levy rate to increase by the rate of CPI in future years. The annual advanced payment for FY22-23 is 105%, which is scheduled to reduce to 100% for Gympie Regional Council, North Burnett Regional Council, and South Burnett Regional Council through to at least FY30-31. Bundaberg Regional Council and Fraser Coast Regional Council are scheduled to receive progressively lower annual advanced payments over the same period. The continued return of landfill levies paid by the three Councils through the continuation of annual advanced payments allows the continuation of the commitment of no-direct impact to households, however, provides little financial disincentive to reduce the amount of organic waste going to landfill.

For Bundaberg Regional Council and Fraser Coast Regional Council the cost of landfill disposal will increase to be nearly $90 per tonne in FY30-31. This provides a potential opportunity to consider the benefit of introducing further organics diversion to minimise the impact of upcoming cost increases.

4.2.3.2 Landfill bans

The Queensland Government is currently exploring the potential for banning of organic waste from landfill to help increase diversion[42]. Individual landfill facilities could also adopt bans however this is considered unlikely in the region. It is expected that should the Queensland Government decide to legislate bans on organic waste to landfill within the region, there would be a very long-lead time to allow local government and industry to adjust, and to ensure collections and post-collection processing infrastructure could support the flow of material.

4.2.4 Introducing new organics collections services

Most Councils in the region provide a transfer station facility for self-hauled green organic waste across the MSW, C&I and C&D streams, noting no organic waste is captured in the C&D stream. No kerbside collection services are provided in the region, although there are substantial self-haul arisings managed by private sector organic waste processing businesses in the region.

An option for all Councils could be to introduce a new kerbside organics collection service. An estimate of potential material within the household organic waste system for each Council is shown in **Table 12** based on the FY20-21 dataset and audit data.

[42] State of Queensland, 2022. Queensland Organics Strategy and Action Plan.
https://www.qld.gov.au/environment/management/waste/recovery/reduction/organics-strategy

Table 12 Potential organics in kerbside waste per LGA

LGA	Potential Food Organics in residual bin (tonnes per annum)	Potential Garden Organics in residual bin (tonnes per annum)	Total Potential Organics (tonnes per annum)
Bundaberg Regional Council	6,346	9,807	16,153
Cherbourg Aboriginal Shire Council	70	67	137
Fraser Coast Regional Council	7,765	7,412	15,178
Gympie Regional Council	2,995	2,859	5,853
North Burnett Regional Council	406	388	794
South Burnett Regional Council	1,044	865	1,909

Note – availability based on forecast arisings in FY25-26 and available compositional data

Key decisions for new organics collections within the region would need to include:

- Which Councils will introduce a service, and the drivers for this including cost of landfill disposal, geography, ability to meet any increased costs, and the general direction of council and commitments made in other strategic documents and planning.
- Who the service is offered to, whether to households, or for commercial premises, and the areas of service (i.e., not all councils provide a household garbage/recycling service to all households within the region). This includes consideration of whether individual councils provide the service.
- The type of material to be collected (e.g., whether to include all food wastes including meat, bones, dairy and fruit and vegetable scraps) or a restricted list. Councils may also wish to commence a kerbside garden organics collection service first, with a view to considering implementation of a kerbside FOGO service in the future.
- The frequency of service provided to optimise collections vs cost, and the potential to reduce the kerbside general waste collection frequency from weekly to fortnightly to offset new collection cost.
- Options for take up by residential or commercial service providers, including whether the service provided is mandatory, opt in, or opt out, noting that universal systems tend to have higher diversion rates.
- The type of facility to be constructed for processing, noting that some technologies are considered better for odour management than others however this also depends on the nature of feedstock.

Additional costs to support new services would include new organic waste bins (assumed 240L) for all households receiving the new service. Where the existing residual (garbage) bin is not red (typically older garbage bins are dark green lidded) it may also be necessary to replace the bin lid to avoid confusion with the light green coloured organics bin, and to meet national harmonisation standards. Additional at home infrastructure such as kitchen caddies and bin liners may also be required, which add additional costs to implementation. The indicative one-off cost of new household equipment required for introducing a new FOGO service is estimated to be in the range $60 to $84 per household with the variance depending on whether councils provide a kitchen caddy and liners for residents. The breakdown of this cost is shown in **Table 13**.

Table 13 Indicative One-off Costs for Collection Consumables

Item	Cost per item excluding GST
Mobile bin (240L)	$45
Delivery & distribution of bins	$15
FOGO kitchen caddy liners including delivery	$13 (pack of 200)
Kitchen caddies including delivery	$11
Re-lidding of mobile bin	$11-$21

Source: Council provided information, quote from equipment provider

4.2.5 Education to support a new kerbside organic collection

The introduction of a new collection service for organic waste within the region would require supporting education and engagement prior to and during implementation. Evidence from Victoria indicates whole of system education costs including a range of waste education and reduction measures for a 3-bin system including FOGO collections should be estimated at approximately 5% of overall waste management costs. Additional funding may be required in the first year of a new service to include business as usual, improvements to the yellow bin service and food waste avoidance, and organics education including FOGO education and food waste avoidance estimated at $8 per household (noting if Councils decided to introduce a garden organics collection service these costs may be reduced). The breakdown of this cost is shown in **Table 14**.

Table 14 Indicative Costs for Education

Item	Cost per household per annum excl. GST (2021/22)
Business as usual (assumed for single or two bin system)	$4 per HH/yr
Improvements to the yellow bin service and food waste avoidance	$8 per HH/yr
Organics education including FOGO education and food waste avoidance	$8 per HH/yr

Source: Council provided information.

To support a new organic collection education and soft enforcement through bin tagging are already applied for the kerbside recyclable collection, councils already have powers under local laws to apply penalties for offences around bin collection and materials placed in bins, which could be utilised or modified to support implementation. It is assumed that these activities are captured within the $8 per household per year cost for FOGO service implementation education.

4.2.6 Post collections infrastructure

Organic waste processing infrastructure is required to recover or recycle a greater volume of material. There are several established organic wastes processing facilities, including shredding/grinding and composting within the region. The compost product is understood to be sold predominantly for agricultural purposes, as well as in the landscape amenity market. The addition of food waste, either individually or via a mixed food and garden organics service (FOGO) may require more involved processing but have outputs that are generally of higher value. There are several considerations when choosing organics processing infrastructure, including the type and quantity of feedstock, quality of product required, and key location specifics such as proximity to sensitive receptors or product offtakers. There are a range of technologies available to process the FO, GO and FOGO stream. Some of these are summarised in **Table 15** noting that there are a wide range of different technological solutions for composting that could be considered by Councils in detail.

Table 15 FOGO processing options

Description	Mulching	Open windrow	Covered aerated static pile (CASP)	Covered inoculated static pile (CISP)	In-vessel composting	Anaerobic Digestion
Process	Use of grinding equipment to create a mulch product.	Composting via open windrow methodology	Composting process enhanced by piped air supply with use of a membrane cover system to manage odours.	Process enhanced by fermentation – compost pile is inoculated with specialised microbes and covered.	Composting undertaken in tunnels with air circulated beneath tunnels; open windrow for maturation.	The breakdown of organics by microorganisms in an enclosed oxygen free environment
Suitable feedstock	Garden Organics	Food and/or Garden Organics	Food and/or Garden Organics	Food and/or Garden Organics	Food and/or Garden Organics	Food Organics
Capital cost	Mobile Plant	$0.5M-4M	$4M-$20M	$1M-$5M	$20M-$34M	$10M -$30M
Estimated operating cost	$10-$40 / tonne	$30-$120 / tonne	$50-$70 / tonne	$50-$70 / tonne	$20-$120 / tonne	$70 to $200/tonne
Output product	Mulch	Compost	Compost	Compost	Compost	Energy, Digestate

Note: indicative costs provided based on 20k to 30ktpa organics processing facility; real costs would form part of detailed business case
Capital costs exclude site preparation, output product quality depends on quality of input. Detail based on benchmarking.

As there are existing composting facility operations in the region, where FOGO collection services are introduced, it may be more cost beneficial for Council to procure a service rather than seek to involve themselves in the build, ownership, or operation of their own facility. Under the service provision scenario, Councils would pay a gate fee for the processing, secondary product manufacturing and distribution of recycled organic material.

Key considerations for organics processing facilities in the region are:

- Type and volume of feedstock
- Location of facility, including number of facilities required within a region
- Transport costs, and benefit of location within a precinct
- Existing facilities and technologies that could provide a service, and whether a new service might impact their ability to continue operation.
- Specific technology to be deployed to meet specific location requirements.
- Facility procurement, ownership, operations, and funding models which provide greatest value for money
- Timeframes for intervention and required go-live date
- The potentially to introduce a garden organics service first as a precursor to a future FOGO service
- The requirements of the Queensland Government's model operating conditions for processing food waste as part of the FOGO stream

Additional technologies may be deployed at a smaller scale to manage organic wastes locally, including anaerobic digestion which may be an option at a small scale for more remote or island communities.

4.2.7 Establishing a market for recycled organics

At a regional scale several offtake markets will need to be identified for recycled organic products. Product quality may dictate the end market, but end market demand may also drive manufacturing of certain products containing recycled organics. In the region the urban amenity market and landscaping is identified as a key target and the establishment of new composting facilities in the regional could be expected to contribute to this. Councils within the region may drive continued demand for this material by using on their own parks and gardens. Other markets may include intensive agriculture, broad acre agriculture or rehabilitation of mine sites, however the product value is likely to vary. Other markets may include or rehabilitation of mine sites, however the product value is likely to lower for this use. Agriculture is generally assumed to be able to utilise large volumes of FOGO compost that could be produced, but further work is required to establish supply or offtake agreements, and perhaps proven quality and benefit. The material may be sold in bulk, but further investment may be required to include screening and bagging infrastructure. Information provided by Councils to support this Plan indicates a price of $30 to $120/tonne for recycled organics product may be achievable in the Bundaberg Region depending on product quality.

Product quality is likely to determine the end price and applicability for all end markets. Contamination of both self-haul organics as well as future kerbside collections is a critical issue that has not yet been resolved. At a household level, education will be important in ensuring items that are not suited to composting are not placed in a FOGO collection service bin. Although compostable, some single-use containers can add additional contaminants, and do not currently meet the definition of FOGO in Queensland.

There also remains additional concern in operation of organics processing facilities with the presence of emerging contaminants such as PFAS in all waste streams, including organics. These concerns need to be addressed in waste collection, processing, and product quality to maintain offtake agreements.

4.3 Major options considered

Major options considered for how organic waste is managed in the region are presented in the following table and discussed in subsequent sub-sections:

Table 16 Major organic waste decisions

Decision area	Business as usual	Options				Rationale
Priority of focus on organic waste stream	Limited specific focus on organic waste diversion	Not a priority focus		Priority focus		Clear driver for BRC and FCRC with annual advance payment change. Focus under Organics Action Plan for region but specific to each Council.
Point of organics separation	At home composting + self-haul + one individual GO collection	FOGO collections for individual councils as business case and economic conditions dictate		FOGO collections for whole of region		BRC/FCRC to progress development of FOGO collections offering for LGA. Other councils to continue BAU collections.
Waste stream composition for collection	Garden Organics / Green waste only	Garden organics only	Food organics only	All garden organics and some food organics	All food and garden organics	BRC and FCRC only – assumed move to FOGO collections. Accepted contents to be determined.
Waste stream for self-haul	Garden Organics / Green waste only	Garden organics only	Food organics only	All garden organics and some food organics	All food and garden organics	All councils to continue to receive self-haul green waste to transfer stations.
Processing technologies	Mulching & local composting (private sector)	Small scale organics infrastructure	Open Windrow	Covered windrow systems	In-vessel composting	Councils to work through individual solutions for processing technologies. May depend on private infrastructure.
Infrastructure ownership	Mulching infrastructure limited	Council owned and operated	Council owned, privately operated	Privately owned and operated	Other	BRC and FCRC likely to seek a service from private industry.
Market development	Mulch product used locally, given away, some challenges	Limited intervention	Moderate level of support or intervention to establish local offtake markets for all products		High level of support or intervention	Secondary market for recycled organics requires further establishment and support.
Approach to behaviour change: Food waste avoidance	Limited delivery through waste education team members.	Limited focus	Priority focus at individual council scale		Priority focus at regional scale	Food waste avoidance can be delivered at regional scale to tie in and leverage state-based support.
Approach to education: collections	Delivery through existing service offerings	Limited focus	Priority focus at individual council scale		Priority focus at regional scale	Different collections will require different approaches. For new collections BRC and FCRC will require significant input
Non-infrastructure organics solutions	No solutions offered	Provision of at home composting solutions (program)		Provision of community composting facilities to allow food scrap diversion		Additional non-infrastructure solutions to allow participation in LGAs or parts of LGAs with lack of access.

Cells in GREEN reflect decision made; BRC – Bundaberg Regional Council, CASC – Cherbourg Aboriginal Shire Council, FCRC – Fraser Coast Regional Council, GRC – Gympie Regional Council, NBRC – North Burnett Regional Council, SBRC – South Burnett Regional Council

4.3.1 Priority of focus on organics waste stream

It is estimated that around 50% of the kerbside residual bin collected from households in the region is organic in nature. With the increasing cost of landfill disposal for Bundaberg Regional Council and Fraser Coast Regional Council, a desire to minimise waste sent to landfill, and the known greenhouse gas emissions caused by organic waste in landfill, there is a clear need to divert organic waste from landfill in the region. However, this is tempered by the geography of the region and the economic conditions including waste levy and annual advanced payment settings for all Councils except Bundaberg Regional Council and Fraser Coast Regional Council.

Bundaberg Regional Council and Fraser Coast Regional Council are developing feasibility and business case documentation to consider the establishment of an organics diversion service commencing from FY26-27. For the other council areas, the organic waste stream is not as much a priority, although efforts should be made to allow participation in reduction and diversion activities at a local scale through access to food waste avoidance programs or other participation events. Alternative collection approaches, such as a milk run for organic waste from households and businesses should be converted from concept into trials that can be supported by the Queensland Government.

4.3.2 Organics separation approach

In FY20-21 a reported 86,165 tonnes of green waste were self-hauled to transfer facilities in the region across the MSW and C&I streams. This includes an estimated 22,000 tonnes of green waste self-hauled in Bundaberg to private facilities. It is expected that self-haul will continue as the separation approach for garden organics across the region. For Gympie Regional Council, North Burnett Regional Council, South Burnett Regional Council, and Cherbourg Aboriginal Shire Council separate kerbside organic waste collections are not a priority in the short-term under current levy and policy settings, due to the potential cost impact on household and relatively low resource recovery benefit. Education activities that focus on food waste avoidance and at home or community composting activities should be supported. These Councils may progress kerbside organic waste collection in the future, because of policy change or through community or council led change.

4.3.3 A new kerbside organics collection service in Bundaberg and Fraser Coast LGAs

To support greater organics collection in the Bundaberg Regional Council and Fraser Coast Regional Council areas a kerbside FOGO collection service will be introduced. The service will commence as soon as economically practicable and pending individual Council approval. The service area is expected to be provided to residents that currently receive a kerbside commingled recycling bin collection, noting specific coverage will be identified by councils undertaking specific business case development. To support economic analysis, it was assumed 80% of households currently receiving a waste collection service would receive a kerbside food and garden organics service. There could be opportunities for councils to collaborate on collection or processing contracts, with benefits from duplication of procurement activities or from shared operational management. To support the roll out of a new kerbside collection system, significant and early investment is required in education to drive initial behaviour, followed up by ongoing education efforts.

Development of a specific business cases will support the best value combination of cost versus service and impact on residual bin collections. In the future this service may expand or a new service to collect commercial food waste from commercial customers will be explored.

4.3.4 Processing technology

Mulching is a favourable solution for green waste managed by most Councils. Large amount of garden organics are also used in composting processes particularly in Bundaberg and Fraser Coast LGAs. Composting is expected to be the primary processing technology for FOGO however technology may yet still be determined. The Department of Environment and Science is currently considering the risks associated with processing FOGO and specific requirements for processing facilities which is expected to dictate to a degree location of facilities or technology to be deployed and will dictate cost. This may necessitate improvements to existing facilities where food waste is received. A further consideration in the region is the integration of existing green waste processing into future composting activities.

4.3.5 Infrastructure ownership and facility delivery vs service fee

There are a range of ownership and funding options available for organic recycling technology. This will be reviewed and considered during the development of business cases and funding requests, however, could include options for Councils to own facilities, design, build and operate, or engage the private sector to do one or all the options. The decision will be made on the most cost-beneficial approach and risk/impact on ratepayers.

Where the private sector is engaged to deliver services relating to organic waste collection or processing, decisions for technology will reside with the solution provider and be reflected in the gate fee paid by the Council or other waste providers. This approach reduces operational risk on Councils however reduces the control Councils have on price, and it would be expected that there would be penalties or increased gate fees associated with poorer quality material delivered.

There is an opportunity for Bundaberg Regional Council and Fraser Coast Regional Council to collaborate on the organic waste processing solution with expected similar commencement dates however this may depend on existing contracts.

4.3.6 Improved understanding of whole of region waste stream composition

There are a range of different organic wastes that could be collected across the region. Business as usual activities for Councils receive a large proportion of garden waste through the self-haul system including both the household and commercial streams which is composted to higher values uses or mulched with little residual value. Across the region green waste will continue to be processed in this manner.

For Councils that decide to include additional collection systems including the FOGO stream an opportunity is provided for composting activities providing a higher quality output than mulching. It is expected that a proportion or single stream garden organics will continue to be mulched and used by Council for operational purposes. Improved or refined data is required to support new systems, including the potential contribution of commercial food organics, and those that are not captured as waste (i.e., agricultural residues etc.,) but may support either public or private investment in new processing facilities. The work undertaken by the Queensland Government on organic material flows should be shared more broadly and used to support holistic discussions around potential feedstocks at a regional level not just limited to waste managed by Councils.

4.3.7 Market development

Market development activities are required to support both existing activities through mulching and the compost product to be produced by the organics processing facility. Whilst there is confidence that a market exists, or links with offtakers can be identified, further work is required to connect supply with potential users. This can be facilitated by individual Councils, through procurement of product for use within urban amenity and by the Queensland Government where recycled organics can be deployed in the road reserve. Use in agriculture may require further refinement of offtake product, strong quality management, and a period of trial with agricultural users to demonstrate product quality. Mulched product, though likely lower value, also has been challenging for some Councils to find a market for. The price of any organic waste processing derived product varies significantly with quality, with a range of between $0 and $130 suggested, the higher value where the product can be deployed locally in agriculture. The establishment of a market for high-quality product should be a consideration of business case activity, as it can determine the processing technology required.

If Councils, choose to follow the service fee approach then ability to influence the market is restricted to purchase of recycled organics product for use in landscaping or amenity purposes. Organic waste derived products have high demand for deployment in agriculture in the region.

4.3.8 Approach to behaviour change and education

For organic waste there are two clear elements for action. Behaviour change aligned to the Queensland Government supported campaign options like Love Food Hate Waste[43] program will support the entire region reduce the amount of food waste generated and proportions of food waste in waste. It is expected and essential that the Department of Environment and Science will provide support through resources, both financial and collateral, to allow regional delivery. This messaging should be delivered at a regional scale, initially through the establishment of a regional waste education strategy, to allow all Councils to participate fully and allow economies of scale in messaging, however in the region it was also highlighted that individual Councils may need to tailor education packages to their own needs, whether specific to new collection or processing systems, or timeframes associated with other engagement activities.

For individual Councils messaging around existing services may be targeted to improve the quality of self-hauled green waste provided to Council transfer stations, as this has an implication on mulch product quality. Where Councils approve the introduction of a kerbside organics collection a specific education and awareness campaign in the lead up to commencement will be required. It is expected that education coupled with behaviour change or enforcement activities will be required to ensure compliance with scheme requirements and to take actions to minimise contamination. Specifically in relation to penalising poor behaviour it is expected and essential that the Queensland Government will take the lead on legislating penalties, rather than individual Councils being required to introduce new penalties into local laws.

4.3.9 Regional collaboration on community initiatives to reduce organic wastes

The potential to support or develop trials for community composting, specifically in parts of the region that are unlikely to move to a kerbside organics service in the immediate term, is identified as an opportunity to allow residents to participate in organics diversion activities and is consistent with the Organic Waste Action plan. There are activities such as licensing arrangements, identifying sites, and procedures to encourage community composting that are better suited for development by the Queensland Government than by individual councils.

[43] Fraser Coast Regional Council already subscribes to Love Food Hate Waste

4.3.10 Tackling problem organic wastes

Regional collaboration to assess jointly higher order end uses in the region for recycled organics derived from green waste were identified as an opportunity. Additionally, the development of an approach to managing biosolids, although not necessarily a critical issue at present, noting successful projects in South-East Queensland (for example the Logan City Biosolids Gasification project or an Urban Utilities project pelletising biosolids for use as a fuel), particularly with the potential for regulatory change regarding the presence of emerging contaminants in biosolids. Gympie Regional Council is reviewing options for managing biosolids through co-digestion, which may have benefits for the whole of the region.

4.4 Expected outcomes

For this Plan, there are clear environmental and social benefits to implement new kerbside organic waste collections and processing solutions throughout the region, however there is no clear economic incentive for Cherbourg Aboriginal Shire Council, Gympie Regional Council, North Burnett Regional Council or South Burnett Regional Council to implement such a solution. There are expected benefits for Bundaberg Regional Council and Fraser Coast Regional Council to progress the development of an organic waste collection and processing solution which will commence when practicable and approved by individual Councils.

A FOGO collection service by both Bundaberg Regional Council and Fraser Coast Regional Council is predicted to capture a combined 27,500 tonnes (initially upon commencement), rising each year through sustained investment in education and as population grows. Other councils may introduce their own services, and build their own processing facilities, or take advantage of existing facilities. The outcome in this Plan assumes:

- A new FOGO system captures 35% of food organics and 85% garden organics from the residual bin[44] estimated to be 2,092 tonnes of food waste and 7,850 tonnes of garden waste diverting a combined 9,942 tonnes of organic waste from landfill in Bundaberg Regional Council, and 2,092 tonnes (food) and 6,261 tonnes (garden) diverting around 8,911 tonnes of organic waste from landfill in Fraser Coast Regional Council.
- Additional garden organics captured with the provision of a new kerbside service (i.e., some material may currently be managed at home or that is currently self-hauled is captured in the new FOGO service, estimated at 8,700 tonnes.
- This includes the impact of education as well as the capture of existing food and garden organic waste currently in the residual bin, plus additional garden organics added to the system by residents.
- After implementation, across the region, there would still be an estimated 21,200 tonnes of organic waste in the residual bin.

Should Cherbourg Aboriginal Shire Council, Gympie Regional Council, North Burnett Regional Council or South Burnett Regional Council decide to introduce a new kerbside organics service benefits based on volumes could generally be scalable, however due to distance and need for additional composting infrastructure costs could escalate significantly. The addition of a FOGO collection service for all other councils would add an extra 1-2% to the MSW kerbside recovery rate and likely have marginable impact on the regional recovery rate for all streams.

Figure 13 provides an estimate of the annual cumulative tonnes of FOGO waste collected through the potential Bundaberg and Fraser Coast FOGO collections. The lines are a reference mark showing the total amount of FOGO waste currently in the residual bin.

[44] RAWTEC, Analysis of NSW Kerbside Green Lid Bin Audit Data Report 2020

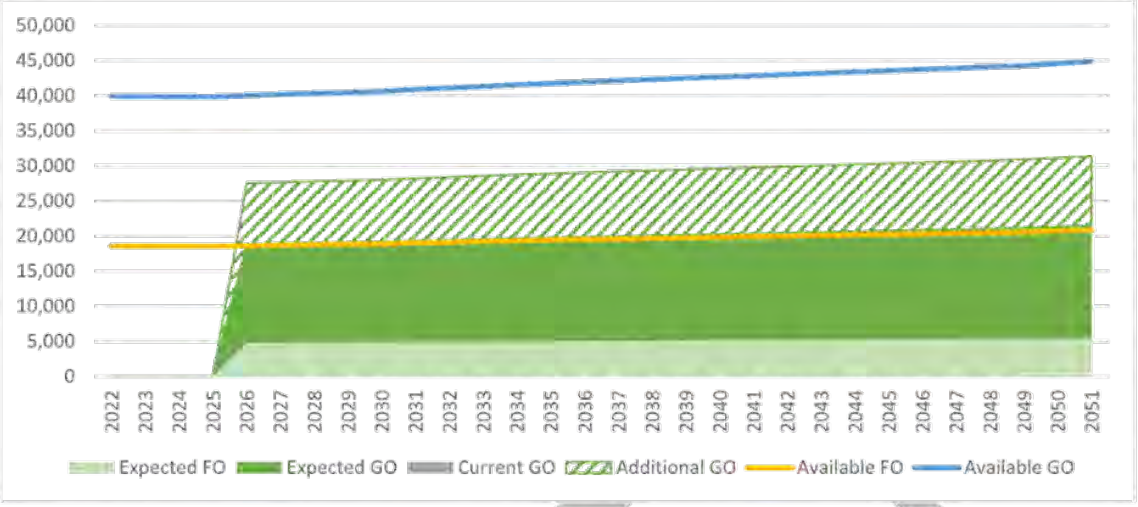


Figure 13 Future State for kerbside organics collections

Community composting is considered to provide a modest reduction in the food waste reduction where applied across the region, however overall, the combination of existing green waste processing across the region, growth of community composting and FOGO collection and processing service in Bundaberg and Fraser Coast is estimated to improve the MSW kerbside recovery rate from 18% to 42% and contribute an additional 5% growth in the regional recovery rate from the current 52% to 57%. New FOGO services could divert an estimated 96,000 tonnes from landfill, between FY26-27 and FY30-31. The estimated emissions savings from organic waste diverted from landfill to composting is 149,000 t/CO^2e over this period.[45]

Table 17 summarises the expected outcomes for the region in implementing the Regional Waste and Resource Recovery Plan regarding organic waste.

Table 17 Expected Outcomes – changes to organic waste performance

Metric	Current (FY20-21)	Forecast 2030	Forecast 2040
Household organic waste recycling rate (kerbside)	0%	24%	26%
Household organic waste diversion tonnage (kerbside)	0 tonnes	28,000 tonnes	30,000 tonnes
Contamination rate	No service	<5%	<5%

[45] Australian Government, Department of Climate Change, Energy, the Environment and Water, 2022. Australian National Greenhouse Account Factors, November 2022 – direct comparison between processing technologies only.

4.5 The cost of making the change

Economic analysis undertaken to support the Plan has identified that the expected cost of making the change at a regional scale or for individual Councils would include:

- Capital, operating and lifecycle costs – for sending organic waste to a 3rd party organic processing facility and paying a gate fee, plus collection, transfer, and bulking infrastructure (if required for transport to a centralised facility). These costs also include one-off costs for the delivery and distribution of new bins for households. Costs may vary depending on the processing technology. For example, costs of anaerobic digestion or covered aerated/inoculated static pile have significantly higher capital costs than an open windrow system.
- Transport costs – these include both the delivery of new kerbside collections and transport to a facility in region.
- Education costs – education costs commencing before the establishment of new services and assumed to continue through service provision to support the change.

This analysis includes a rapid cost benefit analysis. For implementation of the organic waste component of the Plan, it was assumed that existing organic waste processing facilities in the region would be utilised by Bundaberg Regional Council and Fraser Coast Regional Council and so Councils would pay a gate fee. This would be supported by new kerbside collections, assumed weekly, offset by a reduction in the residual waste collection services to fortnightly collections for those households receiving an organic waste collection service. It was assumed that the kerbside FOGO collection service would be rolled out to 80% of households in Bundaberg and Fraser Coast. The estimated whole-of-life cost for the introduction of FOGO collection and processing services in Bundaberg and Fraser Coast LGAs, over a modelled 30-year period is estimated to be **$153.5 million** (present value[46]) or annualised at **$55 per household per year** over the whole period compared to business as the business-as-usual scenario. In summary:

- The kerbside collection cost is estimated to be **$48.5 million** (present value) reflective of the addition of 52 weeks of FOGO kerbside collection and reduction of 26 weeks of residual waste collections over the period.
- Assuming Council's pay a gate fee for processing, the estimated cost of processing forecast collected organic wastes is **$105 million** (present value) over the forecast period. This assumes an initial gate fee of $110 per tonne for a simple windrow facility in the region at an existing facility.
- Initial one-off costs for the purchase of new bins and other consumables (kitchen caddies, liners etc.,) estimated to cost **$2.7 million** for Bundaberg Regional Council and **$3.1 million** for Fraser Coast Regional Council.[47] These costs may vary depending on the final service configuration and decisions made by Councils (e.g., provision of liners for caddies) and the point when they are purchased.
- Additional one-off costs may be required to replace existing residual bin lids with Australian Standard red lids, estimated at between $11-$21 per household, although it is assumed that these can be replaced progressively as bins are replaced.
- Education costs (included in the OPEX costs above) associated with the introduction of a new kerbside organic waste collection service are estimated to be **$0.27 million per annum** for Bundaberg Regional Council and **$0.29 million per annum** for Fraser Coast Regional Council, assumed to start up to 2-years prior to commencement of a full service.

[46] Note whole of life costs are discounted at a rate of 7% per year and presented as present value costs.
[47] Cost based on $84 per household establishment costs

It is assumed that FOGO collection would be impracticable to introduce at this stage in Cherbourg Aboriginal Shire Council and North Burnett Regional Council due to scale and cost. It is also assumed at this stage that Gympie Regional Council and South Burnett Regional Council do not have the economic driver (i.e., 100% annual advanced payment meaning levy cost is not realised) to add additional kerbside collection services. Nothing in this Plan or modelling undertaken precludes any council from deciding to implement a kerbside organics collection service.

Further refinement of the cost estimate would be expected as initially Councils establish whether there is a clear benefit for collaboration between Bundaberg Regional Council and Fraser Coast Regional Council. There may be benefit in collaborating on project management, education, and collectively pooling feedstock to avoid duplication of cost.

Additional costs may be incurred in implementing the plan for:

- Support required to implement food waste avoidance education and behaviour change. This is included within whole of region education costs alongside activities identified in **Section 5**.
- Costs associated with developing a regional or individual council studies for problematic organic wastes such as biosolids and timber.
- Costs associated with the roll out of at home composting solutions such as worm farms or compost bins. This is assumed to be a whole of state response coordinated by the Queensland Government.
- Costs associated with the establishment of community compost facilities within communities in the Wide Bay-Burnett Region. This is assumed to be a whole of state response coordinated by the Queensland Government.
- Updates to material flow analysis commissioned by the Queensland Government to provide a snapshot of current material flows, demand and supply across the region and neighbouring regions to maximise the potential for reuse and recycling in the region.

A breakdown of expected costs for implementation of this Plan is presented in **Appendix D**.

4.6 Supporting the change

4.6.1 Getting to the decision point for investments

Councils require a significant understanding of the business case for delivering new service before making a decision that affects their ratepayers. The preparation of a business case for a proposal requires significant investment in time and potentially the procurement of specialist economic, engineering, and other technical services. Future funding requests associated with the implementation of this Plan will likely require a gateway approval from State Government entities, who will expect documentation of a high standard to support any application.

4.6.2 Funding support for Capital Expenditure

The introduction of a new kerbside organics service in the region will cost more than the current service offering to provide additional collections and support gate fees or operational costs at a new processing facility. This includes preparing business cases that will consider existing fleet capacity and capability in the context of an additional collection service, and the establishment of a new organics processing facility. Ownership and delivery of the latter are to be established, but whether Council or privately owned, capital costs are expected to be significant.

A new organic waste processing facility may be located within a Precinct or existing industrial zone land. Support will be required from the host Council or from the Queensland Government to facilitate the establishment of the precinct to support organics or other resource recovery activities (see **Section 5**) which may be financial, planning and approvals. This includes a clear role for the Department of State Development to support establishment of both enabling infrastructure and industry attraction for new businesses to fill the precinct. There may be benefit in locating an organic processing facility in a future precinct development. The cost of the enabling infrastructure is included in the whole of life cost estimate, however broader precinct costs would require additional investment.

4.6.3 Behaviour change and education support to support food waste avoidance

Central to this Plan is the establishment of regionally focussed education and behaviour change programs. Engagement is required, plus the potential for support through partnerships with the State Government to fully recognise the benefits of a food waste avoidance program, and other behaviour change activities under the National Food Waste Strategy. This should be extended not just to new programs, but for existing services such as self-haul green waste to ensure product quality targets can be met.

4.6.4 Clarity of regulation

Clarity is required around regulation of sites processing food waste (FOGO) at scale as this has a cost implication on ratepayers as well as siting of facilities. Immediate clarity is required from the Queensland Government to ensure clear and transparent application of legislation that enables rather than hinders the establishment of organics processing facilities. This includes providing certainty on the type of facility required to process FOGO. Clarity is also required to how the Queensland Government intends to use landfill disposal bans about organic waste. This need for clarity or certainty also extends to how emerging contaminants (e.g., PFAS) potential in organic waste derived products are managed.

4.6.5 Setting the parameters of community composting

Community Composting could be deployed throughout the region, including in remote and regional communities. Whilst unlikely to have a high cost, consideration of funding for the development of state-wide education and information resources, education staff support, and support to facility community action should be provided by the Queensland Government. Priority should be given to Councils and populations without access to an organic waste service in the first instance, however documents and guidance should be available to all.

4.7 Timeframes

The proposed timeframe for implementation of the organics stream are:

Table 18 Organics implementation timeframes

Immediate action (ASAP)	Within next 5 years	Within next 10 years
Education & Behaviour Change		
ALL: Development of Regional Education Strategy incorporating food waste avoidance behaviour change program (all) as well as specific education for new services or re-enforcing existing rules (e.g., around self-hauled green waste)	Update and continuation	Update and continuation

Immediate action (ASAP)	Within next 5 years	Within next 10 years
DES + Councils: Consider how State based legislation/regulation or individual council action may need to be implemented.	DES + Councils: Implementation of agreed approach	Continuation
	ALL: Support state-based roll out of at home composting or worm farm equipment subsidisation (pending State funding & administration) linked to avoidance and broader education needs.	
Collections		
Bundaberg Regional Council and Fraser Coast Regional Council (pending Council approvals) will further progress plans for kerbside organic waste collection including detailed cost estimate.	BRC and FCRC (pending Council approval) commence modified kerbside organics collection at point where optimal ALL: Review potential for long-term regional or sub-regional collaboration to collaborate on collection contracts	BRC and FCRC continue to deliver. ALL: monitor policy position.
Processing solutions		
ALL: Continue to process green waste under BAU	ALL: Continuation	ALL: Continuation
ALL: Collaborate with DES to develop guidance on community composting	ALL: Implement community composting where feasible and guidance allows	ALL: Continuation
BRC and FCRC collaborate on potential procurement of organics processing solution.	BRC and FCRC implement preferred processing solution to coincide with commencement of collection service.	BRC and FCRC: Continued implementation. ALL: other councils to monitor opportunity to utilise new facilities.
ALL: Commence discussions regarding to the potential for alternative solution to land application for biosolids	ALL: Implement alternative solution for biosolids if triggered by change in regulation or economics	ALL: Continuation
Market development		
BRC & FCRC: As part of feasibility study or business case identify likely opportunities to purchase recycled organics from organics processor(s).	BRC & FCRC: Procurement of recycled organics for use in council projects.	BRC & FCRC: Continuation
Data & Information		
ALL: Work with DES to refine data associated with non-council managed organic waste within region and identify opportunities to collaborate on processing or supply. Collaborate as part of overarching data strategy.		

Cells in grey indicate action not expected to commence during the timeframe, BRC-Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council, SBRC-South Burnett Regional Council; ALL: Indicates collaborative activities for all councils to participate in.

4.8 What could affect implementation?

The following variables could affect implementation of the organics comment of this Plan:

The following variables could affect implementation of the organic waste component of this Plan:

- Changes to regulation or rules relating to the processing of food wastes within composting facilities, and in particular the stipulation of technology type specific to this processing.

- The updating of Australian composting standards (e.g., AS 4454 Composts, soil conditioners and mulches) with more stringent controls associated with the nature of emerging contaminants or other issues that hamper the distribution of recycled organics, including products derived from organic waste.
- The price of recycled organics product (e.g., compost, etc.,) can vary significantly. The typical compost product generated by existing composters running FOGO projects in Victoria and NSW may achieve only $20/tonne for their outputs, whereas high-quality (and low contamination) outputs reported in strong agricultural market areas may achieve up to $120 per tonne. The establishment of high-quality output producing facilities coupled with market development activities could achieve a lower overall whole of life cost for organics diversion.
- Changes to the landfill disposal levy (i.e., incremental prices in levy rate greater than CPI) or annual advanced payments could impact the viability of decisions made to support this Plan, including making the economics of kerbside FOGO collection more or less viable.
- The Queensland Government are considering the potential to introduce landfill disposal ban for certain types of wastes including organic wastes. The introduction of a ban on organic waste to landfill (either holistically or for single streams) would support the establishment of a local or regional scale infrastructure. For those Councils with existing landfill gas to power generation facilities a ban on organic waste to landfill could potentially affect the commerciality of these systems, although this would also support a general reduction in greenhouse gas emissions from landfills and promote diversion.
- The expectation in implementation of the education and behaviour change components of the Plan imply reduction in food waste as well as a movement towards low levels of contamination in organics collection services. This will require ongoing effort and financial commitment to reinforce this messaging throughout delivery of the service offering.
- Incorporation of other organic waste streams could allow for growth of proposed processing facilities over time (e.g., commercial food waste, agricultural wastes, timber etc.,)

5 Material recycling and recovery

This section is intended to capture actions and interventions associated with the kerbside recycling scheme and materials recovered or potentially recoverable and recyclable across the region. Challenges in recent years for the kerbside collected bin have stemmed from restrictions on the export of mixed recyclables firstly due to restrictions in China and other receiving countries due to quality or contamination issues, and more recently due to the implementation of export bans on certain unsorted waste streams imposed by the Commonwealth Government. This section considers:

- The existing dynamics of the recyclable waste stream in the Wide Bay-Burnett Region
- Potential levers and interventions
- Major options considered
- The expected outcomes of the preferred options
- What is required to support the change; and
- What may change during the implementation of the Plan

5.1 Waste stream dynamics

All councils except North Burnett Regional Council offer a kerbside commingled recycling service. There are three MRFs within the region, at Bundaberg, Hervey Bay and at Cherbourg, with a new MRF under construction by Fraser Coast Regional Council in Maryborough. All councils provide transfer facilities for self-haul recycling.

In FY20-21, 200,572 tonnes was reported as recovered, of which the household kerbside collection of dry recyclables contributed 19,478 tonnes. A further 180,994 tonnes is self-hauled to council managed facilities within the region comprising 5,406 tonnes of household, 13,819 tonnes of C&I and 161,869 tonnes of C&D waste (of which 134,000 tonnes is reported as clean earth). **Figure 14** presents a breakdown of estimated quantities, combining audit data with projections.

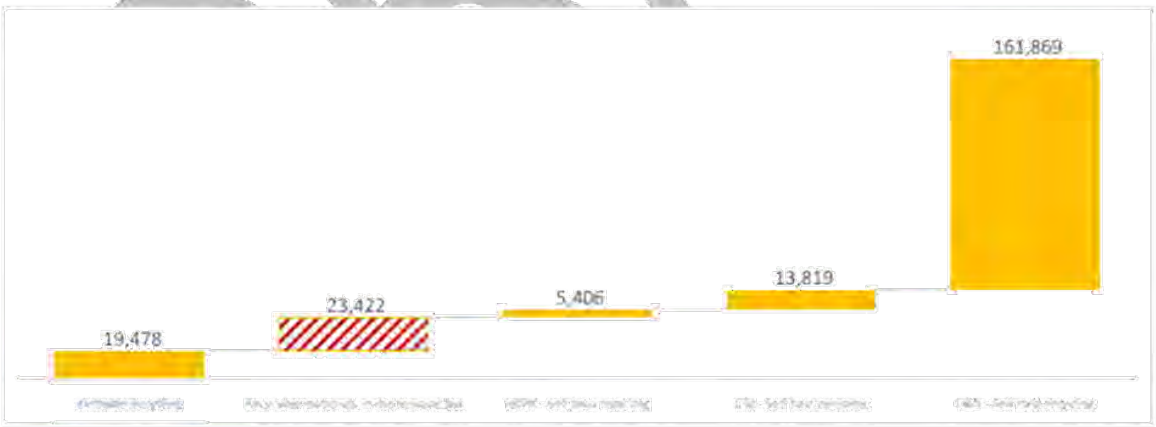


Figure 14 Proportion of recyclable material forecast in each source (FY20-21)

The overall recovery rate (including organic waste) reported in FY20-21 was 38% for the MSW stream. The overall recovery rate for the C&I stream is 29% and the C&D stream is 83%, although it noted that approximately 80% of C&D waste recovered in the region in FY20-21 was clean earth. Contamination in the yellow-top bin is a significant issue across the region with rates across the region ranging from 16-18%.[48] Contracts MRF operators typically have penalties in for exceeded contamination, and this also can affect downstream quality and price of MRF sorted materials. Waste education is provided across the region which strives to drive the avoidance of waste and drives better performance in existing services. Waste education provision is dependent on funding and resource availability, with larger Councils having greater resources. All kerbside collected materials is sorted via existing MRFs and then further processing and remanufacturing is undertaken outside of the region.

Some self-hauled C&I materials are recovered within the region, although recovery rates are low. Wastes in the C&D stream achieve a regional recovery rate of around 83% already, with Councils recycling and recovering large proportions of this material. The levy, operational since 2019 is likely to have driven this diversion rate with a common response observed across the state. This stream already exceeds the target for 2025 and is marginally below the 2030 target of 85% recovered, suggesting significant further intervention is not required.

Although Councils in the region manage a relatively high proportion of non-household waste, private sector businesses operate in the region, including providing waste collection services on behalf of some councils. Whilst some of this data has been captured in the forecasting, it is likely that there are gaps in the reported data for private sector operations not captured in the annual waste data survey by the Queensland Government. These gaps may represent opportunities for material that could be processed locally.

5.2 Levers and interventions

5.2.1 Refuse, reduce, avoid, and reuse through education

For kerbside collection, education of households is critical for reducing contamination. The Queensland Government is currently preparing a behavioural change campaign under its State Education and Behaviour Change Initiative (EBCI) which is understood to include Statewide advertising as well as toolkit resources to be deployed locally at a regional or individual Council scale. Education around putting the right thing in the right bin will not necessarily impact recovery rates, so education around what can and should go in the recycling bin is also critical. Likewise helping residents understand what happens to their recycling and validating that it is recycled and turned into new products is critical, as is understanding what non-kerbside recycling options may also be available. By extension the there are numerous reuse and "op" shop type facilities across the region. These facilities could grow their scope to include preparation of certain recyclables for further transport and processing. A critical need for education is not just initial funding, but ongoing funding throughout the lifetime of this Plan.

[48] Contamination rates provided by Councils based on most recent audit data and as reported in QWDS.

5.2.2 Policy and legislation

At a national scale the phase out of materials, especially plastics or other packaging materials that are harder to recycle would help to drive better quality in the commingled bin; however, this cannot be controlled by those collecting the waste locally and requires Queensland and Commonwealth Government negotiation and intervention. The waste industry, including both Councils and private industry are responsible for managing the end-of-pipe products produced and consumed by residents and visitors to their regions and Council areas. As such they can have limited impact on the materials that flow through the economy and ultimately become waste. Alignment with upcoming recommendations regarding harmonization of bins should be incorporated, where relevant to the services offered, noting that a case for a separate glass collection as currently being implemented in Victoria does not appear to offer significant benefit to existing arrangements and infrastructure. More assistance is needed from the Queensland and Commonwealth Governments on this front.

There are several circular economy transition changes currently being progressed that may achieve some of the higher order 10Rs before the material becomes waste such as changes to right to repair legislation. These activities over time may impact the material flows eventually becoming waste, most likely through delays or keeping products in use for longer.

5.2.3 Regulation and enforcement

Enforcement activities will support education, but Councils need to be able to enforce requirements or even penalise repeat offenders. This could be undertaken under either local laws, or preferable consistent laws at a state-level to allow repeat offenders to be penalized for their repeated poor behaviour. This could include the introduction of alternative pricing systems or potential removal of service.

5.2.4 Collection systems

Collection systems for materials that can be recycled or recovered (excluding organics and residual waste which are addressed in other sections) rely on a combination of kerbside recycling collections or via the self-haul system. Private sector operators undertake collections within the region, although typically this is understood to be for niche wastes (e.g., liquid regulated wastes), for businesses with multi region collection contracts, or where they are contracted to provide a collection service on behalf of a Council. Councils often end up managing large amounts of the non-Council collected waste at resource recovery facilities.

Enhanced material recovery and recycling also requires improvements to self-haul facilities to for both household waste and that generated by the private sector operators, particularly in parts of the region where Councils manage a high proportion of the C&I and C&D stream. This would include better segregation and separation of problem wastes which typically end up in landfill such as tyres, timber, mattresses, e-waste, paint, and construction wastes. Separation of these wastes needs to be supported also by existing or future product stewardship schemes providing a service to all Councils, and not just those on major routes, or subsidising the transport from more regional areas into a centralised hub to allow collection and reprocessing.

In areas where there are kerbside services there are numerous household hazardous waste products (e.g., mattresses, paint tins, batteries, household chemicals etc,.) that cannot be collected from the kerbside, but often end up in the yellow top bin as contamination, or the residual bin where they can cause issues such as fires or contamination. Education can support the non-inclusion of this material in kerbside service bins, but a clear pathway for these materials to be recycled at Council transfer stations should be expanded. Dedicated household hazardous waste transfer facilities (such as the NSW Community Recycling Centres (CRCs)) would help facilitate better capture of these materials. In NSW such facilities are state funded, and there is a clear role for the Queensland Government to support establishment of facilities across the region.

Alignment with an expanded Container Refund Scheme with the updated scheme capturing wine and spirit bottles from late 2023 helps to remove lower quality items, as well as items that cause contamination of other streams (e.g., broken glass to paper/card) helps to further improve the quality. These changes may impact the flow of material into the recycling processing solution which in turn have a material impact on processing contract rates (i.e., less volume being processed typically increases cost to Councils for processing). Councils estimate that annual weight reduction through MRFs may amount to 10-15% less because of the change.

5.2.5 Processing infrastructure

Material recovery facilities typically process and sort wastes. With the new MRF in Maryborough is expected to be operational by mid-2024, it is considered that there are sufficient MRFs with capacity to meet the needs of improved kerbside sorting and commingled recycling. The new MRF in Maryborough has been designed to allow increased throughput to become a regional scale facility in the future, as required. Therefore, it is not proposed for new MRF infrastructure to form part of this Plan, although it is identified that glass processing and washing technology would be beneficial in the region.

Following sorting at an MRF, or taking materials collected individually under specific schemes or at Council transfer facilities, material can be reprocessed into a resource. These reprocessing facilities take pre-sorted materials and change their physical and/or chemical nature, adding value to the processed material so that it can become a feedstock for a manufacturing process or otherwise re-enter the economic cycle.[49] Reprocessing facilities typically manage single-stream materials such as paper, cardboard, plastics, glass, timber, metals, batteries, e-waste, tyres, and oils. The Recycling Enterprise Precinct Location Strategy suggests there may be opportunities for organics, C&D waste, and solar panel recycling within the region. **Table 19** presents indicative processing costs for different types of processing based on published documentation.

Table 19 Indicative Costs for Reprocessing

Item	Capacity tonnes per year	CAPEX	OPEX per Year	Reference
E-waste processing – batteries	4,000	$1.75 million - $2.2 million	$250,000-$300,000	Infrastructure Victoria, 2020[50]
E-waste processing – batteries, monitors, and televisions	5,500	$2.8 million - $3.4 million	$400,000-$500,000	
E-waste processing – solar panels	5,000	$1.5 million - $10 million	$250,000 - $550,000	Infrastructure Victoria, 2020[50] Council provided information
Glass beneficiation	108,000	$8.1 million - $13.34 million	$1.5 million – $2 million	Infrastructure Victoria, 2020[50]
Glass – sand/aggregate plant - crushing/grinding/washing	10,000	$3 million – $7 million	$500,000 - $1 million	
Small scale paper and cardboard processing	20,000	$3 million - $3.5 million	$300,000 - $400,000	
Medium scale paper and cardboard processing	50,000	$8.5 million - $10 million	$750,000 - $850,000	
Plastics processing – flaking and pelletising plant	10,000 – 20,000	$6 million - $14 million	$1 million-$2 million	

[49] Queensland Waste and Resource Recovery Infrastructure Report 2019
[50] Infrastructure Victoria, Waste and Resource Recovery Infrastructure Gap Analysis, 2020. https://www.infrastructurevictoria.com.au/wp-content/uploads/2020/05/2.-Resource_Recovery_Infrastructure_Gap_Analysis_Final_IV.pdf

Item	Capacity tonnes per year	CAPEX	OPEX per Year	Reference
Tyre processing	15,000	$6 million - $8 million	Unknown	

Costs indicative based on published information, Council provided information, or consultant benchmarked data.

The establishment of post-processing infrastructure can be supported by Councils, working with industry and Queensland Government agencies to reduce barriers to entry. The establishment of precinct type infrastructure allowing short transport distances between MRF and post-sorting processing, and the provision of long-term leases on prepared, connected (e.g., to services) and appropriately approved or zoned land can also facilitate the reduction of barriers for processing infrastructure. Councils may play a facilitation role.

5.2.6 Market development

At the moment most MRF processed recyclable (glass, paper and card, plastics, metals) material is sent out of region. Exported recyclable material is typically taken to South-East Queensland and beyond to be processed into new material. Whilst this remains a good outcome, there may be opportunity to establish new industry to process this material in region, thus creating secondary markets and minimizing the long-distance transport of waste. But this requires private sector investment where Council and State Governments' role is to facilitate through identification of land (e.g., in precincts) or for utilities connections, and provide certainty of supply that gives industry the confidence to invest. Councils and the State Government can support demand for recycled content through their own procurement policies and strategies. When the levy commenced in Queensland in 2019, support was also provided to councils to support the transport of recyclables from regional centres to reprocessing facilities. The Queensland Government should consider reintroducing this program to support implementation of this Plan.

5.3 Major options considered

Options are limited for commingled collections where existing contracts are active. Education is critical to help lift the quality of material that enters the post-collection recyclate processing service via the kerbside bin, but also to ensure dangerous materials do not enter any other bin.

Table 20 Major recyclable waste decisions

Decision area	Business as usual	Options			Rationale
Increasing coverage of kerbside collections	Kerbside collection in all councils except NBRC	Current level of service	Increasing number of households serviced in each Council area	Expand service to all Councils	Existing services may grow as population/dwellings grow. SBRC recently commenced kerbside collection.
Getting more from kerbside recycling	Current recovery rate is 20% for kerbside MSW	No significant action	Individual Councils take action to address	Significant action – addressed at regional scale	Bin audits indicate a further 24,000 tonnes of the residual bin could be diverted into the kerbside commingled bin.
Reducing contamination	Current contamination rate is 16-18%	No significant action	Individual Councils take action to address	Significant action – addressed at regional scale	Including support from DES, behaviour change focussing on getting more from the kerbside bin and reducing contamination.
Enhanced and improved transfer facilities	Transfer facilities in each LGA	No significant action	Significant action – individual councils upgrade transfer facilities where needed	Significant action – regional scale transfer facilities	Upgrade and enhancement of transfer facilities in each LGA to better segregate and aggregate recyclable wastes and participate in product stewardship scheme.
Regional collaboration on future MRF and kerbside collections contracts	Existing commercial MRF with individual supply arrangements	No regional collaboration on single MRF	Sub-regional collaboration on single MRF	Regional collaboration in future for regional MRF as required	No need for new MRF at present with Maryborough MRF soon to be operational. Potential for new FCRC MRF to act as regional MRF in future if required
Improve knowledge of material flows for recyclate in region	Data held by DES/Councils limited.	No significant action	Individual councils develop material flow analysis for each LGA	Regional collaboration to identify other feedstocks or materials within region to facilitate localised industry	Current gap in C&I and C&D stream plus other non-waste materials within region. Seek opportunity with DES to improve knowledge to facilitate establishment of new facilities to process regional wastes.
Increased recycling and post-processing technology	Limited recycling or post-processing infrastructure	No significant action	Individual councils attract new technologies and providers to LGA	Regional collaboration for new technologies and consideration of location	Need to attract and support establishment of new processing infrastructure for wastes not currently recycled.
Establish a regional precinct	No existing precinct	No significant action	Establish individual recycling facilities in each LGA	Regional collaboration on precinct including hub and spoke approach	Working with State Development and Councils to develop precinct and attract new recycling and secondary processing industry to region.

Cells in YELLOW reflect decisions made, BRC – Bundaberg Regional Council, CASC – Cherbourg Aboriginal Shire Council, FCRC – Fraser Coast Regional Council, GRC – Gympie Regional Council, NBRC – North Burnett Regional Council, SBRC – South Burnett Regional Council

5.3.1 Behaviour change and education are critical deliverables

Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, Fraser Coast Regional Council, Gympie Regional Council and South Burnett Regional Council currently provide kerbside recycling services to most dwellings within their respective LGAs. There will certainly be opportunities to grow the number of services as population grows over time, however it is generally considered that coverage is optimal when balanced with the cost of collecting from areas with very low population density with trucks travelling long distances. The cost associated with introducing a new kerbside recycling service in the North Burnett Regional Council area would yield less than an estimated 450 tonnes per year across the whole LGA and so a new service here was also not warranted.

There is an opportunity, through education and enforcement, to both reduce the level of contamination in the kerbside collection recycling bin whilst also increase the volume of acceptable recyclable materials collected. What enters the yellow top bin will be captured to a degree by a proposed state-wide education campaign encouraging behavioural change. This is funded by the Queensland Government at $17M for the next 4-years (to FY26-26) and will include partnerships opportunities for Councils to participate further. There may be a cost to participate, and it might be reasonable to assume the deployment of additional staff to support the campaign which may require financial support, with necessary funding support needed to extend beyond 4-years. This could be from direct funding, the procurement (and funding) at a regional scale, or the allocation of resources procured centrally by the Queensland Government. Regional collaboration may help to gain efficiencies in the roll out of this behaviour change approach. This package of behaviour change should explore use of consistent approach to continued poor behaviour as a last resort, which could be supported by modifications to existing Waste Management local laws enacted by each Council in the region.

5.3.2 Glass processing

It is proposed to develop a new glass processing and recycling facility at the location of the new MRF in Maryborough to support regional recycling. The estimated capital cost for glass processing technology is $6 million. Funding support will be required as part of implementation of this Plan to establish the new technology which can process and recycle glass from across the region.

5.3.3 Improved or new transfer facilities for community and business recycling

The new MRF in Maryborough will be operational during 2024, complementing facilities in Bundaberg and Cherbourg. Self-haul facilities receiving household, commercial and industrial, and construction and demolition waste streams represent a large proportion of waste managed in region. At an individual council level there is a need to improve the ability of facilities to capture problematic wastes to pull away from kerbside and offer opportunity to participate in recycling in areas where kerbside collection is limited (i.e., parts of LGAs where kerbside is not economic). Upgrades to other transfer stations may be required to facilitate better segregation of wastes, and arrangements, particularly in more remote locations, need to be in place to aggregate and transport wastes for reprocessing and recovery.

Upgraded facilities to segregate waste however are limited by the cost of transport, particularly the further a collection site is from aggregation or from processing infrastructure. In some cases, it may be considered economically beneficial to do nothing (i.e., stockpile) with this material, or dispose of to landfill than transport at cost. Regional transport assistance may be required to help support flow of material towards centralised sites, avoiding their loss to landfill but mitigating transport costs.

5.3.4 Improved knowledge of recyclable material in region

Data relating to the nature of waste captured at the kerbside is generally granular and of good reliance and captured by Councils through existing data management systems that flow through to the Queensland Government. Data quantity and quality is lower or absent for wastes not managed by Councils. This limits the visible feedstock available for certain types of waste that are expected to flow through the region, which may present an opportunity for localised processing. The Queensland Government has developed materials flow analysis for organic waste, e-waste, and textiles. The region will work with the Queensland Government to provide data and intelligence to update and support future material flow analysis to enable regional analysis to be undertaken to support new business establishment. It is noted that existing material flow analysis data, particularly in regional Queensland, is limited by confidentiality of data providers as aggregation is not usually possible.

5.3.5 Establish an enterprise recycling precinct and attract investment in new industry

A potential option within the region is to collaborate on a regional approach to the attraction, siting, and establishment of new recycling businesses. This includes collaboration with the Queensland Government to develop a Recycling Enterprise Precinct adopting a hub and spoke approach. Under this approach is the establishment of a centralised "Transform Precinct" where most primary and secondary processing will be undertaken, supported by "Prepare Precincts" within the region (and outside of region) where material is pre-processed prior to transport. Work has been prepared by the Queensland Government to identify a location strategy and guidelines to allow precincts to be developed in a consistent manner. Within the region, Bundaberg is identified as the potential location for the "Transform Precinct" with Cherbourg and Curra proposed for potential "Prepare Precincts" however further investigation is referenced in the location strategy to refine locations and understand further the demand for industry within proposed precincts.

Whilst the funding source for establishment of the precinct is uncertain, it is assumed that Councils will not be required to contribute to establishment fees. Councils can also support the establishment of facilities by providing certainty of supply for wastes that they manage which will contribute to feedstock assessments for business cases for new facilities.

To reduce barriers further support is recommended to support the transport of recyclable materials to spokes, or from spokes to the regional processing facility. This can help to support the establishment of new industry within the region. The Queensland Government has previously provided transport assistance for recycling, particularly in remote locations to facilitate greater resource recovery. Whilst long-term sustainability of logistics should be the aim of new business, support over a defined period may encourage investment.

5.3.6 Promoting the 10Rs hierarchy

Opportunities to promote higher order activities under the 10Rs framework should be sought in the region. This could include supporting resale or reuse of materials through existing tip shops on Council resource recovery facilities. Opportunities to repair and refurbish could be promoted in the region, either through identifying specific areas within a precinct site, or through the encouragement or establishment of repair facilities within individual Council areas. This should include working collaboratively with ratepayers to identify opportunities for services such as repair centres or cafes to be established. These likely require minimal funding but could be supported through education activities or minor funding for booking of locations (such as Men's Sheds, PCYCs etc.). Funding for the establishment of community repair services should come from program funding by the Queensland Government.

5.4 Expected outcomes

At present 12,784 tonnes of kerbside recycling material is collected by councils in the region via two council owned MRFs in Bundaberg and Cherbourg, with new MRF to commence operation in Maryborough in 2024. Education to encourage greater use of the kerbside bin for household recyclables could reasonably divert a further 6,500 tonnes of material from the residual stream per year by FY30-31. The addition of a kerbside service by North Burnett Regional Council is considered unlikely as it would only add less than 400 tonnes for processing per annum and require collection across a large geographical area. Forecasting to support this Plan indicates that the volume of available material for kerbside recycling will increase to 28,500 tonnes per year by FY30-31, 33,000 tonnes by FY40-41 and 35,000 tonnes by FY50-51.

An important element of engagement and behaviour change is buy-in from residents within the participating communities. A region wide Education Strategy will be developed with investment from the Queensland Government to support both additional staff resources as well as funding for advertising to support implementation. This is important across all streams and gives ownership. Communities will be better informed as to what should go in their bin, and what happens to the waste that is collected. This education needs to be sustained and should not be viewed as a one-off intervention. Cherbourg Aboriginal Shire Council will develop their own community focussed waste education strategy.

Evidence from other regions suggests that education and behaviour change campaigns could reduce contamination in the kerbside commingled bin from the regional contamination rate of 18-20% contamination a target by of <5% by FY30-31. Whilst the Queensland Government is currently baselining contamination rates as part of a kerbside education and behaviour change program and initiative, which should define target contamination rates, other Councils in Australia have sought to achieve 2% contamination.[51] It is noted however the presence of contaminants such as glass fines may restrict contamination rates below 5%. Contamination rates would form a new baseline for the procurement of a new recycling processing or MRF contract for the region. This would also form part of the objectives of a regional Education Strategy.

Enhanced transfer facilities for non-kerbside waste will give residents better opportunities to participate and remove hazardous or harmful materials from the kerbside collected waste, protecting a new MRF or recycling solution contract, as well as reducing the potential for these materials to get into the organics and residual waste streams. Provision of these facilities should be dependent on the establishment of collection, processing and treatment systems for these wastes being available in region, or for transfer out of region. There is little benefit in providing better sorting and separation for there to be no processing available.

Wine and spirit bottles will be the heaviest item in a bin and will contribute significantly to reduction in weight. Less weight also means more bins can be collected per truck; however, there is a need to manage compaction ratios so that product is not over compacted.

Table 21 presents the expected outcomes from the material recycling and recovery stream by way of metrics to measure the performance of this action.

[51] NSW Government, Department of Energy and Climate Change, 2007. Reducing Contamination of Dry Recyclables and Garden Organics at the Kerbside – The NSW Experience, https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/warrlocal/070211-kerb-dry-recycling.ashx)

Table 21 Expected Outcomes – material recycling and recovery

Metric	Current (FY20-21)	FY30-31	FY40-41
Kerbside recycling rate (Proportion of kerbside waste collected sent for recycling excluding organics)	18%	25%	27%
Kerbside recycling tonnes (Material collected at the kerbside sent for recycling excluding organics)	19,478 tonnes*	28,500 tonnes	33,000 tonnes
Contamination rate (Contamination rate as reported by waste audits)	16-18% Requires baselining across the region	< 5%	< 5%

*Value does not include new service for South Burnett Regional Council which commenced in FY22-23. These are included in the forecast numbers.

5.5 The cost of making the change

The economic assessment considered the cost of incrementally adding to the intervention scenario described for organic waste in Section 4. The estimated costs for implementing the changes described for materials recycling and recovery include:

- Capital, operating and lifecycle costs – for the delivery and operation of a new material recycling solution within the region beyond existing business as usual costs, and processing facilities for local beneficiation. It is noted this does not include the establishment costs for a new precinct or capital costs for establishing new facilities which is assumed to be driven by private sector involvement.
- Transport costs – which include the ongoing increased cost in region from local improved transfer stations to a regional facility.
- Education costs to support behaviour change activities described in this section (assuming these would be delivered in tandem with organic waste behaviour change and new system implementation). Evidence collected during the development of this plan suggests approximately 5% of overall operating budget would be allocated to education to achieve best practice results.

Through analysis undertaken to support this Plan, the estimated whole-of-life costs for the introduction of a of the proposed interventions of the material recycling and recovery stream is **$53 million** (present value) over the economic model lifetime.[52] This can be summarised as an incremental cost of **$19 per household per year** (present value) compared to the base case (and on top of the organics diversion cost per household for Bundaberg and Fraser Coast) In summary:

- Estimated capital expenditure of approximately **$6.5 million** for new glass processing and washing technology to be deployed, and ongoing operational costs for over the 30-year lifetime.
- Small scale improvements to transfer facilities have been estimated without formal assessment of need or build-up of designs. For this Plan, it is assumed the cost of upgrades will average $1.25 million in CAPEX, comprising **$7.5 million** in overall expenditure with resulting increases in OPEX and an allowance for transport. Councils may need funding support to develop specifications for design upgrades, which may be determined by the establishment of precincts within the region.

[52] Includes discount rate of 7%

- Allowances for funding supported improvements to provide household hazardous waste facilities, waste stream audit and other initiatives to support better segregation and understanding of waste flows in the region.
- Additional education costs will be incurred to both increase the capture of recyclable material at the kerbside (from the residual bin) and optimise levels of contamination. As part of a broader education strategy this could be developed at a regional level but implemented by each Council. Funding should support additional FTEs to provide education in partnership with the Queensland Government and partially under the Education and Behaviour Change Initiative. All councils should be able to access resources. Using the metrics discussed in Section 4, a further $8 per Household per Year is estimated to provide additional education funding across the region. Based on the total number of waste services offered across the region, this gives an overall per year estimate of **$1 million** to cover additional staff cost, marketing material and advertising. As a region there are clear benefits from working together on collaborative campaigns (in partnership with the Queensland Government) but it would be also reasonable for the distribution of funding to be allocated to a degree based upon scale (i.e., number of services) or population. Extrapolated over the period from FY23-24 to FY30-31 the overall funding required would be an estimated **$8 million**. This investment in education will need to be maintained on an ongoing basis beyond this period and this has been assumed in the waste flow and financial models.
- It is expected that Cherbourg Aboriginal Shire Council will require an individual community specific education and engagement strategy, working collaboratively across other services provided by Council.
- Within the economic analysis there is an additional cost is considered for the development of beneficiation facilities. There would be a capital cost to build such facilities, which could be aligned with the proposed precinct plans. The economic analysis includes new beneficiation facilities, noting the intent and allowance for new glass processing technology in the region. In the cost per household presented it is assumed the capital costs associated with the development of new beneficiation facilities would be funded by industry, potentially with industry support funding from the Queensland Government and would not have a direct impact on Council or householder cost, so these costs are excluded.

5.6 Supporting the change

For the material recycling and recovery stream getting better quality and greater quantity from existing services has a direct impact on overall recovery rates. The following supporting actions are required to move towards a future state for recycling:

- **Education resourcing and collaboration:** The Queensland Government has announced funding to support the development of a behavioural change and education campaign over the next 4-years targeting contamination of the kerbside comingled bin. At a regional scale Councils will benefit from collaboration to develop an approach, particularly for the three Councils currently providing a kerbside collection for recycling. Through a partnership approach with DES, support could be provided to roll out the campaign, whether funding for additional education staff resources or for materials and events.
- **Establishing regional precinct infrastructure:** The region in collaboration with the Queensland Government may progress the development of plans for a precinct to house resource recovery and secondary processing infrastructure. There are initial start-up costs associated with construction of a precinct, including planning, enabling infrastructure (roads, connections etc.,) that may present barriers to establishment or colocation of new resource recovery or secondary processing infrastructure. Both Councils and the State Government can support establishment of infrastructure at a centralised precinct hub, or at local spoke sites facilitating pre-processing and transport.

- **Upgrading or building new transfer, aggregation, and bulking facilities:** This Plan has identified the need to upgrade existing or build new transfer facilities within the region. This will facilitate the better separation of materials brought to local transfer facilities. This includes better separation of household hazardous wastes. New facilities designed to accommodate better separation, plus the potential for storage of collected material for longer to allow bulk transport would help to reduce the cost of transport but require capital investment. This also includes the potential for the Queensland Government to support the establishment of community recycling centres to target household hazardous wastes.
- **Offsetting transport costs for recyclables.** The hub and spoke approach, and collection of recyclable materials at transfer facilities will require the transport of these materials to either a precinct, or out of region for processing. Transport costs may require short-term support through grant funding to reduce barriers for supply to new facilities, however a long-term strategy may need to be developed to ensure viability of these arrangements in the medium to long term. Take back schemes or reverse logistics could also be explored to support transport of materials.
- **Procurement for recycled content.** Through updated local, Queensland and Commonwealth Government procurement, there is an opportunity to drive the uptake of recycled material demand by specifying use of recycled product in procurement documentation and tendering processes. The Department of Transport and Main Roads in Queensland has a significant opportunity to drive this process within the region.
- **Improved granularity and availability of data:** Data quantity and quality is generally good for Councils within the region, and through weighbridge transaction software records of transactional data have a high degree of reliability. There are gaps in the data set that limit the discussion with regard to the total volumes of recyclable material that flows through the region, which in turn hinders the development of new reprocessing or remanufacturing solutions. This includes the C&I stream for which there remains opportunities to reduce and avoid waste going to landfill. Whilst Councils in the region have provided some knowledge of private processing tonnes, records are not complete.

5.7 Timeframes

Table 22 Recycling Stream implementation timeframes

Immediate action (within next 2 years)	Within next 5 years	Within next 10 years
Education & Behaviour Change		
ALL: Development of Regional Education Strategy incorporating behaviour change and education associated with 1) reducing contamination and 2) improving recovery of the kerbside commingled recycling bin, working with DES to support behaviour change campaign. Options to refine messaging for all councils depending on	ALL: roll out and continued delivery of regional campaign associated with existing collections. Delivery mixed between region and individual councils.	Update and continuation
Collections		
ALL: Consider regional or sub-regional collections approach when contract expiry dates align.	ALL: Implement join approach (if in agreement) for collections to commence (if within next 5-years)	ALL: Consider new collection contract when existing expires within this period.
ALL: Develop business cases/plans for enhancements to existing, or new transfer facilities to facilitate better segregation of self-haul recyclables and capture household hazardous materials	ALL: With funding support, construct and commission improved transfer facilities	Continued operation
Regional infrastructure & precinct		
ALL: Collaborate on establishment of a regional scale precinct (hub) with identification of site and location of potential feeder (spoke) sites across region.	ALL (funded by State): Construct enabling infrastructure for precinct (road, utilities, approvals etc.,) within Continue to collaborate on approach to providing feedstock to processing sites within precinct	Continued
Processing solutions		
ALL: Working with Queensland Government agencies establish and attract new resource recovery processing or secondary material processing facilities within precinct.	Continued support	Continued support.
Market development		
	Queensland Government + ALL: Work with State Government agencies to improve update of recycled materials in procurement.	
Data & Information		
QGOV + ALL: Led by the Queensland Government, councils collaborate to obtain and understand material flow data from the region from council and non-council managed streams with a view to supporting establishment of recycling and reprocessing technologies in region.	ALL: Update and refinement under regional data strategy	ALL: Update and refinement under regional data strategy

Immediate action (within next 2 years)*	Within next 5 years	Within next 10 years
ALL: Collaborate to collect data on contamination and materials within all kerbside bins to facilitate improvement. This may include regional or subregional procurement of audits facilitated by a governance body (if progressed)	Continuation	Continuation

Cells in [redacted] indicate action not expected to commence during the timeframe, BRC-Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council, SBRC-South Burnett Regional Council; ALL: Indicates collaborative activities for all councils to participate in.

5.8 What could affect implementation

This Plan provides certainty over the direction and actions required to support Queensland's Waste Management and Resource Recovery Strategy for the region. In the recycling space, flexibility or alternate delivery of the Plan may be necessary due to unforeseen circumstances, or potential challenges such as:

- Wine and spirit bottles are proposed to be included within the container refund scheme, which will further divert material from the kerbside recycling bin. If wine and spirit bottles are incorporated into the CRS, this will reduce the volume of material that needs to go to the existing, or a future MRF for sorting. A future MRF or kerbside collected recyclable processing contract would need to allow for this, particularly as glass reprocessing will still be undertaken at this private facility. The benefits seen for MRFs under this scenario is that MRFs with CRS processor capability will benefit from a separate income stream by processing CRS collected material. Conversely the removal of wine and spirit bottles may increase the proportion of contamination of MRF glass above the levels permitted under the existing end of waste code for glass, requiring MRFs to invest in washing equipment or charge a higher gate fee for beneficiation.
- Reduction in variability of materials in household products. Over time as the 10Rs and circular economy approach drives the rejection of materials used in products that cannot be reused or recycled, a simpler stream of products may develop. This in turn may support larger volumes of material for single stream reprocessing opportunities or less mixed waste processed in the MRF stream. This is likely to be a long-term outcome.
- There is a significant amount of investment required to establish the enabling infrastructure for a precinct, and for the establishment of new industry to lease land and contribute to the precinct objectives. If this precinct is not available at the time of construction, then implementation of these solutions could be delayed, or alternative sites may be required.

6 Managing Residual Waste in the Wide Bay Burnett region

Residual waste refers to the material left over and managed in, or out of region, after all other technologically, economically, and environmentally practicable alternatives are exhausted. This typically includes material captured in the household kerbside recycling bins, but also unsorted mixed loads delivered to transfer stations, and portions of commercial waste. This chapter considers actions for the region to take to support the identification of an acceptable long-term solution for residual waste. Each of these are discussed in turn:

i) An overview of residual waste stream dynamics

ii) Discussion over key levers including potential costs and benefits.

iii) Options considered.

iv) Recommendations and agreed actions to move towards a 2032 outcome.

v) Expected outcomes.

vi) Consideration of what may change in execution.

6.1 Residual waste stream dynamics

In FY20-21, approximately 221,000 tonnes of residual waste was managed, of which 123,000 tonnes was generated directly by households. By FY30-31, with greater organics diversion and improvements in capture from the kerbside streams, the amount of residual waste is expected to be 224,000 tonnes (allowing for growth) across the MSW, C&I and C&D streams, growing to 235,000 tonnes by FY40-41 and 250,000 tonnes by FY50-51. For the household MSW stream only, Councils are forecast to need to manage 90,000 tonnes of residual waste in FY30-31, 91,000 tonnes in FY40-41 and 94,000 tonnes by FY50-51. The forecast residual waste arisings including interventions are presented in **Figure 15**

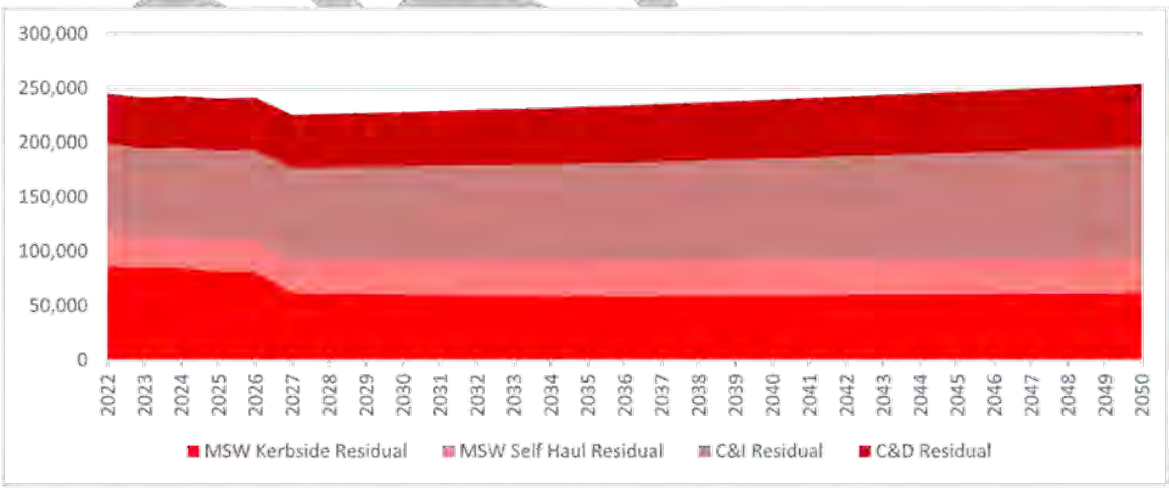


Figure 15 Current forecast – residual waste within the region to 2050 (tonnes per stream)

Each Council manages its own landfill capacity, including both current and historic landfill. Landfill capacity at a regional scale is not constrained, with the two largest facilities at Bundaberg and Maryborough having significant remaining airspace however Gympie Regional Council has an immediate need to secure or construct additional landfill capacity. Council is currently progressing

The Queensland Waste Management and Resource Recovery Strategy and supporting action plan *Queensland's Energy from Waste Policy* both clearly present a role for energy recovery within waste management. In the Wide Bay Burnett region, there are no commercial scale energy from waste facilities that can process mixed household or commercial residual waste. There are also none planned. Outside of the region there are plans to establish Energy from Waste facilities in the Southeast Queensland region but there are no large-scale approved combustion projects, meaning it could take several years for a plant to be approved, constructed, and commissioned.

6.2 Levers and interventions

6.2.1 Avoidance and residual waste reduction

Education programs associated with reducing food waste, diversion of food and garden organics and improving returns in the kerbside recycling bin and providing more choice or separation opportunities for away from home recycling there is expected to be a knock-on effect on the residual waste bin.

6.2.2 Landfill levy and bans

The landfill levy rate is scheduled to increase with the prevailing rate of inflation over the forward estimated period. For residual waste, the levy rate is paid on all waste disposed of to landfill. As previously detailed within the region all Gympie Regional Council, North Burnett Regional Council and South Burnett Regional Council will receive 100% of the levy paid on household waste that goes to landfill as an advanced payment. The landfill levy liability, the difference between levy paid and annual advanced payment, will continue to reduce to 20% by FY30-31 increasing the operating cost of this service for Bundaberg Regional Council and Fraser Coast Regional Council, which is likely to need to be passed onto ratepayers. It is noted there is a commitment from the Queensland Government to review the annual advanced payment arrangements by 2025.

The introduction of landfill bans for additional materials will further support diversion from landfill and reduce the amount of residual waste generated. This work has not yet been completed by the Queensland Government, and implementation is likely to focus on materials that either pose an unacceptable risk when placed in landfill or where economically feasible recycling exists for a product.

6.2.3 Infrastructure – landfill capacity and new landfill

Landfill capacity is severely constrained for Gympie Regional Council, but generally not constrained within the broader region in the short-medium term. In the longer term if long-term landfill was the preferred solution, then additional capacity may need to be added as current approved and engineered cells are used up. The true cost of adding additional landfill capacity extends beyond solely traditional capital and operational expenditure, but into provisions for capping and closure, and long-term geotechnical and environmental monitoring for 20-25 years beyond exhausted airspace capacity. Where extension is not possible, the approvals process and cost of identifying a new site for a large-scale landfill can be significant.

Landfills are often cited as a major landfill gas emitter, however actions in the region removing a portion of the putrescible component may reduce these emissions. The traditional view is that energy recovery of material that otherwise would go to landfill would be environmentally beneficial however evidence from Scotland has cited the reducing emissions benefit of incineration (with energy recovery) technology that is processing a higher proportion of fossil fuel derived non-recyclable wastes (e.g., plastics)[53], particularly with the expected growth of alternative renewable energy sources in Queensland. It is noted however that Scotland has several operational EfW facilities and planning approvals in place for several further facilities, compared to the region which has none. The carbon benefits would need to be explored further in a life cycle assessment as part of a future business case.

6.2.4 Infrastructure – Energy recovery

The Queensland Waste Management and Resource Recovery Strategy places an emphasis on the waste hierarchy with energy recovery placed higher than landfill. **Table 23** presents summary information on potential energy recovery technology that could be deployed in the region.

Table 23 EfW technologies and options

Description	Combustion	Pyrolysis	Gasification	Processed Engineered Fuel or fuel substitute
Indicative capacity	50ktpa to 200ktpa plus	Range from 10ktpa to 70ktpa	Approx 50-100ktpa	Range from 50ktpa to 250ktpa
Process	Moving grate combustion technology with energy recovery	Thermal breakdown of waste in the absence of air.	Thermal breakdown & partial oxidation of waste under controlled oxygen environment	Development of fuel from waste
Suitable feedstock	Mixed residual waste with limits on certain materials	Single source feed-stock or PEF/RDF derived from MSW/C&I mixed waste that is homogenised and uniformly sized.	Requires pre-processing system to extract unsuitable materials (glass, inorganics, metals etc.,). Can target specific feedstocks at smaller scale. Some technologies use mixed waste feedstock.	Post-processed mixed waste targeting non-recyclable plastics, cardboard, paper, textiles, and waste timber.
Capital cost	$300M-$500M	$9M-$119M	$150M-$200M	$40M
Indicative gate fees	$140-$350 per tonne	$180-$300 per tonne	$180-$300 per tonne	$100-$200 per tonne
Output product	Electricity, heat, steam, metals	Biochar	Syngas converted to electricity	Engineered fuel
By products	Flue gas residues Incinerator bottom ash Fly ash	Bio-oil and syngas	Biochar / slag material Flu gas residues	Pre-processing wastes (i.e., rejected material)

[53] Scottish Government, 2022. Stop, Sort, Burn, Bury – incineration in the waste hierarchy: independent review, from https://www.gov.scot/publications/stop-sort-burn-bury-independent-review-role-incineration-waste-hierarchy-scotland/documents/

Description	Combustion	Pyrolysis	Gasification	Processed Engineered Fuel or fuel substitute
Environmental concerns or benefits	Would need to operate under EfW Policy and environmental limits Relatively large footprint Would require EIS	Pyrolysis is not harmful to the environment when it is done properly. Some reasons for pollution from pyrolysis include incomplete pyrolysis, no gas recycling, oxygen entry, improper feedstock, dangerous disposal of products and inappropriate storage and transport.	Limited emission as closed system. Emissions managed under EfW policy and environmental limits.	Greater proportion of residual waste goes to landfill. Can require long-distance transport Can offset use of fossil fuels (e.g., if burnt in cement kiln)
Community concerns or benefits	Untested in North Queensland. Would require long community interaction and strong social license.	Tyre pyrolysis has a poor compliance record with planning and EPA requirements in Victoria. In Queensland, a pyrolysis plant, treating tyres and plastics, is in the process of obtaining approval.	Typically deployed in smaller scale Plants. Larger Plants may have similar challenges to combustion	Generates a fuel product. Fuel may be utilised out of region
Technology certainty	Proven technology at large scale: smaller scale also proven internationally. By-products 20-25% of feedstock and require approved pathway for reuse.	Limited maturity. Largely unproven on mixed wastes such as un-treated residual MSW. There are no pyrolysis facilities or proposals for mixed waste in Australia.	Technology still developing, particularly at large scale. Some high profiles with facilities in Europe Unproven on required scale in Australia. Small scale deployment for specific wastes viable or can be deployed on mixed feedstock	Existing technology deployed in Australia servicing local and international markets. It is understood that Cement Australia has approved the use of PEF in the Gladstone Cement Kiln.

Note: Accurate costings would form part of detailed business case

Capital costs exclude site preparation, output product quality depends on quality of input. Detail based on benchmarking.

Whilst there is a clear acceptance of the role of energy from waste within Queensland, its deployment has been hindered to date by a lack of need (e.g., levy or other fiscal drivers, general availability of landfill airspace), or by a lack of community support. Key questions to be answered in the region in relation to EfW would be:

- Timeframes when an EfW facility is required to come online and expected benefits (compared to the modified current state) compared to landfilling. A life cycle analysis should be undertaken as part of business case development.
- The approach to be taken to engage with the community and broader stakeholder groups to develop a proposal that allows engages prior to key decisions being made and supports the community.
- The type of technology to be deployed.
- A solution for incinerator bottom ash allowing its safe and environmentally sound reuse and recycling, ideally within the region, would help support the development of future business cases. This will require liaison with the Queensland Government to facilitate through existing policy and legislation.

- The ownership and contracting approach for development of a facility. Typically, there would be some private sector interest in providing investment, alongside opportunities for co-ownership or even for Councils to own themselves, although this is likely undesirable.
- The cost and affordability of a long-term energy from waste facility warrants further scrutiny. Whilst there is a need to secure a long-term solution for how residual waste is managed, Councils will need to decide based on best value for their ratepayers.

Individually procured or delivered larger scale traditional EfW may be beyond even the largest Council within the region based on a current technology assessment. Smaller scale portable EfW is already deployed for processing of some specific wastes, such as tyres, however technology is still emerging, and cost-effectiveness and reliability may not be attractive at scale and by-products (e.g., biochar) remain challenging for reuse. Over the next several years this is expected to change, as technologies are proven to be operable and profitable for technology providers, which may present an alternative to conventional residual waste solutions.

6.3 Options considered

Major options considered for how residual waste is managed in the region are:

Table 24 Major residual waste decisions

Decision area	Business as usual	Options			Rationale
Short term residual capacity considerations	No action on existing capacity	No need for action	Individual council action	Immediate regional solution	In the immediate term Councils continue to manage their own landfill airspace. GRC has an immediate need.
Long term residual waste solution needed	Existing landfills manage residual waste	Do nothing	Individual council action	Develop long-term regional solution	Councils to work through individual solutions
Residual waste solution	Landfill	Extend existing landfills	Close smaller landfills and move to regional landfill	Develop energy from waste solution as a region	Councils to work together consider long-term regional landfill feasibility
Develop EfW solution in region	No current EfW	No action	Develop individual EfW solutions for Councils	Develop regional EfW solution	Councils decided there was no desire to have an EfW facility within the region.
Send residual waste to EfW	No waste sent to EfW	Do nothing	Send to regional EfW facility	Send out of region to EfW or PEF facility	Councils were of the view that some residual waste may be sent out of region to EfW facilities, or a PEF facility, once constructed (likely in SEQ) and operational.
Other problem wastes: timber, contaminated soil, PFAS etc.	Manage via existing arrangements (e.g., landfill)	Do nothing (BAU)	Develop individual council solutions	Develop regional solution to problem wastes	Regional collaboration to identify alternative management solutions or safe disposal options for range of problematic wastes or emerging contaminants within the region
Regional management plan for disaster wastes	Manage under existing arrangements	Do nothing (BAU	Councils develop individual solutions	Collaboration at regional scale to manage disaster wastes	No change in existing disaster waste management procedures

Cells in RED reflect decisions; BRC-Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council, SBRC-South Burnett Regional Council; ALL: Indicates collaborative activities for all councils to participate in.

6.3.1 Short term residual capacity considerations

In the short to medium term Councils will continue to manage their own landfill airspace. Where a Council will run out of landfill airspace before an alternative solution, whether at their own facility or at a regional scale is available, they may seek to transport residual waste to another facility out of LGA. This is an immediate action for Gympie Regional Council who are expected to run out of landfill capacity shortly. Others will run out of capacity in the short-medium term and need to seek alternative arrangements.

6.3.2 Deciding on a long-term residual waste solution

At a regional scale there may be a need to develop a collaborative long-term approach to residual waste management which could involve development of a long-term regional landfill facility. The decision is whether to send most residual waste to landfill over the medium and long-term, or to utilise energy from waste. Through development of the Plan, it was decided that Council led energy from waste facilities at large scale are unlikely to be developed in the region, however an alternative solution could be to utilise facilities out of region. As there are currently no facilities in development that can receive and process mixed MSW or C&I wastes, there is uncertainty over this option. Until such a facility is commissioned and contracted, Councils will need to continue to send their residual waste to landfill. Even if Councils decide to send waste out of region, long-term landfill capacity will need to be maintained in the region to manage lower volumes of residual waste.

Decisions to send waste out of region to EfW will be driven by commercial decisions associated with the differential between local disposal and gate fee plus transport cost for the receiving facility. It is also feasible that in the long-term smaller scale EfW technologies may emerge at a commercial scale locally that can provide a similar service for Council.

Councils also receive a significant portion of predominantly C&I waste that is disposed of to landfill. This material may also be targeted by EfW facility operators outside of the region. The diversion from Council facilities may drive a further reduction in residual waste managed by Councils pending commercial decisions by those collecting the C&I waste in the region.

6.3.3 Managing disaster waste

A long-term management approach to disaster waste within the region was identified as a collaborative opportunity for the region, however it was decided that there already sufficient processes in place to manage this, so no further action was identified.

6.3.4 Managing problem wastes

Additional to biosolids already identified, the region manages several other problematic residual wastes. This includes timber, contaminated soils, asbestos and material containing emerging contaminants. Councils will collaborate at a regional scale to develop solutions for these wastes and identify appropriate management fates.

6.4 Expected outcomes

Decisions supporting how residual waste is managed within the region could have a direct impact on households. The quantity and quality of residual waste is dependent on the avoidance and diversion activities undertaken in the region. Solutions and actions are not just around additional resource recovery, but also ensuring that there is sufficient residual treatment and disposal capacity in the region in the long-term to meet the needs of a growing population. Residual waste will continue to be sent to landfill.

6.4.1 Residual waste management - landfill

With landfill as the preferred solution for at least the next 10-years, capacity will need to be able to manage as a minimum 89,700 tonnes of residual MSW per year in FY30-31, 90,700 tonnes in FY40-41 and 95,000 tonnes by FY50-51, however across the region Councils also manage significant volumes of the C&I and C&D streams. Based on current proportions and a long-term forecast, Councils in the region will still need to manage 224,700 tonnes of residual waste per year by FY30-31 and potentially 250,000 tonnes by FY50-51. Additional capacity can be progressively added over time. If all residual waste continues to go to landfill, the resulting recovery rate in FY30-31 will be 59% with little change through to FY50-51. This recovery rate assumes improvements to organics recovery and material recovery as described in prior sections. **Figure 16** shows the forecast residual waste arisings under the landfill scenario (compared to the do nothing current residual scenario).

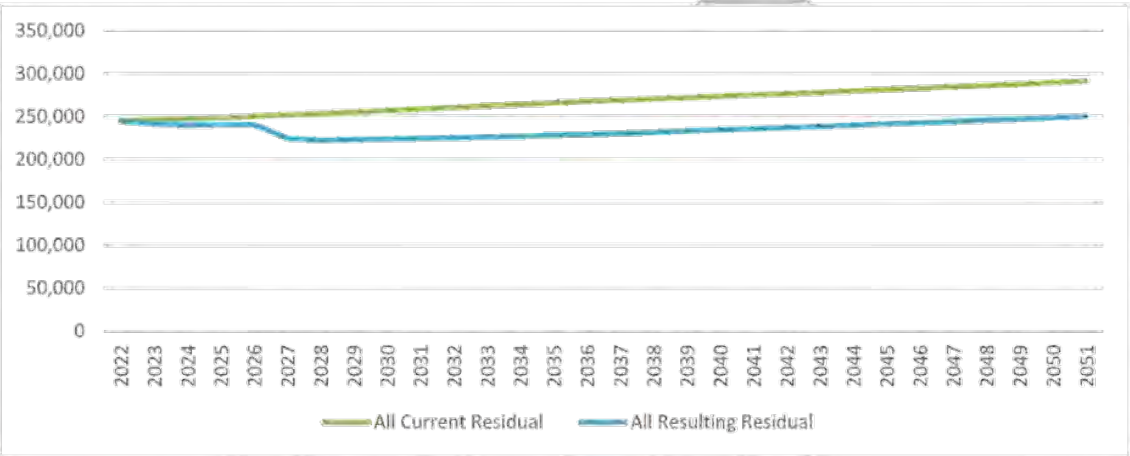


Figure 16 Forecast whole of region residual waste arisings (landfill scenario)

6.4.2 Sending waste out of region to future EfW facility

Under the assumption that an EfW facility will be established out of region that is commercially viable for Councils to utilise, by FY35-36, it is expected that a combination of MSW and C&I streams will be captured. If such a facility was available in proximity to the region it may target mixed C&D loads currently managed by Councils. Additionally, not all residual waste will be suitable for EfW such as asbestos and soils. The deployment of an EfW solution capturing residual waste from the region could significantly increase the regions resource recovery rate to an estimated 70% to 80%. There is uncertainty over how much residual waste would be sent under this scenario, however this is likely, under current policy and technology settings, the only pathway to the region getting close to the Queensland Government's resource recovery rate target of 90% by 2050. The impact on the MSW stream inclusive of kerbside and self-hauled waste is show on **Figure 17**.

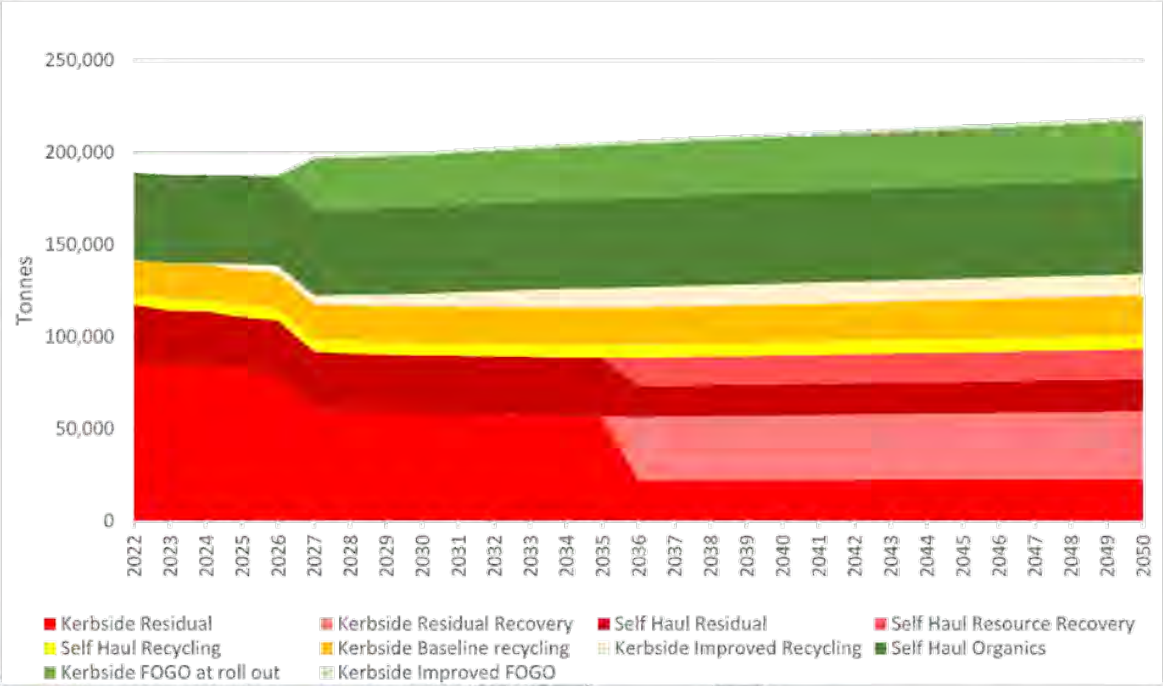


Figure 17 Forecast changes to MSW stream with energy recovery (out of region)

There is a high degree of uncertainty over the councils sending waste to EfW at this stage of Plan development, notably as facilities do not exist. Whilst it is likely they will be available in the future, it is unlikely this will be within the next 10-years, and so there is time for Councils to adapt to new facilities and technologies becoming commercially available. For all councils there would be little incentive to send waste to EfW unless commercially comparable to their own landfill costs. Even if EfW was utilised, it is estimated that Councils would still need to manage 40,000 tonnes of residual waste from the MSW stream per year from FY35-36. **Figure 18** shows that an estimated 125,000 tonnes of residual waste may still need to be managed in landfill, even if 80% of residual MSW and C&I waste from Bundaberg and Fraser Coast LGAs was sent to an EfW facility in FY35-36.

Figure 18 Impact on residual waste volumes if EfW is utilised

6.5 The cost of making the transition

For residual waste the solutions tested under economic analysis included sending residual waste via road to a hypothetical EfW facility utilising combustion technology on the northside of the Greater Brisbane Area. There is a general expectation that under current policy settings, the utilisation of EfW is more expensive than sending the same waste to landfill, even accounting for the cost of adding additional landfill airspace. The costs of implementing EfW were considered in the context of decisions made in relation to streams discussed in Section 4 and Section 5.

Costs included in the analysis include:

- Capital, operating and lifecycle costs – focussed predominantly on operating costs associated with paying a gate fee and any primary processing (e.g., bulking) associated with preparing waste for transport to an out-of-region EfW facility.
- Transport costs, including transport of bulked waste to hypothetical EfW facility in Brisbane.

Managing residual waste will cost more than the pre-FY22-23 levy settings for Bundaberg Regional Council and Fraser Coast Regional Council, regardless of preferred solution. For other leviable councils, it is assumed that costs will still be considered as business as usual, including the establishment of new landfill capacity. The following costs are identified depending on the solutions chosen:

- **Residual waste to landfill:** Under the current proposed levy settings, by FY30-31 the increased levy liability after improvements in organics diversion and recycling capture are expected to be **$2.7 million per year** for Bundaberg Regional Council and **$3.0 million per year** (in real terms) for Fraser Coast Regional Council if all resulting residual waste continues to be sent to Landfill. This amounts to an additional cost per household of $66-68 to account for the increased cost in landfill disposal allowing for a reduction in waste to landfill because of actions and interventions in this Plan. For the other levy paying councils in region the costs for sending waste to landfill are not forecast to increase above business-as-usual. Business as usual costs for new cell development, and for closing and rehabilitating former landfill may still be significant and require funding support.
- **Sending residual waste to an out-of-region combustion facility:** If a proportion of residual waste was sent to an energy from waste facility out of region, the indicative whole-of-life costs in modelled period for doing so are estimated to be **$92 million** (real cost, based on 2023 values) over the period FY35-36 to FY50-51. Councils would be a price taker, and largely these costs would be operational covering gate fee plus transport.[54] It is estimated that this might add an additional $130 per household per year considering the levy benefit of not sending this waste to landfill. The economic analysis assumes such a facility would not be operational until at FY35-36. There is a high-degree of uncertainty in the cost per household per year which depends on the procurement approach, and, assuming a private-sector owned facility, the expected gate fee. Consideration of saved landfill airspace also significantly affects the overall cost. All of these will require detailed consideration as the as a potential solution becomes available.

[54] Note the CBA covers the 30-year period of the Plan however an EfW solution is not expected to be operational until halfway through this period (assumed in FY35-36), and as such costs are not necessarily indicative of full solution costs. Cost per household per year above sending the same waste to landfill may be more beneficial.

6.6 Timeframes for delivery

The timeframes for delivery of the residual waste component of the plan require the development or continuation of work to identify the feasibility and required timings for a solution to be in place. Long-term residual solutions are not required immediately, but the establishment of new landfill capacity or EfW could take several years to progress from inception to commissioning. **Table 25** summarises proposed timeframes for managing the residual waste stream.

Table 25 Residual Waste Stream implementation timeframes

Immediate action (within next 2 years)	Within next 5 years	Within next 10 years
ALL: Ongoing management of own councils landfill requirements	ALL: Ongoing management of own councils landfill requirements	ALL: Ongoing management of own councils landfill requirements
	ALL: Collaborate on the development of long-term approaches to managing problematic and emerging wastes, including contaminated soils, asbestos, PFAS containing materials and biosolids.	
	ALL: Develop long-term solution for regional infrastructure including either a regional landfill or sending waste out of region for energy recovery, progressing from feasibility study to business case.	ALL: Construct and commission long-term infrastructure solution including provision of bulking facilities where out of LGA residual waste transport is required.

Cells in grey indicate action not expected to commence during the timeframe.

6.7 Supporting the change

There is a clear choice to be made between the most economically beneficial approach to residual waste management in the region, whether acceptance of long-term landfill or the development of a long-term energy from waste solution. The latter will still require long-term landfill airspace, however significantly less. To support the definition of the future state for residual waste:

- **Long term strategic planning requires support:** A long-term residual waste strategy for the Wide Bay Burnett region should be developed in collaboration. This could be expanded to incorporate neighbouring Councils or regions to identify potential scale and transport costs. This strategy should identify and work in partnership with industry to identify feasible solutions but also expected costs versus the need to ensure residual landfill capacity is available beyond currently approved capacities.
- **Levy clarity supports planning beyond the next 10-years:** long term certainty of the waste levy rate and annual advanced payment is required. For residual waste that goes to landfill, where there are no other options, there is little benefit of applying a waste disposal levy other than to raise revenue as further diversion has been proven to be unachievable without an unreasonable cost burden on households and industry.

7 Implementing the Plan

The previous sections have identified current issues and opportunities and developed a series of preferred actions and approaches for how waste and resource recovery is managed in the Wide Bay Burnett Region.

7.1 Key actions & collaborations

This Plan has been developed to identify areas for Councils within the WBB region to collaborate on in the delivery of waste services, as well as to identify and accept individual Council actions and decisions. To support development of this Plan, the region has utilised a collaborative approach to strategy development and implementation by establishing a specific working group. Due to the varied economic and geographical conditions in the region agreement has been reached on the actions for regional collaboration and for individual council action.

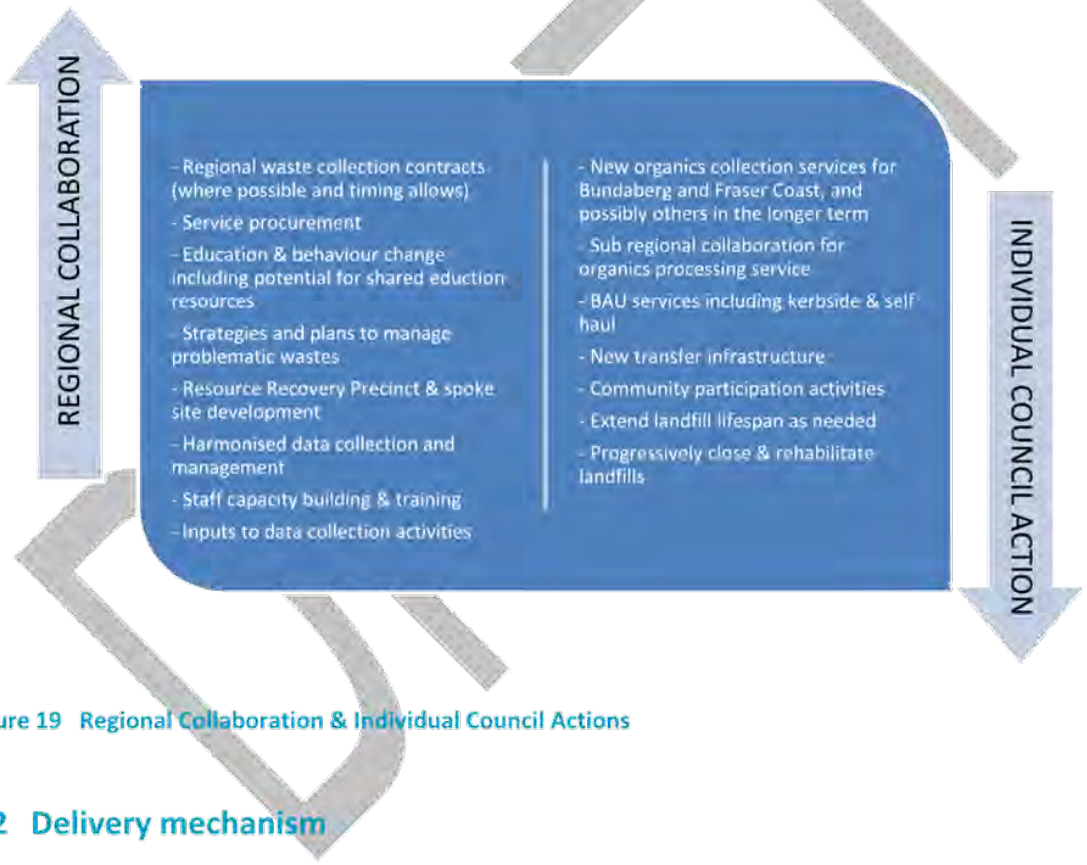


Figure 19 Regional Collaboration & Individual Council Actions

7.2 Delivery mechanism

The Plan will be delivered by the region via the establishment of a Resource Recovery Working Group which will be formalised by member councils. The structure of a steering group and working group and its functionality has been endorsed by member councils. **Figure 23** provides a schematic of the proposed governance structure and function.

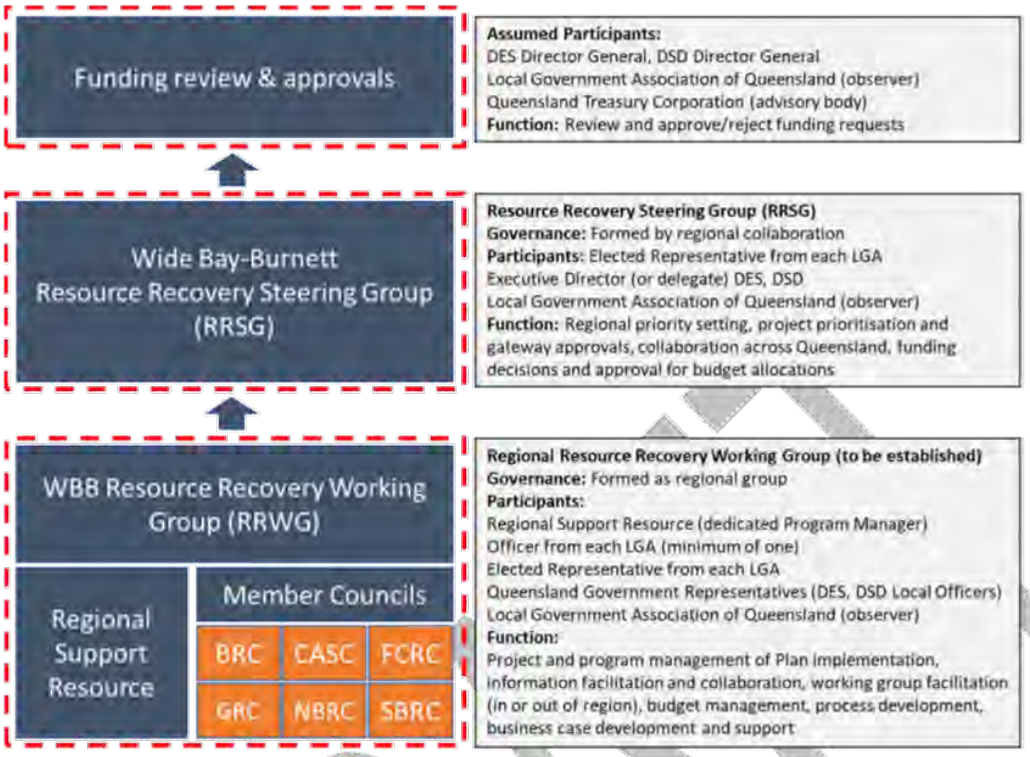


Figure 20 Governance and collaboration structure for implementation

7.2.1 Regional Working Group

Strategic ownership of this Plan and the underlying actions sit with the member councils. A Waste and Resource Recovery Working Group will be formalised to deliver the Plan. This will need to be established as the first action in implementing the Plan, including establishing terms of reference, participation expectations and implementation goals. This group will have responsibility to steer the outcomes of the region in resource recovery and recycling, including the following activities:

- Ownership, monitoring, and review of the WBB Regional Waste and Resource Recovery Plan
- Support identification and priorities (as per the RWRRP) as they require decisions for funding from the Queensland Government decision making body
- Access support via a regional resource or centralised function for administration, funding, and development of supporting documentation and access to shared information.
- Collaboration on:
  - Education and behavioural change, including a regional Strategy
  - Data harmonisation, management, and reporting
  - Capacity building and education for resource recovery staff
  - Establishment of circular economy community initiatives such as repair cafes or hubs, community composting, tool libraries

- Development of feasibility studies, business cases and other research activities relating to progressing regional solutions that benefit Councils in the long-term

The Queensland Government would be required to facilitate a coordinator for the established group to manage collaboration, progress against the plan and generally be a champion for collaborative actions across the region. One full-time equivalent resource will be included as part of Plan Implementation to coordinate the regional plan response and act as secretariat to the group.

Whilst detail will be developed as part of the terms of reference. Implementation of the Plan including an allowance for Council Officer time (above existing commitments), and a project or program manager is likely to be approximately **$0.3 million per year**. The majority of this is for new staff requirements to implement the Plan.

7.2.2 Regional Procurement

Where the working group progress actions that will require the contracting (of more than one Council) of a service provider consideration of setting up a separate regional procurement entity would be advantageous. It is noted that the current model by Councils (with one Council leading procurement but each Council signing an individual contract) may continue to be the preferred approach. The actions that potentially would require either approach are:

- Procurement of technical or commercial advisory services relating to research and development
- Regional scale contracts for waste audit, surveys, software
- Development of a new contract(s) for kerbside recycling collections and processing
- Development of a long-term regional residual waste solution(s) or other problem wastes

For some elements of regional scale procurement at a regional scale (notably long-term contracts for collection or post-collections services) it is expected that the entity would need to have authorisation from the Australian Consumer and Competition Commission (ACCC) to collectively procure.

7.2.3 Support for delivery

To support the execution of the regional plan, and the development of detailed business cases, procurement and contract development activities support will be required. It is understood that this function will be developed and funded by the Queensland Government, for which details are currently being finalised. This function will support:

- Governance and management system development for implementation of projects
- Project Management and scheduling associated with development of key initiatives.
- Non-technical support to development of business cases and funding plans for key initiatives
- Support with preparation of information to support funding applications specific to the gateway processes setup by the Queensland or Commonwealth Government
- Support the coordination of the monitoring, evaluation and reporting requirements arising from the implementation of the plan

7.3 Implementation Plan

An implementation schematic, bringing together the details of this Plan and timeframes for implementation has been developed as presented in **Table 26**.

While the regional waste management plan provides the primary vehicle for accessing available funding from the Recycling and Jobs Fund, there may also be opportunities for initiatives to be funded that are outside the plan. For example, a pilot at a local level to 'test' the suitability of a model or infrastructure for the region (or sub-region). It is recognised that the plan needs to be a living document and that not all potential initiatives will have been identified in the plan.

However, it is expected that the bulk of the funding will come through the projects identified in the plan with a more streamlined pathway for funding approvals as it has already been identified in the plan. In the first instance any projects identified that are outside the plan would likely be discussed with the regional working and steering groups and the proposed regional support resource position that will be funded to support implementation of the plan, to assess suitability for funding under the plan or whether this would be considered under a separate funding process.

Councils, in participating in the development of this plan and subsequent endorsement of or support for its finalisation and publication, can do so in the knowledge that this consideration does not obligate individual Councils to any funding commitment. Subsequent business cases developed as part of implementing the plan and implementation decisions made by the region for implementing the plan would normally include that detail.

Table 26 Implementation Schematic

Action	Responsibility	Next 2 years			Within next 5 years			Within next 10 years					To 2040	To 2050
General														
Establish regional waste working group to implement Plan	All													
Program management	RWWG													
Regional collaboration (e.g., RRWG meetings, action management, etc.)	RWWG, All													
Organic Waste Management														
Participate in Education and Behaviour Change Initiative (assumed continuation) as part of regional education strategy – incorporating a food waste avoidance component	All													
Review potential for behaviour change regulation (new services)	BRC, FCRC													
Roll out of at-home composting solutions	QGOV													
Develop business case for organics collection service for council approval including refinement of market price for recycled organics	BRC, FCRC													
Commence new organic waste collection service education	BRC, FCRC													
Procurement of organic waste collection solution	BRC, FCRC													
Procurement of organic waste processing solution	BRC, FCRC													
Commence and operate kerbside organic waste collection service (pending individual council approval)	BRC, FCRC													
Continuation of self-haul green waste receipt and processing	All													
Roll out of community composting solutions including guidance	QGOV													
Collaborate on regional solution for finding highest value market for green waste across region	RWWG													
Develop regional solution for biosolids and timber	RWWG													
Develop pathway to improve non-Council held data collection	QGOV, All													
Material Recycling & Recovery														
Participate in Education and Behaviour Change Initiative (assumed continuation) and develop regional education strategy, implement	RWWG, All													
Review & agree pathway for improved enforcement activity for poor household behaviours in kerbside bin service provision, and implement	RWWG, All													
Seek opportunities to collaborate on regional collections approach when contracts allow	RWWG													
Develop business case, designs for new or improved transfer facilities	All (as required)													
Construct and commission upgrades or new transfer facilities	All (as required)													
Collaborate on establishment of regional scale precinct and ancillary satellite sites in accordance with precinct guidelines	RWWG, All													
Construct enabling infrastructure for precinct	QGOV													
Establish new resource recovery processing facilities within precinct	GGOV, All support													
Work with Queensland Government agencies to improve uptake or recycled materials in procurement	QGOC, All RWWG													
Develop pathway to improve material flow data and knowledge across region for recyclable material	QGOV, All													

Action	Responsibility	Next 2 years			Within next 5 years			Within next 10 years						To 2040	To 2050
Collaborate to collect data on contamination within kerbside bins to improve education approach.	RWWG, All														
Residual Waste Management															
Councils to consider individual landfill capacity needs in short-medium and long-term	All														
Consider long-term options and approach to managing residual waste in the long-term, pending availability of facilities out of region	RWWG, All														
Develop long-term approach to managing problem and emerging wastes	All														

Notes: BRC-Bundaberg Regional Council, Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council, SBRC-South Burnett Regional Council; ALL: Indicates collaborative activities for all councils to participate in.

7.4 Roles and responsibilities

It is assumed that the region will establish a resource recovery working group who will overall ownership of the Plan. Roles and responsibilities for implementation of the Plan sit with individual councils collaborating under the RWWG. A RACI (responsible, accountable, consulted, informed) matrix has been developed to describe the participation of various stakeholders in delivering the regional plan. It is expected that this matrix is updated as implementation of the Plan progresses by the RWWG.

The definitions adopted for the RACI matrix are in **Table 27**, with the matrix presented in **Table 28**.

Table 27 RACI definitions

Item	Definition	Abbreviation
Responsible	Entity responsible for completing the work associated with the action/task, may be split across multiple entities	R
Accountable	Entity responsible for signing off/approving the outcome of the task. May reside with Councils to sign off, or with funding entities or gateway approvals to sign off.	A
Consulted	Provides input into the delivery of the task/action based on their specialist knowledge or experience.	C
Informed	Important to keep stakeholders engaged/informed as an activity progresses or decisions are made.	I
Where required	Identifies where RACI action will sit if the activity is required. This may denote an activity where Council in the future decides to progress a particular option	*
Not required	Specific to decisions made in this Plan, to complete the RACI, not required is applied to stakeholders who do not have role in addressing specific tasks or actions.	NR

Table 28 RACI Chart – Plan Implementation

Action	RACI											
	QGOV (DES)	QGOV (DSD)	Project & Funding Support Function	RRWG	Bundaberg Regional Council	Cherbourg Aboriginal Shire Council	Fraser Coast Regional Council	Gympie Regional Council	North Burnett Regional Council	South Burnett Regional Council	Industry
General Actions											
Establish regional waste working group to implement Plan	C	C	I	NR	A	A	A	A	A	A	I
Program management	C	C	I	A	R	R	R	R	R	R	NR
Regional collaboration (e.g., RRWG meetings, action management, etc.)	C	C	I	R	A	A	A	A	A	A	C
Liaison with State Agencies, PMO, industry	C	C	I	A	R	R	R	R	R	R	C
Organic Waste Management											
Participate in Education and Behaviour Change Initiative (assumed continuation) as part of regional education strategy – incorporating a food waste avoidance component	A	I	NR	R	R	R*	R	R	R	NR	A
Review potential for behaviour change regulation (new services)	C	I	NR	I	A/R	I	A/R	I	I	I	C
Roll out of at-home composting solutions	A/R	I	I	C	I	I	I	I	I	I	I
Develop business case for organics collection service for council approval including refinement of market price for recycled organics	C	C	C	I	A/R	I	A/R	I	I	I	C
Commence new organic waste collection service education	I	I	I	I	A/R	I	A/R	I	I	I	I
Procurement of organic waste collection solution	I	I	C	I	A/R	I	A/R	I	I	I	C
Procurement of organic waste processing solution	I	I	C	I	A/R	I	A/R	I	I	I	C
Commence and operate kerbside organic waste collection service (pending individual council approval)	I	I	C	I	A/R	I	A/R	I	I	I	R
Continuation of self-haul green waste receipt and processing	I	I	NR	I	A/R	A/R*	A/R	A/R	A/R	A/R	NR
Roll out of community composting solutions including guidance	A/R	I	NR	I	R	R	R	R	R	R	NR
Collaborate on regional solution for finding highest value market for green waste across region	C	C	NR	R	A	A*	A	A	A	C	C
Develop regional solution for biosolids and timber	I	C	I	R	A	A*	A	A	A	C	I
Develop pathway to improve non-Council held data collection	A	C	NR	R	C	C	C	C	C	C	A
Material recycling and recovery											
Participate in Education and Behaviour Change Initiative (assumed continuation) and develop regional education strategy, implement	R	I	C	I	A	A	A	A	A	A	NR
Review & agree pathway for improved enforcement activity for poor household behaviours in kerbside bin service provision, and implement	A/R	I	I	I	A/R	A/R	A/R	A/R	I	A/R	C
Seek opportunities to collaborate on regional collections approach when contracts allow	C	C	C	I	A	A	A	A	A	A	C
Develop business case, designs for new or improved transfer facilities	C	I	C	I	A*	A*	A*	A*	A*	A*	I
Construct and commission upgrades or new transfer facilities	C	I	C	I	A*	A*	A*	A*	A*	A*	I

Action	RACI										
	QGOV (DES)	QGOV (DSD)	Project & Funding Support Function	RRWC	Bundaberg Regional Council	Cherbourg Aboriginal Shire Council	Fraser Coast Regional Council	Gympie Regional Council	North Burnett Regional Council	South Burnett Regional Council	Industry
Collaborate on establishment of regional scale precinct and ancillary satellite sites in accordance with precinct guidelines	C	A	C	R	R	R	R	R	R	R	C
Construct enabling infrastructure for precinct	C	A/R	A	I	I	I	I	I	I	I	C
Establish new resource recovery processing facilities within precinct	C	A/R	A	I	C*	C*	C*	C*	C*	C*	R
Work with Queensland Government agencies to improve uptake or recycled materials in procurement	A	A	I	I	R	R	R	R	R	R	C
Develop pathway to improve material flow data and knowledge across region for recyclable material	A	C	NR	R	C	C	C	C	C	C	C
Collaborate to collect data on contamination within kerbside bins to improve education approach.	C	I	NR	R	A*	A*	A*	A*	A*	A*	NR
Residual waste management											
Councils to consider individual landfill capacity needs in short-medium and long-term	I	I	NR	I	A/R*	A/R*	A/R*	A/R*	A/R*	A/R*	NR
Consider long-term options and approach to managing residual waste in the long-term, pending availability of facilities out of region	C	C	C	I	A/R*	A/R*	A/R*	A/R*	A/R*	A/R*	C
Develop long-term approach to managing problem and emerging wastes	C	I	NR	R	A/R*	A/R*	A/R*	A/R*	A/R*	A/R*	C

Responsibility highlighted in BLUE indicates owner(s) of the activity.

7.5 Cost estimate

A high-level cost estimate for implementation of this Plan has been developed for the period between FY23-24 (year 1) through to FY30-31 (the year to which regulated changes to the AAP has been forecast). Costs should be assumed with a level of accuracy than p50 be considered indicative, and subject to change as Plans are refined and the level of funding available is confirmed. The estimated cost for implementation (excluding residual waste management) is **$84 million** over the period FY30-31. A breakdown is presented in **Appendix D**.

7.6 Funding

Funding needs to support implementation of the preferred option has been identified within Sections 4-6 as specific to initiatives across each stream. The following summarises prospective funding sources.

7.6.1 Local Government funding & financing

Local government can fund the provision of resource recovery infrastructure and initiatives through Council revenue, which is primarily derived from municipal rates, other duties and charges, or transfers from Federal and State Governments. Depending on the population size, Local Governments often have limited resources to directly support capital investment in resource recovery infrastructure and initiatives.

7.6.2 Private sector funding & financing

The significant capital costs to construct and deliver the packages suggests that co-funding with non-government organisations and private sector proponents may be viable. The private sector can participate in a variety of capacities, from concept and design, to construction, operations, and maintenance. They can also provide financing to a greater capacity than the public sector and relieve Local Governments of borrowing constraints. However, by assuming financial risk in the proposed project, the private sector will require confidence in an expected return. The private sector will typically be involved in two ways – a traditional public-private partnership (PPP) model, or through complete ownership of the process and operations. Local Government may attract private sector investment by providing land, concessions, guaranteed feedstocks, or product offtake agreements. Private funding is most likely to be sought for options that incur high capital costs such as anaerobic digestions or an energy from waste facility, or for facilities where private sector expertise and innovation are critical.

7.6.3 State Government funding - Annual Advanced Payment for Local Governments

The forward estimates for the period to FY25-26 has resulted in the payment of $40.95 million to the region in annual advanced payments. Cherbourg Aboriginal Shire Council sits outside the levy zone and has not received annual advanced payments. For Gympie Regional Council, North Burnett Regional Council and South Burnett Regional Council these payments are expected to be used to offset the amount paid on the levy to avoid passing those costs on to households. As they are based on forecast from previous years landfilled amounts it is feasible that the amount may vary and be less (or more) than paid. For Bundaberg Regional Council and Fraser Coast Regional Council, who have received around $13 million each, their landfill levy liability is expected to be significantly higher than this amount over the same period and growing significantly beyond in the regulated period to FY30-31. On this basis the benefit from the annual advanced payments in terms of funding additional resource recovery activities in the region is likely to be marginal as it will go to offset the gap between annual advanced payment and levy liability.

Annual advanced payments form part of the Queensland Governments $2.1 billion waste and recycling package, which includes the $1.1 billion jobs and recycling fund. This funding, allocated over a 10-year period to FY30-31 is identified as the funding mechanism to implement this Plan. Some funding has already been announced; however, it is intended that this Plan will help to shape funding required for the Wide Bay Burnett region. This includes one-off-costs to make transitions (e.g., the cost of FOGO bins) plus longer-term funding support.

7.6.4 State Government funding – Infrastructure

Funding from the State Government typically occurs in the form of direct investments, grants, and subsidies. The State may provide cash transfers to local governments, direct investments in projects, or offer low-interest loans.

Queensland Treasury Corporation (QTC) is the central financing authority for the Queensland Government and provides financial resources and services to the State. Typically, QTC does not provide project-specific funding for Local Councils so Councils should seek resource recovery infrastructure funding from QTC as part of their annual funding request (i.e., whole of Council funding). There may be potential for a group of Councils to set up a special purpose vehicle (SPV) to request funding for a specific project as a group, however, there is no precedent for this.

Access to grant funding from the State typically requires the proponent and the project to meet a certain set of criteria which may include funding requirement, potential economic impact, location, partnership arrangements with the private sector and several other factors. Relevant to Councils, grant funding may be dependent on the location and scale of the proposed infrastructure. Resource recovery facilities in larger LGAs are likely be self-sufficient owing to the expected scale and output of the facility and therefore may not require grant funding. However, small facilities may rely more on grants and transfers from the State as their revenue may be uncertain and slow to achieve.

The Federal Government may be able to fund the delivery of the project however, the benefits for the broader Australian economy would need to be explicitly demonstrated. A concessional loan from facilities such as Northern Australia Infrastructure Facility (NAIF) or the Clean Energy Finance Corporation (CEFC) may be appropriate as these loans can be offered below the market rate of interest and often provide other benefits such as long payback periods, grace periods in which only interest or service fees are due, and interest holidays.

Public funding may be used for low to medium technology options, such as organics composting (e.g., open windrow or similar), local community solutions including community composting and repair hubs, funding for education and landfill expansion.

7.6.5 Government funding – Subsidising & supporting new systems

Financial mechanisms for resource recovery operations vary widely however, operational expenditures must be financially self-sustaining. There are recent and relevant examples of failed resource recovery projects in Queensland that utilised grant funding for capital expenditure however, ultimately collapsed due to the inability of the owner to support operational costs. Operational expenditures can be managed through traditional methods of improving businesses' processes and maximising revenue streams, including gate fees, and selling products such as compost.

Australian Carbon Credit Units (ACCUs) may also be utilised to secure ongoing financing. ACCUs are a financial instrument awarded to eligible energy efficiency, renewable energy generation and carbon sequestration projects that result in a reduction of greenhouse gas (GHG) emissions. One ACCU represents the avoidance or removal of one tonne of carbon dioxide equivalent GHG. CCUs are a financial product that can reduce the total capital expenditure for an emissions reduction project. ACCUs are traded or sold on the national environmental commodity market, through carbon market agents, to organisations looking to offset their carbon footprint or meet emissions reduction obligations. ACCUs are also purchased by the Federal Government in a commitment to decarbonise Australia's economy through emission reduction projects.

7.6.6 Government funding – non-infrastructure

Through the delivery of grant programs additional funding may be provided by the Queensland or Commonwealth Governments to support non-infrastructure solutions. These include education, such as the already commenced support program for improving kerbside behaviour support, or the roll out of love-food-hate-waste education packages. These programs should be developed to account for the non-infrastructure interventions presented in this Plan to support participation and education activities across the region.

7.7 Managing change

It is expected that the economic, environmental, and technical assumptions that this Plan is based on will change over the next 10-years, as documented in the individual stream sections. It is important that in implementing the Plan, the RWWG is aware of and able to respond or react to disruptions caused by policy change, industry, or technology. The biggest potential disruptors are:

- Changes to the levy rate (beyond the forecast CPI increases) and annual advanced payments (beyond the current state) – the potential introduction of a reduction in annual advanced payments to those Councils in the region who currently receive the full levy amount returned. Even the gradual reduction in payment would likely increase the cost of waste management for ratepayers within these Councils whilst adding limited resource recovery or other benefits.
- Policy changes imposed by the Queensland Government or Commonwealth Government that have a direct impact on the services provided by Councils (e.g., the introduction of landfill disposal bans or mandatory collections).
- Changes to the composition of waste within household and other streams due to action taken by the Commonwealth Government on imported materials.
- The change in packaging materials, particularly an increase in the type of packaging used to favour a greater proportion of recyclable packaging.
- The development of new technologies, or the establishment in Australia of technologies that are more commonly deployed elsewhere in the world (e.g., proven small-scale EfW technologies or anaerobic digestion).

7.8 Monitoring and review

Responsibility for monitoring of this Plan will reside with member Councils under the overall leadership of the WBB Region. It is expected that Plan implementation will reside with the RRWG under the WBB Region. Key metrics to be monitored area:

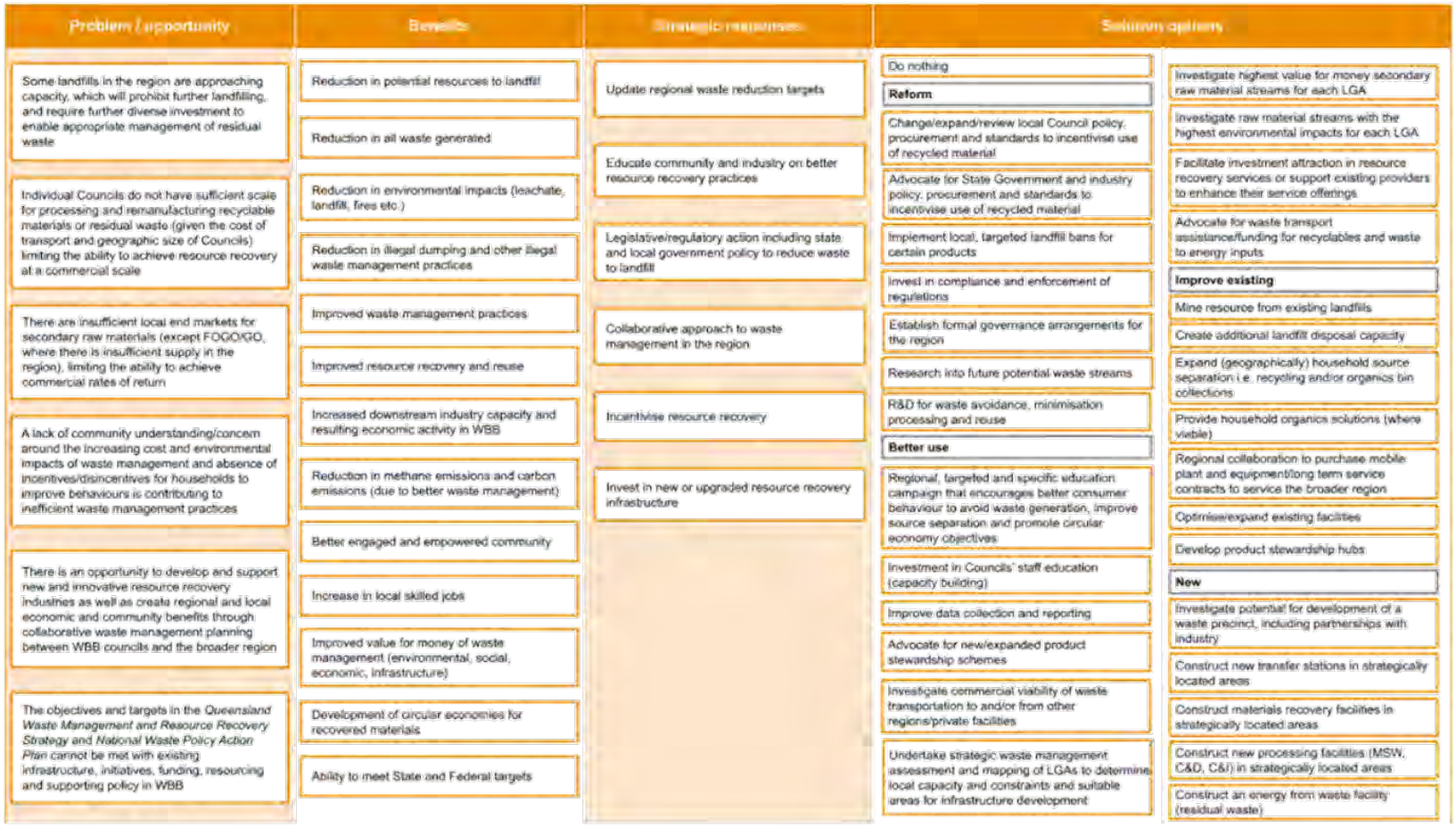
Table 29 Monitoring parameters

Criteria	Measurement	Rationale
Establish a regional delivery mechanism to support Plan implementation	Mechanism in place by 31 Dec 2023	To facilitate implementation of the regional Plan a mechanism should be formalised and in place by 31 December 2023 to maintain momentum.
Action tracking and accountability	Working group develops action tracking register with specific dates for action of key players. Project Management tracking against actions. Quarterly updates reported back to Councils.	The implementation of the Plan has a series of actions, and sub actions to deliver. These actions require allocation to specific Councils or other actors (e.g., State Government) who should be held to account. Project Management reports should be prepared Quarterly to track progress and correct delays.
Regional Targets		
Contamination percentage in comingled kerbside recycling	Measurement of contamination via standard methodology reported at least annually	To measure impact of behaviour, change program in achieving target of <5% contamination.
Regional resource recovery target (all streams)	Current: 52% 2030: 59% 2040: 65%	To measure long term progress and commitments under Plan to achieving regionally specific resource recovery target rates. This assumes that organics divers on commences in Bundaberg and Fraser Coast prior to 2030.
Organics specific targets		
Regional organics diversion target (kerbside household organic waste)	Current: 0% 2030: 24% 2040: 30%	This Plan sets out the potential for organics diversion rates for kerbside organic waste.
Organics collection contamination rate	Current: Baseline to be established 2030: <5% 2040: <5%	Where service provided, data will be collected on contamination rates as a proxy for effectiveness of education and awareness campaigns.
Kerbside recycling specific targets		
Regional kerbside recycling diversion target (excluding organic waste)	Current: 19% 2030: 25% 2040: 27%	Diversion rate to increase because of education but excluding organic waste diversion. Measured by Council data records, annual returns.
Kerbside recycling tonnes (material collected at the kerbside sent for recycling)	Current: 19,478 tonnes 2030: 28,500 tonnes 2040: 33,000 tonnes	Target takes account of increased population but also improved capture of material from the residual bin (plus recently introduced service in South Burnett)
Regional kerbside recycling contamination rate	Current: 16-18% 2030: <5% 2040: <2%	Contamination rate to be measured through audits undertaken by participating Councils.
Residual waste monitoring		

Criteria	Measurement	Rationale
Collect data on type and management fate of residual waste	No specific target	As a function of other streams, the regional should continue to monitor how residual waste is managed to facilitate future opportunity development. Revisit relevance of targets if long-term solution is developed.

Appendix A:

Investment Logic Mapping & Strategic Rationale Outcome


Problem / opportunity
Some landfills in the region are approaching capacity, which will prohibit further landfilling, and require further diverse investment to enable appropriate management of residual waste
Individual Councils do not have sufficient scale for processing and remanufacturing recyclable materials or residual waste (given the cost of transport and geographic size of Councils) limiting the ability to achieve resource recovery at a commercial scale
There are insufficient local end markets for secondary raw materials (except FOGO/GO, where there is insufficient supply in the region), limiting the ability to achieve commercial rates of return
A lack of community understanding/concern around the increasing cost and environmental impacts of waste management and absence of incentives/disincentives for households to improve behaviours is contributing to inefficient waste management practices
There is an opportunity to develop and support new and innovative resource recovery industries as well as create regional and local economic and community benefits through collaborative waste management planning between WBB councils and the broader region
The objectives and targets in the Queensland Waste Management and Resource Recovery Strategy and National Waste Policy Action Plan cannot be met with existing infrastructure, initiatives, funding, resourcing and supporting policy in WBB
Benefits
Reduction in potential resources to landfill
Reduction in all waste generated
Reduction in environmental impacts (leachate, landfill, fires etc.)
Reduction in illegal dumping and other illegal waste management practices
Improved waste management practices
Improved resource recovery and reuse
Increased downstream industry capacity and resulting economic activity in WBB
Reduction in methane emissions and carbon emissions (due to better waste management)
Better engaged and empowered community
Increase in local skilled jobs
Improved value for money of waste management (environmental, social, economic, infrastructure)
Development of circular economies for recovered materials
Ability to meet State and Federal targets
Strategic responses
Update regional waste reduction targets
Educate community and industry on better resource recovery practices
Legislative/regulatory action including state and local government policy to reduce waste to landfill
Collaborative approach to waste management in the region
Incentivise resource recovery
Invest in new or upgraded resource recovery infrastructure
Solution options
Do nothing
Reform
Change/expand/review local Council policy, procurement and standards to incentivise use of recycled material
Advocate for State Government and industry policy, procurement and standards to incentivise use of recycled material
Implement local, targeted landfill bans for certain products
Invest in compliance and enforcement of regulations
Establish formal governance arrangements for the region
Research into future potential waste streams
R&D for waste avoidance, minimisation processing and reuse
Better use
Regional, targeted and specific education campaign that encourages better consumer behaviour to avoid waste generation, improve source separation and promote circular economy objectives
Investment in Councils' staff education (capacity building)
Improve data collection and reporting
Advocate for new/expanded product stewardship schemes
Investigate commercial viability of waste transportation to and/or from other regions/private facilities
Undertake strategic waste management assessment and mapping of LGAs to determine local capacity and constraints and suitable areas for infrastructure development
Investigate highest value for money secondary raw material streams for each LGA
Investigate raw material streams with the highest environmental impacts for each LGA
Facilitate investment attraction in resource recovery services or support existing providers to enhance their service offerings
Advocate for waste transport assistance/funding for recyclables and waste to energy inputs
Improve existing
Mine resource from existing landfills
Create additional landfill disposal capacity
Expand (geographically) household source separation i.e. recycling and/or organics bin collections
Provide household organics solutions (where viable)
Regional collaboration to purchase mobile plant and equipment/long term service contracts to service the broader region
Optimise/expand existing facilities
Develop product stewardship hubs
New
Investigate potential for development of a waste precinct, including partnerships with industry
Construct new transfer stations in strategically located areas
Construct materials recovery facilities in strategically located areas
Construct new processing facilities (MSW, C&D, C&I) in strategically located areas
Construct an energy from waste facility (residual waste)

Appendix B:

Waste Flow Model Assumptions

B1 Modelling Methodology

The following works have been undertaken:

Step 1 - Data Request

- Prepared and issued formal data requests to each Local Government Area (LGA)

Step 2 - Review of Information

Review of available information including:

- Suitability for use / data quality
- Data type (arisings, infrastructure, materials/service, and cost factors).
- Completion of data gap analysis
- Review of future policy and legislative requirements

Step 3 – Stakeholder Engagement

- Attended initial project inception meeting with the working group established by councils to develop the Regional Waste and Resource Recovery Plan
- Developed baseline status and forecasting for inclusion in WBB Interim Report
- Undertook Options Assessment and Multi Criteria Analysis (MCA) Workshop with key LGA stakeholders to discuss findings of WBB Interim Report.
- Additional follow up sessions with relevant LGAs and Department of Environment and Science (DES) to validate data / address identified data gaps provided to inform waste flow forecasting.

Step 4 - Modelling

- Develop forecast scenarios to analyse variation of generation rates, recovery rates, processing, and landfill demand scenarios for different waste streams
- Develop predictive scenarios based on population change within the region

B2 Data sources

The following State-wide primary data sets reviewed during the development of this model include:

- Queensland Waste Data Survey (QWDS) – Waste Arisings
- Queensland Waste Resource Recovery Infrastructure Report (QWRRIR) – Waste Infrastructure
- Recycling and Waste Collection Options Tool (RAWCOT) – Waste Materials/Service

In addition, the following WBB specific data sets were reviewed such as local waste audits / independent studies not captured under the above as summarised below:

- Council responses to the DES Annual Waste Data Survey
- Council data provided for the Queensland Waste and Resource Recovery Infrastructure Report (2019)
- Council waste management strategy, operational planning, and reporting documents
- Council infrastructure data including remaining airspace
- Council waste site and facility statistics
- Australian Bureau of Statistics government population and householder forecasts
- Studies, business cases and other documentation prepared at a council or regional scale to inform the development of new or optimised services for collection or post-collection
- Workshops, interviews and discussion with regional working groups, councils, mayors, CEOs, councillors, economic development, waste management.

A full list of data sources used is presented in **Table C1** below.

Table B1 Data sources

Title / Dataset	Date	Provided by	Summary
2015-16 WBBROC_Regional_Waste_Strategy_Final	2015-20	WBBROC	regional waste strategy
20171101 ATCW COM Transport Analysis	11/1/2017	ATC Williams	Transport Analysis – Centre of Mass
20171101 Figure 1 - haulage routes	2017	ATC Williams	regional waste transport network infrastructure map
2021_22_23 Annual Tonnage and Levy Liability (A5833502)	2019-2023	WBBROC	annual tonnage data
2022 Forecast Life of Landfills	2022	WBBROC	forecast life of landfills
620.31107-WBB-RWMP-RFI-01	5-Aug-22	WBBROC	RFI on WtE feasibility study 2020
AECOM Report. Note: Title is Implementation of Regional Waste Strategy Feasibility Study - Options Paper	24-Jan-18	WBBROC	"Implementation of Regional
BRC Waste Fees 202223	2022-23	WBBROC	Waste Strategy Feasibility
BRC_Waste_Management_and_Resource_Recovery_Strategy_2017___2025 (5)	Jan-17	BRC	Study - options paper"
Bundaberg Council - RAWCOT - 5 August 2020 (A7060956)	2020	Ricardo	waste disposal fees

Title / Dataset	Date	Provenance	Summary
Cedars Airspace Option Ltr 6.6	6-Jun-16	BRC	"WASTEMANAGEMENT& RESOURCE
Cedars Road Landfill Development Plan 2019	7 November 2019	ATC Williams	RECOVERY STRATEGY
Confidential - FINAL Report updated - Waste to Energy Feasibility 2020	16-Apr-20	Ricardo	2017–2025"
FW Waste Reserves Spreadsheet and historic information	Monday, August 22,	BRC	resource and waste collections options tool
Local Government Survey 2021 (2020 - 2021) (A6187963)	2021	BRC	Cedars Road landfill Airspace 2015 – 2035
QTC Analysis - New Regional Landfill information	2021?	QTC	BRC - update to the 2013 Cedars Road Landfill Site Development Plan
Qunaba Landfill Development Plan 2019	7-Nov-19	ATC Williams	Regional Waste Strategy for WBBROC – Waste to Energy Feasibility Study
SLR Info Request BRC	September 5, 2022,	BRC	Email thread, no data, refer to financial summary fund PDF
SLR Information Request - items 1 - 17 (A7098998)	5-Aug-22	BRC	local government survey on waste services/ composition
University Drive Landfill Development Plan 2019	8-Nov-19	ATC Williams	New Regional Landfill information
Waste Collections Business case for the introduction of a Food Organics and Garden Organics Service in 2026 (A6429083)	8/19/2022	BRC	BRC - update to the 2016 Qunaba Road Landfill Site Development Plan
Waste Service charges 202223	2022	BRC	SLR Info Request BRC
Waste Services - Monthly Budget Report - June 2022 Alt version	Jun-22	BRC?	completed RFI by BRC from SLR
2019003 Maryborough Landfill Optimisation - Rev 2	31-Mar-20	Maryborough Landfill Optimisation	"Update to the 2013 the
CTWW008 - Waste Services Contract 2020 - Material Recovery Facility Feasibility Assessment - Redacted Version - Specification At	29-May-20	Fraser Coast Council	site development plan (SDP) for University Drive Landfill"
DOCSHBCC__3854587_v2_FINAL___Fraser_Coast_Waste_Strategy_2019_2029	2019	Fraser Coast Council	Waste Collections introduction of a Food Organics and Garden Organics service in 2026
FCRC FCP MODEL v15.0	2020	Fraser Coast Council	waste disposal fees - long term financial plan
2022_DES-Waste-Survey-Final_Local Government	2022	DES/NBRC	XL SS with monthly budget report
620.31107-WBB-RWMP-RFI-01	5-Aug-22	NB	Landfill Optimisation Study for the Maryborough Landfill which will inform the extent and design criteria for Cell 9
Confidential - FINAL Report - Waste to Energy Feasibility 2020	see row 013	see row 013	"MRF Feasibility Assessment -
Confidential - FINAL updated Waste to Energy Feasibility presentation 2020	15-Apr-20	Ricardo	derives from basic assumptions and the general direction from Council's Waste Strategy 2019-2029 (Waste Strategy), yellow lid bin composition surveys from other comparable councils and the research performed by the Waste Services team."

Title / Dataset	Date	Provenance	Summary
NBRC-Waste-Reduction-and-Recycling-Plan-2021-26-020821	7/28/2021	North Burnett Regional Council	waste Strategy document
2022_DES-Waste-Survey-Final_Local Government	2021-22	DES/South Burnett Regional Council	FRC financial model
Master facility Register_Fixed	31/08/2019	Arcadis	waste survey for local government
2019 Operator Site_Updated LH	18/19	Arcadis	North Burnett response to SLR RFI
LG Survey Qual responses	18/19	Arcadis	WBBROC Waste to Energy Feasibility CEO and Mayors Briefing
018 QunabaTransfer Station Opinion of Probable Cost_draft_18.12 Draft Rev	19-Dec-13	AECOM	waste reduction and recycling plan 2021-26

B3 Model Assumptions

Assumptions

Regional waste projections have been developed (see Figure 2) based on the data sources and assumptions summarised below:

- Medium population projection applied
- Per capita generation rates (tonnes per capita) calculated from historical population and waste data
- Two-year historical average per capita rate applied to all waste streams and all councils.
- Historical waste quantities and generation rates are prone to inter-yearly fluctuations due to administrative issues including reporting changes, or underlying changes to consumption.
- Economic and social factors influence what residents and businesses buy, use, consume and dispose of, which is particularly relevant considering COVID-19 induced restrictions.
- Variations are especially prevalent with C&I and C&D waste as these streams are dependent on a range of external market forces and can be price sensitive.
- The Queensland Waste and Resource Recovery Infrastructure Report (QWRRIR) outlined trends in waste generation rates and their relationship with GDP to determine if an adjustment factor might be applied. However, no conclusive adjustment factor was determined due to data quality concerns and inconsistency in waste tonnage data reporting back to 2010-2011.
- At a national scale, the National Waste Data Report 2020,5 reported a 20% reduction in per capita generation of waste for MSW and C&I over a 13-year period, equating to an annual decrease of approximately 2.5%. However, analysis of regional waste generation rates does not support this.

Regional waste projections have been developed based on the assumptions summarised below:

Table B2 Model Assumptions

Title	Input	Description
Population Scenario	Implied Compound Annual Growth Rate (CAGR) of 0.9% for 2021-2041 and 1.0% 2021 to 2041 Medium population projection has been applied	CAGR and Medium population scenario applied based on existing QLD State government forecasts: Projected Populations - sourced from QLD Government Statistician's Office (2019) *The State of Queensland, Queensland Treasury, 2022. Projected-dwellings-series-local-government-area-qld-2016-2041.xlsx* accessed at: https://www.qgso.qld.gov.au/statistics/theme/population/population-projections/regions Historical Population - sourced from Queensland Government Statistician's Office (2022), *The State of Queensland, Queensland Treasury, 2022. Estimated-resident-population-lga-qld-2001-2021pr.csv* accessed at: https://www.qgso.qld.gov.au/statistics/theme/population/population-estimates/regions
Generation per capita	Assumed kerbside yield (kg/capita):	Generation per capita
Bundaberg - 334		Bundaberg - 334
Recycling Bin	**80% Default bin coverage**	Default bin coverage assumption based on Council of Mayors Southeast Queensland (COMSEQ) SEQ Waste Management Plan, Final Report 2021.

Title	Input	Description
Organic Bin Assumptions	100% proportion of food organics can go in Food Organic and Garden Organic (FOGO). 0% proportion of food organics can go in GO 100% proportion of garden organics can go in FOGO 100% of garden organics can go in GO. 80% Default Organics bin coverage 14% Additional GO from service introduction (based on yield per person). 5% Loss of self-haul GO due to FOGO service introduction (best guess estimate / nothing reported).	Organic bin assumptions based on COMSEQ SEQ Waste Management Plan, Final Report 2021. Capture rates based on existing services and review across NSW from Analysis of NSW Food and Garden Bin Audit Data, RAWTEC (2018) FO: High (50%), Med (35%) & Low (25%) GO: High (95%), Med (85%) & Low (75%)
Residual Waste Recovery Options	90% Energy for Waste (EfW) 80% Refuse Derived Fuel (RDF)	Nominal recovery rates for EfW assuming Air Pollution Control residues will be disposed to landfill and assuming bottom ash has a viable recovery option such as base material for road construction. Recovery rate for RDF assumes estimated 25% loss of materials required to meet RDF acceptance criteria (defined by moisture content and calorific value)

Appendix C:

Economic Analysis Report

Appendix D:

Indicative Cost Plan

Table D1 Indicative Cost Estimate (costs in millions, p50 accuracy)

Item	2024	2025	2026	2027	2028	2029	2030	2031	Total to FY31
Regional Implementation									
Project Manager (RWG)	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21	1.57
Administrative & Legal	0.10	-	-	-	-	-	-	-	0.10
Develop detailed implementation Plan	0.05	-	-	-	-	-	-	-	0.05
Review RWWP	-	-	-	-	0.10	-	-	-	0.10
Meetings (Council FTE requirement)	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.43
Council contribution to actions	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.43
Sub Total – Plan Implementation	**0.43**	**0.28**	**0.29**	**0.30**	**0.41**	**0.31**	**0.32**	**0.33**	**2.67**
Regional Education Strategy									
Education Strategy (and updates)	0.05		0.02		0.02		0.02	0.00	0.10
FOGO implementation, BRC/FCRC only	Captured within organic implementation costs below								-
Kerbside Education & Other	Captured within material recycling & recovery costs below								-
Sub-Total – Regional Education	**0.05**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.10**
Regional Organics Solution[55]									
FOGO Implementation, BRC only									
Administration, business cases, PM	0.20	0.20	0.08	0.08	0.08	0.08	0.08	0.08	0.88
FOGO education costs (new service BRC)		0.26	0.27	0.27	0.28	0.29	0.29	0.30	1.97
One off investment (bins) (BRC)				2.74					2.74
Collection costs (new, BRC)				1.71	1.75	1.80	1.84	1.89	8.99
Processing Costs (new, BRC)				1.56	1.60	1.65	1.69	1.75	8.24
FOGO implementation, BRC only	**0.20**	**0.46**	**0.34**	**6.35**	**3.71**	**3.81**	**3.91**	**4.02**	**22.80**
FOGO Implementation, FCRC only									
Administration, business cases, PM	0.20	0.20	0.08	0.08	0.08	0.08	0.08	0.08	0.88
FOGO education costs (new service FCRC)		0.29	0.30	0.31	0.32	0.32	0.33	0.34	2.21
One off investment (bins) (FCRC)				3.08					3.08
Collection costs (new, FCRC)				1.92	1.97	2.02	2.07	2.12	10.11
Processing Costs (new, FCRC)				1.56	1.61	1.66	1.71	1.77	8.32
FOGO implementation, FCRC only	**0.20**	**0.49**	**0.38**	**6.95**	**3.98**	**4.09**	**4.20**	**4.32**	**24.59**
Organics Programs									
Community composting	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.80
Roll out of compost bin program		0.31						0.31	0.61
Material flow analysis - organics	0.01	0.02					0.02		0.05
Sub-Total – Organics Programs	**0.11**	**0.43**	**0.10**	**0.10**	**0.10**	**0.10**	**0.12**	**0.41**	**1.46**
TOTAL (Regional Organics Solution)	**0.51**	**1.38**	**0.82**	**13.40**	**7.79**	**8.00**	**8.23**	**8.74**	**48.86**
Material recovery & recycling solution									
Education Implementation (kerbside + other)	0.98	1.01	1.03	1.06	1.09	1.11	1.14	1.17	8.59

[55] Costs for new services presented here do not include benefits (e.g., reduced levy, reduced use of landfill airspace) however these savings are represented in the economic analysis. These costs represent actual costs for implementation. Benefits may not be realised at the same time.

Item	2024	2025	2026	2027	2028	2029	2030	2031	Total to FY31
Education Plan (Cherbourg)		0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.18
Small scale infrastructure improvements		1.25	1.25	1.25	1.25	1.25	1.25		7.50
Community circular economy programs	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.40
Household Hazardous Waste CRCs			0.20	0.20	0.20	0.20	0.20	0.20	1.20
Glass processing & washing plant		0.20	7.00	1.00	1.03	1.05	1.08	1.10	12.46
Supplementary funding for Waste Audits	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.70
TOTAL (MRR Solution)	**1.11**	**2.64**	**9.64**	**3.67**	**3.72**	**3.78**	**3.83**	**2.64**	**31.03**
Residual Waste									
Progress & implement R&D into problematic wastes	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.80
TOTAL (Residual Solution)	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.80**
OVERALL TOTAL – IMPLEMENTATION COST FOR RWRRP TO FY30-31	**2.20**	**4.41**	**10.86**	**17.46**	**12.03**	**12.19**	**12.50**	**11.81**	**83.46**

All costs presented in Million $ based at 2023 rates, BRC-Bundaberg Regional Council, CASC-Cherbourg Aboriginal Shire Council, FCRC-Fraser Coast Regional Council, GRC-Gympie Regional Council, NBRC-North Burnett Regional Council. SBRC-South Burnett Regional Council

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10.4 BLACKBUTT TRANSFER STATION - COMMERCIAL WASTE

File Number: **02-08-2023**

Author: **Acting General Manager Liveability**

Authoriser: **General Manager Infrastructure**

PRECIS

Consideration for the acceptance of commercial waste at the Blackbutt Transfer Station.

SUMMARY

At the 28 June 2023 Ordinary Meeting, resolved to scope and cost the provision of a commercial waste service at the Blackbutt Transfer Station and that a report be brought back to the August Standing Committee Meeting, and if required, Council consider a first quarter provision to fund this service.

OFFICER'S RECOMMENDATION

That the committee recommend to Council:

1. That Council offer a commercial waste collection service at the Blackbutt Transfer Station; and
2. That the utilisation of this service be reviewed after six (6) months of use; and
3. That the operational budget for the Blackbutt Transfer Station be amended accordingly at the first quarter budget review.

FINANCIAL AND RESOURCE IMPLICATIONS

Increase to operational budget should commercial waste be accepted at the Blackbutt Transfer Station.

LINK TO CORPORATE/OPERATIONAL PLAN

OPL/12 Provision of acceptable, cost effective and environmentally responsible waste management services including collection services and waste disposal facilities.

COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)

N/A

LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)

N/A

POLICY/LOCAL LAW DELEGATION IMPLICATIONS

N/A

ASSET MANAGEMENT IMPLICATIONS

N/A

REPORT

The Blackbutt Transfer Station is currently supervised and is open Thursday to Monday between the hours of 8:00am – 5:00pm. The facility is currently operated for the acceptance of domestic waste only. There are currently two (2) by twenty-seven (27) cubic metre roll on roll off (RORO) bins at this facility which are serviced twice a week.

With the State Government Waste Levy and given that there is no weighbridge at the Blackbutt facility, commercial waste cannot be mixed with general waste. If this did occur, Council would be funding the full component of the Waste Levy for the entire contents of the bulk bin.

Based off fourteen (14) tonnes of domestic waste being removed from the site each week and with the Waste Levy currently being at $91.00 per tonne, this would equate to $1,274.00 per week or over $66,000.00 per year just on payment of the State Government waste levy.

Currently with this facility only receiving domestic waste, the Waste Levy liability comes from the pre-payment which Council receives from the State Government to offset the domestic waste going to landfill.

As a result, should Council wish to accept commercial waste at Blackbutt, it is recommended that a separate, standalone bin be provided for the exclusive use for generators of commercial waste.

Without fully understanding the anticipated volume of commercial waste that would be received at the facility, it would be recommended that a three (3) cubic metre bin be provided in the first instance for commercial waste, with this being serviced fortnightly. It is also recommended that a cardboard recycling bin also be provided and have this bin serviced monthly.

This level of service can be adjusted depending upon demand.

It is proposed that these bins be provided and serviced by JJ's Waste & Recycling.

Based off this scenario and contract rates, it is anticipated that an additional $15,000.00 would be required per year in the operational budget just to service these bins on the frequencies mentioned above.

Based off Council's 2023/24 Fees and Charges, commercial business operators would be charged $220.00 per cubic metre, which equates to $55.00 per 240 litre wheelie bin as there is no weighbridge at Blackbutt.

In lieu of this proposal, other options available to commercial premises include:

1. A weekly kerbside collection service can be offered – this is dependent upon the volume of commercial waste generated.

2. Commercial business owners engage a waste collection contract to collect waste from their property.

3. Council Officers can visit businesses where a service may not be able to be provided to discuss alternatives.

4. Continue to utilise the Nanango Waste Facility.

ATTACHMENTS

Nil

11 PORTFOLIO - RURAL RESILENCE & DISASTER RECOVERY, PARKS & GARDENS, PROPERTY & FACILITY MANAGEMENT, FIRST NATIONS AFFAIRS

11.1 RURAL RESILIENCE & DISASTER RECOVERY, PARKS & GARDENS, PROPERTY & FACILITY MANAGEMENT AND FIRST NATION AFFAIRS PORTFOLIO REPORT

File Number: **02-08-2023**

Author: **Councillor**

Authoriser: **General Manager Infrastructure**

PRECIS

Rural Resilience & Disaster Recovery, Parks & Gardens, Property & Facility Management and First Nation Affairs Portfolio Report.

SUMMARY

Cr Duff presented her Rural Resilience & Disaster Recovery, Parks & Gardens, Property & Facility Management and First Nation Affairs Portfolio Report to Council.

OFFICER'S RECOMMENDATION

That Cr Duff's Rural Resilience & Disaster Recovery, Parks & Gardens, Property & Facility Management and First Nation Affairs Portfolio Report to Council be received for information.

Parks & Facility Management:

Councils Facilities and Parks Section has been focussed on the delivery of Capital Works projects and implementation of the winter maintenance program for park infrastructure. Some of the projects include;

Kingaroy Memorial Park redevelopment has commenced with the removal of the old concrete tables, garden beds in preparation for the installation of 5 new shelters and 12 new table settings. Council has also commenced design on the repairs to the concrete storm water drain that runs through the park and replacement of the pedestrian bridge as part of a flood repair project under the Queensland Reconstruction Authority.

Benarkin First Settlers Park redevelopment has progressed with the installation of a new shelter, picnic table, footpath, and bollards. Local contractor is working to install new playground fencing to improve child safety as the playground is located close to local roads, entrance to the park and rail trail. This park is becoming a very popular stopover point on the Brisbane Valley Rail Trail as rail trail users access the amenities, picnic nodes and the local store.

Wondai Swimming Pool Amenities refurbishment and all-inclusive PWD is in the final stages of fit out. Works scheduled to be completed by mid-August ready for the 2023 swimming season. This has been a successful project jointly funded by Building Better Regions Round 5 and South Burnett Regional Council.

Council has called tenders for the reroofing of Blackbutt Hall. This project is jointly funded by Local Government Grants and Subsidies Program and South Burnett Regional Council.

Council is working in partnership with the Mondure Hall Committee to reroof the Mondure Hall. This project is jointly funded by Gambling Community Benefit Fund and South Burnett Regional Council. Local contractor has been successfully awarded a contract and works will commence early August.

ATTACHMENTS

Nil

11.2 REQUEST FROM STEAMING BACK TO WONDAI EVENT

File Number: **2/08/2023**

Author: **Manager Facilities and Parks**

Authoriser: **General Manager Infrastructure**

PRECIS

Request to Council from the Steaming Back to Wondai organisers for the old railway spikes in storage along Rail Trail.

SUMMARY

A request from the Steaming Back to Wondai organisers to Council asking if they could have access to the old Fettlers shed in Wondai where there is a large amount of old railway spikes that they would like to use as part of the Steaming Back to Wondai event in September.

OFFICER'S RECOMMENDATION

That the Committee recommend to Council that:

1. The Steaming Back to Wondai organisers are allowed to remove the old railway spikes from the old Fettlers shed for them to use as souvenirs at their Steaming Back to Wondai event in September 2023.

FINANCIAL AND RESOURCE IMPLICATIONS

No direct Financial and Resource Implications

LINK TO CORPORATE/OPERATIONAL PLAN

EC16 Partner with community to develop and promote events.

COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)

Council Officers have meet with Steaming Back to Wondai organisers to discuss the event activities and souvenirs.

LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)

Council leases the property from the Department of Transport and Main Road (TMR) which expires on 01/07/2037. The lease is for the purposes of Multipurpose Recreational Transport Use and any development must be consistent with the lease terms. Council has consulted with TMR with their response being that they consider the spikes to be abandoned by any other claimant, and Council is able to dispose of spikes in accordance with Councils Policy.

POLICY/LOCAL LAW DELEGATION IMPLICATIONS

No policy implications

ASSET MANAGEMENT IMPLICATIONS

No asset management implications

REPORT

A request has been sent to Council relating to the Steaming Back to Wondai event. The event is to commemorate the 120th anniversary of the arrival of the first passenger train to Wondai.

There will be celebrations held at Coronation Park, Wondai on Thursday 14th September 2023. As part of the celebrations the organising committee would like to use the old railway spikes that are currently in the old Fettlers shed which is located along the Kingaroy to Kilkivan Rail Trail at the Wondai section as souvenirs for the event.

Council staff have been on site to inspect and confirm that there is a large pile of old spikes inside.

ATTACHMENTS

1. **Old Fettlers Shed Wondai photos**
2. **Aerial image of Fettlers shed along Rail Trail - Wondai section**

Photos from inside Fettlers Shed (Wondai)

SOUTH BURNETT REGIONAL COUNCIL

South Burnett Regional Council does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that SBRC shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Aerial Image of old Fettlers shed along Rail Trail - Wondai

20/07/2023

1:1250

11.3 ROS GREGOR WALKING TRACK - CONSULTATION

File Number: **2/08/2023**

Author: **Manager Facilities and Parks**

Authoriser: **General Manager Infrastructure**

PRECIS

Ros Gregor walking track community consultation.

SUMMARY

Community consultation with the Nanango community in relation to vegetation along the Ros Gregor Trail. This was after Council received a request from the community expressing concerns in relation to the low vegetation along the trail and requesting removal.

OFFICER'S RECOMMENDATION

That the Committee recommend to Council that:

1. Council received the community consultation report for Ros Gregor Walking Track vegetation maintenance; and
2. Improve the Ros Gregor walking track drainage to prevent future hazards along the track through silt removal from track, resurface low lying areas with deco and place pipe under walking track to improve drainage; and
3. Council budget for the works at the 2023/24 1st Quarter review.

FINANCIAL AND RESOURCE IMPLICATIONS

The proposed works would be an increase in the Parks operational budget of $6,000.

LINK TO CORPORATE/OPERATIONAL PLAN

EC1 Develop and implement initiatives to enhance community parks, gardens and recreational facilities, which may include: tree planting strategy, botanical gardens and perennial (drought tolerant) shrubs and flower planting programme.

COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)

Council then engaged VC1 Consulting to assist with consulting the Nanango community.

A public meeting was held onsite Saturday 3 June 2023, same day as the regular Nanango Park Run. Several parkrun participants took the time to speak with Councillors and staff.

An online community survey was available from 10 May to 18 June, with information emailed to Council's libraries, customer service centres, visitor information centres, local schools and key local stakeholders.

LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)

No direct Legal Implications

POLICY/LOCAL LAW DELEGATION IMPLICATIONS

No direct Policy/Local Law Delegation Implications

ASSET MANAGEMENT IMPLICATIONS

No direct Asset Management Implications

REPORT

The Ros Gregor trail is used by the general public as a walking track and every Saturday it is used for the Nanango Park Runs. At the June 3 parkrun event Councillors and staff where onsite for an informal meeting with attendees to talk about the vegetation issue.

The common theme indicated was there is not an issue with the vegetation along the track, but more of an issue with drainage and water that presents a safety hazard to users.

An online community survey was available from 10 May to 18 June 2023 which was promoted through Council's social media outlets, libraries, customer service centres. Visitor information centres, local schools and key local stakeholders. A total of 21 responses were received from the online survey. There were 16 respondents from Nanango with the remaining 5 from Kingaroy, Murgon and unknown.

Some of the results from the survey include;

- 72% of respondents use the trail once or more per week.
- 70% of respondents indicated their main reasons for using the walking track was for exercise and fitness purposes.
- When asked if respondents supported or not supports an increase to maintenance of the vegetation the replies showed 48% supported an increase and 38% did not support an increase to maintenance. 14% indicated they did not have an opinion either way.
- When asked to indicate their opinion on the current buffer (mowed area between the walking track and vegetation) 90% agreed the buffer was adequate.
- 74% of respondents indicated they feel safe when asked their opinion on safety when walking along the track.

Some of the reasons for not supporting an increase to maintenance included;

- Feels the areas near the track are adequately maintained.
- Money is better spent elsewhere.
- Swampy area after the gym equipment needs repairs.

There were a number of comments provided by respondents with seven stating the drainage issue along the trail was a more pressing issue then the maintenance of vegetation. Comments included;

- Drainage is more of a priority.
- Sections of the track are extremely slippery when wet.
- Drainage is the issue when it rains during Parkrun events.
- When it rains the water can pool for weeks after and becomes a slipping hazard and a breeding ground for mosquitos.

In relation to the vegetation, the preference is to continue to maintain the vegetation in it's current state with some suggestion of improvements which included:

- The area was covered in natural vegetation prior to 2004 when it was cleared, and the track constructed. The planted trees are now stunted by the thick grass around them. A one-off program to clear and suppress this grass would improve tree growth and meet the original biodiversity objective.
- We need to keep any trees that are there or have been planted, visibility is fine and the trees support the local wild life.
- It is a waste of money to clear and not needed.
- The vegetation adjoining the creek line increases the natural aesthetic of the area and assists with shade and cooling during summer months.

- Keeping the current slashed areas maintained regularly in the warmer seasons when it grows quicker.

The result from this consultation would be that Council continue with its regular maintenance of the vegetation and investigate the drainage issue.

ATTACHMENTS

1. Ros Gregor Trail Consultation Summary

Ros Gregor Trail

Community Engagement Summary

July 2023

VC1 CONSULTING
Planning for Vibrant Communities

Contents

1. Introduction

Council engaged VC1 Consulting to consult with the Nanango community in relation to vegetation along the Ros Gregor Trail. This was in response to request from members of the community expressing concerns in relation to the low vegetation along the trail and requesting removal.

Consultation activities included:

- Information about the consultation and how to provide input was posted on Council's web page and social media pages
- A community survey. The survey and a promotional flyer including the survey QR code was emailed to Council libraries, customer service centres, visitor information centres, local schools and key local stakeholders
- Public meeting on site coinciding with the Ros Gregor Trail ParkRun
- Discussions with local community during flyer distribution and discussions with key stakeholders.

2. Community Survey

An online community survey was available for completion from 10 May 2023 to 18 June 2023. A total of 21 responses were received. Of these, 16 respondents indicated they were from Nanango, 3 were from Kingaroy, 1 was from Murgon, and 1 did not indicate a location.

2.1 Frequency of Use of the Walking Track

Respondents were asked how often they use the Ros Gregor Trail. Over a quarter of respondents (29%) use the trail more than three times a week (including responses for "Every day"). 43% use the trail 1-2 times a week, meaning that in total, 72% of respondents use the trail once or more per week.

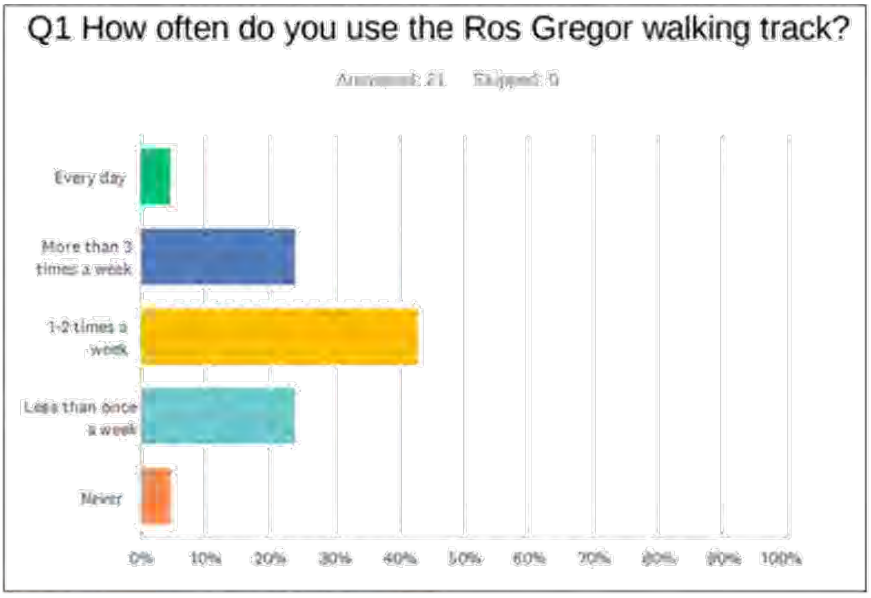

Figure 1: Frequency of use of Ros Gregor Trail

2.2 Reasons for Use

Respondents were asked to indicate their main reason for using the walking track. Over 70% of respondents indicated they use the trail for exercise or fitness.

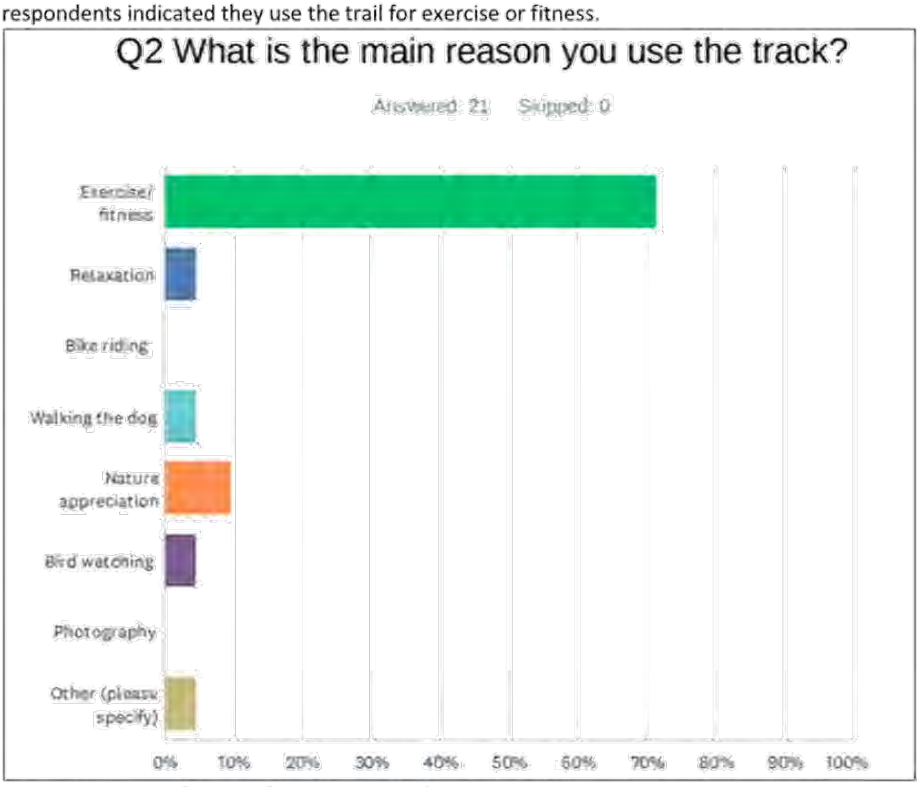

Figure 2: Reasons for use of Ros Gregor Trail

2.3 Support for Increased Maintenance of Ros Gregor Trail

Respondents were asked to indicate whether or not they support increased maintenance of the vegetation along Ros Gregor trail. The figure below illustrates the results. Most respondents (47.62%) support increased maintenance. 38% indicated they do not support increased maintenance and 14% indicated they do not have an opinion either way.

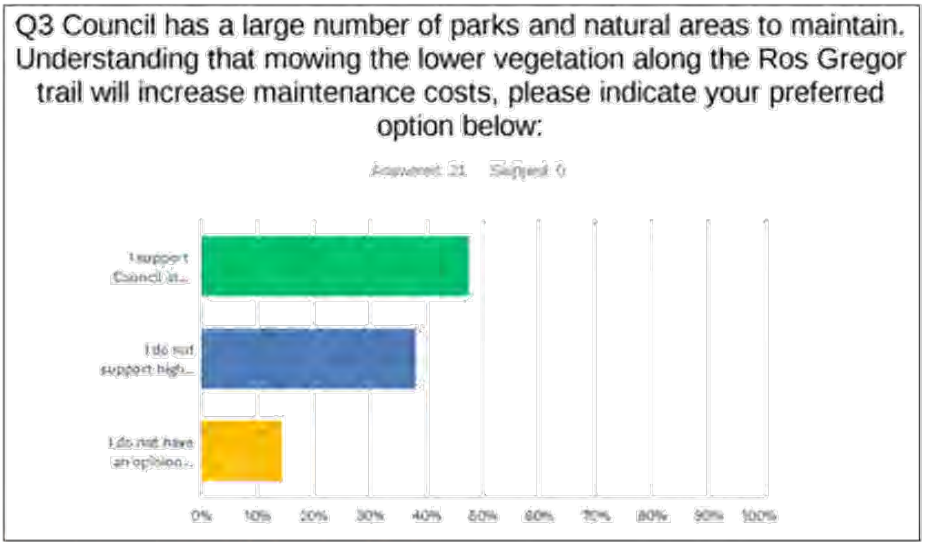

Figure 3: Overall support for increased maintenance

2.4 Reasons for Not Supporting Increased Maintenance

The key reasons respondents do not support increased maintenance include:

- Support for the natural vegetation, the enjoyable walking environment it provides, and the benefits for animal habitats.
- Feel the areas near the track are adequately maintained
- Feel money is better spent elsewhere

Other relevant comments included:

- Fix up the swampy section after the gym equipment.
- The people complaining are the relatives of the residents who laboured hard to remove the vegetation in the first place. They feel insulted that their relatives' hard work has been ignored and the area replanted. How many people have been assaulted / raped in the area since the area was revegetated?
- The extra mowing already down around the sections of newer shrubs are really great to allow people with horses ride the tracks as well.
- The only problem I have had is menacing dogs on the track.

2.5 Opinion on Buffer

Respondents were asked to indicate whether they believe the current buffer (i.e. mowed area between the walking track and the vegetation) is adequate. 90% of respondents agreed the buffer is adequate.

2.6 Opinion on Safety

Respondents were asked to indicate whether they feel safe walking along the track. 74% of respondents indicated that they do feel safe.

2.7 General Comments

Respondents were given an opportunity to provide any additional comments in relation to the Ros Gregor Trail. In total, 16 comments were provided, with seven of these indicating that drainage issues along the trail may be a more pressing issue than the vegetation. Comments related to drainage/ water included:

- I think drainage is more of a priority
- Sections are extremely slippery when wet
- The sides of the track are high and are a hazard for rolled ankles. The bridge gets slippery and water through it when it rains
- Yes, fix the swamp section
- Drainage is the issue when it rains during Parkrun events
- Drainage along certain parts is an issue. After rain water will pool for weeks causing algae to form on the pavement making it slippery. The path needs some fill put on the high side and a few small drains hit in on the lower creek side.
- One of the main issues is drainage along the track. When it rains the water can pool for weeks after and becomes a slipping hazard and a breeding ground for mosquitos. I would rather see this addressed.

Eight comments were related to the vegetation, with most indicating a preference to continue to maintain the vegetation in the current state, with some improvements suggested. Comments included:

- Some of the more advanced trees could stay. If maintenance is done regularly job never becomes too big.
- This area is never going to grow an attractive landscaped area without lots of input. Leave it the way it is and maintain it as basically a green space with the trees/shrubs that are already planted there.
- The area was covered in natural vegetation prior to 2004 when it was cleared, and the track constructed. The planted trees are now stunted by the thick grass around them. A one-off program to clear and suppress this grass would improve tree growth and meet the original biodiversity objective.
- We need to keep any trees that are there or have been planted, visibility is fine and the trees support the local wild life.
- It is a waste of money to clear and not needed.
- The vegetation adjoining the creek line increases the natural aesthetic of the area and assists with shade and cooling during summer months.
- Keeping the current slashed mowed areas maintained regularly in the warmer seasons when it grows quicker.

3. Public Consultation

Public consultation took place as part of the Ros Gregor Trail ParkRun on Saturday 3rd June 2023. This public meeting opportunity was advertised via Council's web page and social media pages.

The public meeting was attended by:

- 1 Council staff member
- 2 Councillors and the Mayor
- Numerous community members/ ParkRun attendees.

The meeting was not formal, but provided attendees with the opportunity to talk about the issue of the vegetation and attendees were encouraged to complete and promote the online survey. Flyers were provided to key attendees for distribution to the broader community.

Throughout this consultation, a common theme emerged indicating that there is not an issue with the vegetation along the trail, but that there are issues with drainage and water that present a safety hazard to trail users.

11.4 MURGON HOOP PINE - COMMUNITY CONSULTATION

File Number: **2/08/2023**

Author: **Manager Facilities and Parks**

Authoriser: **General Manager Infrastructure**

PRECIS

Murgon Hoop Pine community consultation.

SUMMARY

Community consultation with the Murgon community in relation to the future of the Hoop Pine located on Macalister Street, Murgon This was after Council received a request from a community group to remove the tree due to concerns of falling branches that pose a safety risk to the public and surrounding buildings and infrastructure.

OFFICER'S RECOMMENDATION

That the Committee recommend to Council that:

1. The Hoop Pine located on the footpath in McAllister Street Murgon is not removed.
2. Ongoing 12 monthly tree inspections be conducted to monitor the health of the tree and a future report presented to Council if the health of tree changes and poses a safety concern to the community.

FINANCIAL AND RESOURCE IMPLICATIONS

Ongoing inspection of trees is an operational cost for Parks.

LINK TO CORPORATE/OPERATIONAL PLAN

EC1 Develop and implement initiatives to enhance community parks, gardens and recreational facilities, which may include: tree planting strategy, botanical gardens and perennial (drought tolerant) shrubs and flower planting programme.

COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)

Council engaged the services of VC1 Consulting to assist with consulting the Murgon community.

A public meeting was held onsite Tuesday 23 May 2023, there was Council staff, a Councillor and two community members in attendance.

An online community survey was available from 10 May to 18 June, with information emailed to Council's libraries, customer service centres, visitor information centres, local schools and key local stakeholders.

Informal discussions were also held via telephone and in person with key stakeholders and community representatives.

The community organisation who submitted the original request conducted their own independent email survey of its members at the same time as the community survey was opened to the public.

Discussions were also held with Ergon Energy as the tree is in close proximities to the Murgon Ergon Energy depot.

LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)

No direct Legal Implications

POLICY/LOCAL LAW DELEGATION IMPLICATIONS

No direct Policy/Local Law Delegation Implications

ASSET MANAGEMENT IMPLICATIONS

No direct Asset Management Implications

REPORT

The hoop pine in Murgon is around 80 years old and is approximately 60m tall. The trunk has a circumference of just over 2m. It's located along the footpath of Macalister Street, Murgon between the Murgon Ergon Energy depot and the 55 Million Years Ago museum.

A public meeting was held onsite Tuesday 23 May 2023, there was Council staff, a Councillor and two community members in attendance.

An online community survey was available from 10 May to 18 June 2023, which was promoted through Council's social media outlets, libraries, customer service centres. Visitor information centres, local schools and key local stakeholders. A total of 21 responses were received from the online survey. There were 79 respondents in total, with 82% of respondents from Murgon and a small number from Tingoora, Wooroolin, Kingaroy and Kumbia. A majority of respondents were aged between 55 and 64 years at 28%.

Some of the results from the survey include;

- 92% of respondents were against the removal of the tree. Only 8% indicated they supported it.
- 53 respondents indicated that if the tree was removed they would like a replacement tree. 25 respondents said they didn't want a replacement.

Key reasons for not supporting the Hoop Pine removal;

- Tree is healthy.
- Significant historical & cultural value and importance of the tree.
- Tree provides environmental and visual amenity values.

Ergon Energy officer conducted a tree inspection, with the inspection deemed; that the tree is healthy and doesn't pose a risk to Ergon assets as the tree is healthy and at a distance from Ergon assets. Officers also advised that Ergon would be unable to offer any assistance in the removal of the tree should Council decide to have it remove.

Council also engaged with its insurance provider to get clarity, if the tree was to remain what responsibility would Council hold should the tree be damaged in the likes of a storm which may result in damage to it's surrounding area and the response was Council has a duty of care to act reasonably to prevent reasonably foreseeable injury or damage to a claimant. Meaning regular inspections of the tree either 6 or 12 monthly and regular maintenance which may include trimming of limbs may assist with the prevention of personal injury or property damage.

ATTACHMENTS

1. **Murgon Hoop Pine - Consultation Summary**
2. **Email to SBRC from LGM Assets regarding Murgon Hoop Pine**
3. **SBRC Tree Inspection of Murgon Hoop Pine**

Murgon Hoop Pine

Community Engagement Summary

July 2023

VC1 CONSULTING
Planning for Vibrant Communities

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1. Introduction

Council engaged VC1 Consulting to consult with the Murgon community in relation to the future of the Hoop Pine located on MacAlister Street Murgon. This was in response to Council receiving a request from the Murgon Business and Development Association (MBDA) to remove the tree due to concerns that falling branches from the tree pose a safety risk to the public and nearby buildings and infrastructure.

Consultation activities included:

- Information about the consultation and how to provide input was posted on Council's web page and social media pages
- A community survey. The survey and a promotional flyer including the survey QR code was emailed to Council libraries, customer service centres, visitor information centres, local schools and key local stakeholders
- Flyers distributed to the local community via email and in-person distribution to local shops
- Direct emails to key local community organisations providing a link to the survey and encouraging distribution to member networks
- Public meeting on site
- Discussions with local community during flyer distribution and discussions with key stakeholders.

2. Community Survey

An online community survey was available for completion from 10 May 2023 to 18 June 2023. A total of 79 responses were received.

2.1 Respondent Profile

2.1.1 Age

The majority of respondents were aged between 55 and 64 years (28%) followed by 65+ years (24%) and 35-44 years (20%).

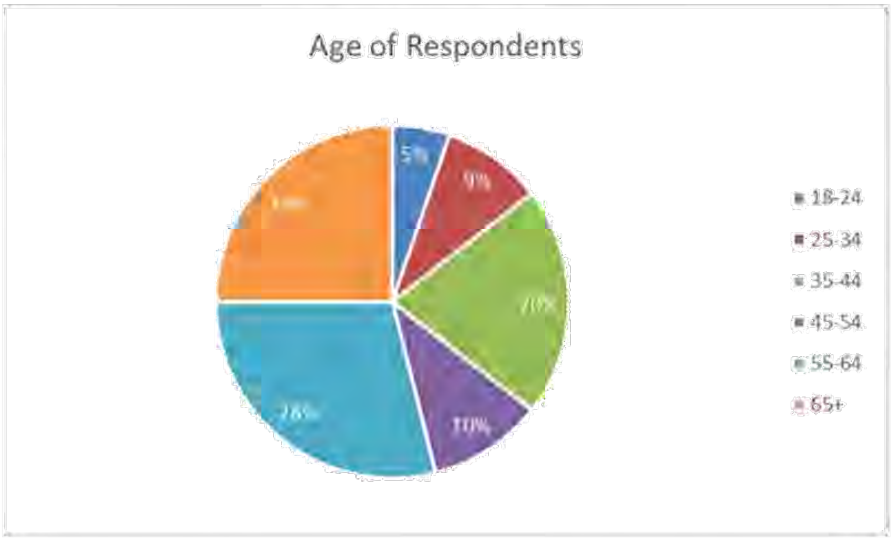


Figure 1: Age profile of respondents

2.1.2 Location

Most respondents (82%) live in Murgon. The small remaining percentage indicated they live closest to Tingoora, Wooroolin, Kingaroy and Kumbia.

2.2 Support for Removal

Respondents were asked whether or not they support the removal of the Hoop Pine. The response was overwhelmingly negative, with 92% of respondents indicating they do not support the removal of the tree and 8% indicating they do support the removal of the tree.

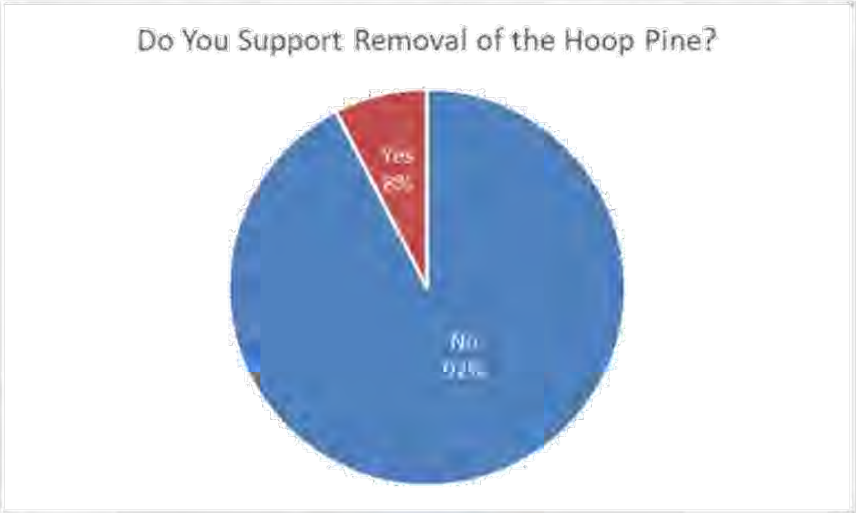


Figure 2: Overall support for tree removal

2.3 Reasons for Not Supporting Hoop Pine Removal

The key reasons respondents do not support the removal of the hoop pine include:

- The tree is healthy
- Significant historical and cultural value and importance of the tree
- The tree poses no threat to the community or surrounding infrastructure
- The tree provides environmental and visual amenity values

2.4 Alternative Species

Respondents were asked to indicate whether they would like a replacement species planted if the tree was to be removed, and if so, to indicate a suggested species. 53 respondents indicated they would like a replacement tree, and 25 indicated they would not. Key suggestions included:

- Hoop pine or similar
- Australian native
- Grevillea
- Bleeding Heart
- Flame Tree

2.5 General Comments

Respondents were given an opportunity to provide any additional comments. Comments received further reiterated support for retaining the tree.

3. Public Meeting

A public meeting was advertised to the Murgon and broader South Burnett community via Council's website and social media pages and direct email invitation to key stakeholders. Prior to the public meeting, in-person visits to local shops were undertaken distributing flyers encouraging attendance at the public meeting and encouraging completion of the online survey.

The public meeting was attended by:

- 2 Council staff
- 1 Councillor
- 2 community members.

The community members present were members of the Murgon Business and Development Association and were in favour of the tree being removed.

The lack of attendance at the public meeting may be attributed to:

- A preference to provide feedback via the online survey
- Inability or lack of interest in attending public meetings
- Lack of interest in the topic.

4. Other Engagement

Informal discussions were held via telephone and in person with key stakeholders and community representatives. During these discussions there was a strong preference to retain the tree, and generally an element of surprise that removal of the tree was being considered at all.

5. Murgon Business and Development Association Survey

The Murgon Business and Development Association conducted an independent email survey of its members at the same time as the community survey was open to the public.

The MBDA asked members to email a "yes" or "no" in relation to tree removal.

The survey received 14 responses, with 12 of these indicating a preference for the tree to be removed.

6. Consultation with Ergon

Discussions were held with Ergon Energy regarding the Hoop Pine and the tree was inspected by Ergon officers.

Inspection by Ergon officers deemed that:

- The tree is very healthy
- The tree is considered to be no risk to Ergon assets at this stage given its health and the distance from Ergon assets
- The tree is outside the Ergon exclusion zones and could be easily removed without affecting electricity supply in the area

Advice from Ergon officers was that Ergon is unable to offer any assistance in the removal of the tree should SBRC decide to have it removed.

Ergon utilises the Energy Queensland Vegetation Management Strategy to assist in determining management options for vegetation affecting powerlines. Key points to note from this strategy are:

- Energy Queensland considers a number of methods of maintaining the clearance zone between overhead electricity networks and exposed electrical parts and the vegetation; the most common method used is the pruning of the vegetation.
- Alternative methods will be considered if:
    - Safety issues exist
    - They are economically feasible; or
    - Where the vegetation concerned is of significance; or
    - Where the vegetation concerned is of heritage value or listing; or
    - Where vegetation cannot be successfully pruned.
- Alternative methods will be considered prior to removing a tree and owners of trees are encouraged to consider alternatives to pruning or removal.
- In some cases, the pruning of vegetation method may not address the problem and the vegetation may need to be removed. This can occur for the following reasons:
    - Potential for the vegetation to suffer die-back if regularly trimmed
    - The vegetation is suffering from extensive rot or disease
    - The vegetation is a palm.
    - Bamboo that has the potential for the canes to drop onto or clash with the overhead electrical network.
    - The vegetation cannot be pruned in accordance with relevant Australian Standards.
    - After pruning occurs, the pruning will remove more than 2/3rds of the original potential mature canopy of the tree.
    - The vegetation species, size and growth rate is such that the vegetation cannot be effectively pruned to prevent vegetation re-entering the clearance zone between rectification intervals (vegetation treatment cycles).

From: Insurance Matters
To: [redacted]
Subject: FW: LGM Liability - South Burnett Regional Council - Insurance query - Trees
Date: Tuesday, 6 June 2023 9:52:27 AM
Attachments: SocialLink_Facebook_32x32_14bbded4-35a5-42f5-97ee-4954a962be74.png

FYI below

SOUTH BURNETT REGIONAL COUNCIL

Insurance Matters
Insurance Matters

P 07 4189 9100
PO Box 336 Kingaroy QLD 4610
www.southburnett.qld.gov.au
southburnettregion

From: Van Kalken, Emma R <[redacted]>
Sent: Tuesday, 6 June 2023 8:18 AM
To: Insurance Matters <insurance@sbrc.qld.gov.au>
[redacted]
Subject: [EXTERNAL] RE: LGM Liability - South Burnett Regional Council - Insurance query - Trees

Please be cautious
This email originated outside of SBRC..

Hi [redacted]

Thank you for your email.

We note Council are seeking commentary on how their LGM Liability cover may respond to a healthy tree falling over and causing personal injury or property damage.

As a starting point, Council has a duty of care to act reasonably to prevent reasonably foreseeable injury or damage to a claimant.

In relation to your scenarios, to determine whether the Council could be found liable in these instances, the following issues can be considered:

1. What system of inspection does Council have in place to detect a problem?
2. When was the tree last inspected?
3. What was involved in that inspection – how was it performed and by whom?
4. What caused the tree branch to fall?
5. Is this tree of a species that habitually drops limbs?
6. Was this tree diseased, and if so, would an inspection have detected the disease?
7. if Council doesn't conduct regular inspections/maintenance, is this due to budget constraints?

In cases where a tree has a defect, but this wouldn't have been visible on inspection, a claim can be denied on the basis that no reasonable inspection by Council would have located the problem, regardless of whether or not a system of inspection was in place at the time of the accident.

Also, where Council's budget does not allow for regular inspection / maintenance of trees in this and similarly populated areas, a court may find that the Council has acted reasonably and is therefore not liable for the subsequent damage.

Trust the above assists Council's review of liability in this scenario, however should you have any queries, please don't hesitate to contact me to discuss further.

Kind regards,

Emma van Kalken | Liability Consultant, JLT Public Sector
JLT Risk Solutions Pty Ltd | 27 Evelyn Street, Newstead Australia 4006
[redacted]
www.jltpublicsector.com
Follow us on LinkedIn

[redacted]

Cc: Van Kalken, Emma R <[redacted]; Hefter, Jessica <[redacted]

Subject: LGM Liability - South Burnett Regional Council - Insurance query - Trees

Hi [redacted]

We acknowledge receipt of your email dated 31 May 2023.

Your enquiry is noted and a substantive response will be provided in the near future.

In the meantime, please do not hesitate to contact memberservicesqld@jlta.com.au to discuss any aspect of this matter further.

Thank you

Kind Regards,
Jess

Jessica Hefter | Account Manager – LGM Assets
JLT Risk Solutions Pty Ltd | 27 Evelyn St, Newstead QLD Australia 4006
[redacted]
www.jltpublicsector.com

From: Insurance Matters [redacted]
Sent: Wednesday, 31 May 2023 4:34 PM
To: Hefter, Jessica [redacted]
Subject: Insurance query - Trees

Hi Jess

Hoping you can help with a community issue regarding a 60+ hoop pine tree in a street in Murgon. Whilst I know this isn't an asset, what would Council be liable for if this tree 'fell' over and caused damage to private property, take out pipe lines etc. We have an arborist report regarding the tree and it is a healthy tree. The questions we have are:

- What would happen if the tree 'fell' over or caused damage in a natural disaster or storm
- What would happen if the tree 'fell' over in the middle of the night

Any insights you can give us would be appreciated.

Kind regards
[redacted]

SOUTH BURNETT REGIONAL COUNCIL

Insurance Matters
Insurance Matters

P 07 4189 9100
PO Box 336 Kingaroy QLD 4610
www.southburnett.qld.gov.au
southburnettregion

South Burnett Regional Council

FORM: DI-F45-V1
Department - Infrastructure

Tree Inspection Form

1. REFERENCE DETAILS

Action Request No		Complaint Received	
Inspected by	[redacted]	Date of Inspection	14-9-22
Location	45 Macalister St Murgon.		
Complaint			

2. LOCATION

Urban [✓] Rural [ ] Rural Residential [ ] Road Reserve [ ] Council Land [✓] Footpath [✓]
Property Access [ ]

3. TREE

Age	Young [ ] Semi Mature [ ] Mature [✓] Old [ ]			
Condition	Dead/Dying [ ] Poor [ ] Average [ ] Good [✓]			
Height	Approx 40-60m	Canopy Dimensions	approx 8m - 10m	Protected Species/Area: Yes [✓] No [ ]
Species if known	Araucaria cunninghami - Hoop Pine			

4. DEFECTS

Decay	Minor [ ]	Major [ ]				
Insect Attack	Minor [ ]	Major [ ]				
Split	Small [ ]	Medium [ ]	Large [ ]			
Dead Branches	Minor [ ]	Major [ ]				
Root Problem	Minor [ ]	Major [ ]	Leaning [ ]			
Stem Opening	Small [ ]	Medium [ ]	Large [ ]			
Canker	Small [ ]	Medium [ ]	Large [ ]			
Poor Tree Architecture	Yes [ ]	No [✓]				
Photos Attached	Yes [✓]	No [ ]	Sketch Attached	Yes [ ]	No [ ]	
Comments	Tree is in excellent health. No pests and diseases.					

N/A

5. CORRECTIVE ACTION

Is expert advice required?	Yes ☐	No ☐	If yes	External ☐	NRM ☐
Prune ☐ Remove ☐ Brace ☐ Leave As Is ☑ As per Policy → **Yes** ☐ **No** ☐					
Refer to Council / Insect Control	**Yes** ☐ **No** ☐				
Comments					

6. RISK ASSESSMENT

Hazard	Falling Branches ☐ Falling Tree ☐ Insects ☐ Visibility ☐ Obstruction ☐ Trip ☐
Comments	minor ~~bar~~ branch trimming to be undertaken. None - no trip hazards around base of tree.
Risks to	Pedestrians ☐ Vehicles ☐ Property ☐ Services ☐ Nil ☐
Comments	None

7. APPROVAL

Co-ordinator	Yes ☐	No ☐	Signature		Date	
Comments						
Manager	Yes ☐	No ☐	Signature		Date	
Comments						

8. RISK ASSESSMENT MATRIX

LIKELIHOOD	CONSEQUENCES				
	Catastrophic 5	**Major 4**	**Moderate 3**	**Minor 2**	**Insignificant 1**
Almost Certain 5	10	9	8	7	6
Likely 4	9	8	7	6	5
Possible 3	8	7	6	5	4
Unlikely 2	7	6	5	4	3
Rare 1	6	5	4	3	2

Risk Score		What should I do?
9-10	Extreme	Immediate action required
~~5-6~~	Moderate	Specific monitoring or procedures required, management responsibility must be specified.
2-4	Low	Manage through routine procedures.

ISA Basic Tree Risk Assessment Form

Client _____ Date 2-5-23 Time _____

Address/Tree location 45 Macalister St Murgon Tree no. _____ Sheet _____ of _____

Tree species Araucaria cunninghamii dbh 2050 mm Height 50m-60m Crown spread dia. _____

Assessor(s) [redacted] Tools used Tape, binoculars, Time frame _____

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1x Ht.	Target zone: Target within 1.5x Ht.	Occupancy rate (1–rare 2–occasional 3–frequent 4–constant)	Practical to move target?
1	Ergon depot		✓	✓	✓	4	N
2	Murgon Museum			✓	✓	4	N
3	car park to road			✓	✓	4	N
4							

Site Factors

History of failures N/A **Topography** Flat☑ Slope☐ _____% **Aspect** _____

Site changes None☑ Grade change☐ Site clearing☐ Changed soil hydrology☐ Root cuts☐ Describe _____

Soil conditions Limited volume☐ Saturated☐ Shallow☐ Compacted☐ Pavement over roots☑ 20 % Describe Bitumen foot path

Prevailing wind direction _____ **Common weather** Strong winds☐ Ice☐ Snow☐ Heavy rain☐ Describe _____

Tree Health and Species Profile

Vigor Low☐ Normal☐ High☑ **Foliage** None (seasonal)☐ None (dead)☐ Normal 100 % Chlorotic — % Necrotic —

Pests/Biotic N/A **Abiotic** N/A

Species failure profile Branches☑ Trunk☐ Roots☐ Describe 1 branch hanging half way up.

Load Factors

Wind exposure Protected☐ Partial☑ Full☐ Wind funneling☐ Buildings. **Relative crown size** Small☐ Medium☑ La

Crown density Sparse☐ Normal☑ Dense☐ **Interior branches** Few☐ Normal☑ Dense☐ **Vines/Mistletoe/Moss** ☐ —

Recent or expected change in load factors No changes

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown☐ LCR _____%

Dead twigs/branches☑ 1 % overall Max. dia. 10cm

Broken/Hangers Number 1 Max. dia. 10cm

Over-extended branches☑

Pruning history

Crown cleaned☐ Thinned☐ Raised☐

Reduced☐ Topped☐ Lion-tailed☐

Flush cuts☐ Other _____

Cracks☐ _____ Lightning damage

Codominant☑ Halfway up tree Included bark

Weak attachments☐ _____ Cavity/Nest hole ___% ci

Previous branch failures☐ _____ Similar branches present

Dead/Missing bark☐ Cankers/Galls/Burls☐ Sapwood damage/decay

Conks☐ Heartwood decay☐ _____

Response growth Tree responds quickly to attacu

Condition(s) of concern _____

Part Size _____ Fall Distance _____

Load on defect N/A☑ Minor☐ Moderate☐ Significant☐

Likelihood of failure Improbable☑ Possible☐ Probable☐ Imminent☐

Part Size _____ Fall Distance _____

Load on defect N/A☑ Minor☐ Moderate☐ Significant

Likelihood of failure Improbable☑ Possible☐ Probable☐ Imminent

— Trunk —

Dead/Missing bark☐ Abnormal bark texture/color☐

Codominant stems☑ Included bark☐ Cracks☐

Sapwood damage/decay☐ Cankers/Galls/Burls☐ Sap ooze☐

Lightning damage☐ Heartwood decay☐ Conks/Mushrooms☐

Cavity/Nest hole _____% circ. Depth _____ Poor taper☐

Lean _____° Corrected? _____

Response growth _____

Condition(s) of concern _____

Part Size _____ Fall Distance _____

Load on defect N/A☑ Minor☐ Moderate☐ Significant☐

Likelihood of failure Improbable☑ Possible☐ Probable☐ Imminent☐

— Roots and Root Collar —

Collar buried/Not visible☐ Depth _____ Stem girdling

Dead☐ Decay☐ Conks/Mushrooms

Ooze☐ Cavity☐ ____% ci

Cracks☐ Cut/Damaged roots☐ Distance from trunk _____

Root plate lifting☐ Soil weakness

Response growth _____

Condition(s) of concern _____

Part Size _____ Fall Distance _____

Load on defect N/A☐ Minor☐ Moderate☐ Significant

Likelihood of failure Improbable☐ Possible☐ Probable☐ Imminent

Page

Risk Categorization

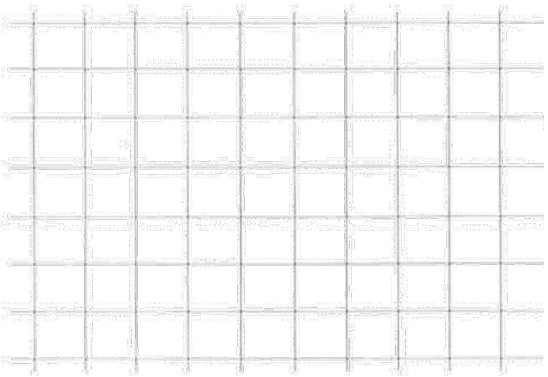
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Likelihood: Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Somewhat	Likely	Very likely	Consequences: Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
Eigen dept	Crown Trunk		X							X	X						X		low
Morgan museum	Crown Trunk		X							X	X						X		low
car park Road	Crown Trunk		X							X	X						X		low

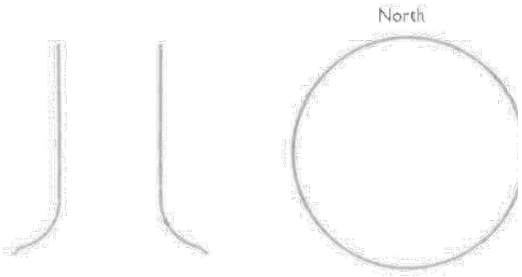
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Tree is on 6 monthly inspection.
Assessed by both Arborists and tree loppers.

Mitigation options

1. _____ **Residual risk** _____
2. _____ **Residual risk** _____
3. _____ **Residual risk** _____
4. _____ **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☐ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 6 - 12 monthly

Data ☐Final ☐Preliminary **Advanced assessment needed** ☐No ☐Yes-Type/Reason _____

Inspection limitations ☑None ☐Visibility ☐Access ☐Vines ☐Root collar buried Describe _____

12 PARKS & GARDENS

12.1 FACILITIES AND PARKS OPERATIONAL UPDATE

File Number: **02-08-2023**

Author: **Manager Facilites and Parks**

Authoriser: **General Manager Infrastructure**

PRECIS

Liveability – Facilities and Parks Operational Update.

SUMMARY

Liveability – Facilities and Parks Operational Update.

OFFICER'S RECOMMENDATION

That the Facilities and Parks Operational update be received for information.

BACKGROUND

Nil

ATTACHMENTS

1. Facilities & Parks Operational Report

LIVEABILITY – FACILITIES AND PARKS OPERATIONAL UPDATE

Leanne Petersen
Manager Facilities and Parks

2022/23 Capital Works - South Burnett Regional Council
Facilities

Project Name	Description	Status
Kingaroy Memorial Park and Memorial Swimming Pool Masterplan	Concept Plans for Kingaroy Swimming Pool and Memorial Park	Kingaroy Memorial Swimming Pool Growing Regions Program Round 1 Expression of Interest due 1st of August. Kingaroy Swimming Pool Detailed Design for Stage 1 and Pool Liner closed. Two tender submissions received. Kingaroy Memorial Park Catchment Flood Study Tender closed. Six tender submissions received. Kingaroy Youth Precinct detailed design for construction of multipurpose court and Ninja course released for tender in September.
Kingaroy Depot Car Park	Construct 12 additional carparks at Kingaroy Depot	Scope of works and plans being finalised and works to go out for Tender in June. Tender closed 22/6 – no offers received. Will be re-advertised July 23.
Nanango Pioneer Park	Reinstate walking track	Engaged with contractor for quotes.

2022/23 Capital Works - South Burnett Regional Council
Parks

Project Name	Description	Status
Parks	Kingaroy Apex Park – Carpark	Works scheduled for 2023/24

2022/23 Works for Queensland Projects
Department of State Development, Infrastructure, Local Government and Planning
Queensland State Government
Facilities

Project Name	Description	Status
Regional Maintenance	Operational Maintenance projects	Ongoing maintenance projects within community buildings.

Parks

Project Name	Description	Status
Kingaroy Parks Refurbishment	Lions Park Refurbishment	Concrete slabs and construction of shelters has been completed in Lions Park – section near Bill Hull Car centre. Public Amenities and new playground equipment has been procured. Playground equipment estimated time of arrival is 18 weeks. Installation to commence October 2023.
Benarkin Parks Refurbishment	First Settlers Park Refurbishment	The old timber toilet block has been removed. Tenders for the concrete slab and shelter construction have been

		awarded. Bollards have been installed by Parks Team. New Shelter has been installed. Fencing installation commenced July by local contractor.
Murgon Parks Refurbishment	QEII Park renewal	Works completed. Defects on shelter and slabs are being rectified by local contractor. Solar light repaired. CCTV to be commissioned in August.
Proston Park Refurbishment	Railway Park renewal	Railway Park is complete, the weaners and southern cross windmill are in places, Crew did a wonderful job on this project.
Kumbia Park Refurbishment	Play equipment, landscaping, and car parking	Design Stage – community consultation to commence August. A meeting was held on the 13/07/2023 at Kumbia Hall, a committee has been elected with 12 people joining the community.
Kingaroy Memorial Park Redevelopment	Delivery of concept design	Estimating for the construction of 5 new shelters and 12 new table settings is underway. Tenders for the shelters and slabs have been awarded. Concreting of the shelter slabs has been awarded. Construction of the shelters has been awarded. Demolition of the old concrete table settings will start on Monday 17th July.
Kingaroy Memorial Park	Asbestos removed from garden	Australian Asbestos Management Removed the asbestos and garden beds from the gardens on the western end of Park.
Wondai Park Amenities Refurbishment	Upgrade 3 amenities (McKell, Dingo Creek, Coronation Park)	Dingo Park completed Coronation Park completed McKell Park completed
Wondai 24hr Stop Over carpark and drainage		Design stage – concept plan completed
Nanango Tipperary Flats	Restoration of carpark and free camping area at the Nanango Tipperary Flat	Internal roadwork is complete. A new pump and pipework have been installed for the water feature. Irrigation system to be installed in July, area to be grassed in September. Nanango Parks team have installed the water feature. They are planting out the surrounding landscaping this week.

2022/24 Building Better Regions Round 5 (BBRF)
Department of Infrastructure, Transport, Regional Development, Communication, and the Arts. Australian Government

Project Name	Description	Status
Wondai Swimming Pool Building Better Regions Project	Upgrade toilets and create water play area.	Water Splash Play Area completed and operational by January 2023. Contractor for toilet refurbishment commenced April. Toilet refurb due for completion approx. 14/8/23

2022/24 Local Government Grants and Subsidies Program (2022-24 LGGSP)
Department of State Development, Infrastructure, Local Government and Planning
Queensland State Government

Project Name	Description	Status
Blackbutt Memorial Hall	Roof replacement on Blackbutt Hall	Grant approved. Project to commence in 23/24. Tender documents to be released 4th of August

2022/24 Gambling Community Benefit Fund
Department of Justice and Attorney-General

Project Name	Description	Status
Mondure Hall Committee	Roof replacement on Mondure Hall. Application submitted by Mondure Hall Committee.	Grant approved. AKR Builders have been appointed and will commence 23/24. Work to commence 31/7. Estimated 6 week construction period.

2022/24 Kingaroy to Kilkivan Rail Trail
Department of Transport and Main Roads

Project Name	Description	Status
Kingaroy to Kilkivan Rail Trail	Rehabilitation and rectification work.	Funding announcement from Community and Recreational Assets Recovery and Resilience Program. Grant project plan and budget to be discussed with project managers in June.

FACILITY & PARKS MAINTENANCE

Project Name	Description	Status
Parks Maintenance update	General Operations	The Winter Maintenance Program has commenced across all parks and CBDs in the region. Parks Teams have completed the following maintenance works under the 23/24 Operational Budget for Parks. Kingaroy • Kingaroy Setup and pack down of temporary fencing for asbestos removal Memorial Park Kingaroy • Chainsaw training for two staff • TAFE careers day stall at Kingaroy TAFE campus • Two staff have begun formal training at Toowoomba TAFE campus for their Certificate 2 and 3 in Horticulture (one day per week each) • Tree Requests • Stump grinding • Tree trimming using EWP to remove dead wood and mistletoe. • Back filling concrete slabs at Taabinga cemetery

		• Completion of topping up soft fall in playgrounds • Pressure washing of O'Neill Square and the visitor information centre. • Painting back wall of youth park Basketball court • Tree requests have been completed now working on parks, footpaths, and green space trees. • Removal of mulch piles from Taabinga cemetery to complete garden update at Crawford. • Continuation of sanding and staining all timber structures. • Removal and replant of selected street gardens. • Repair of park play equipment. • Spreading of a further 80 cubic meters of soft fall in the playgrounds. • Removal of roses from Memorial Park. Replant them in Senior Citizens Garden at Kingaroy Town Common Hall. • Removal of dirt and silt from gutters within the CDB Nanango • Les Muller Park Blackbutt garden edging sleepers have been installed, garden has been pruned and mulched. • New soft fall at Benarkin and Maidenwell. • CBD in Nanango re- mulched. • Work on town bin repairs for Waste Services. • Repairs to all toilets, repaint of Les Muller Park amenities. • Staff training. • Clean up at Nanango and Blackbutt cemeteries, back filling holes at the edge of graves. • Pressure cleaning of tables and chairs at Scotts Car Park and Nanango CBD completed. • Blackbutt CBD and Les Muller Park maintenance. • 175 anniversary programs complete.

		Wondai & Murgon • Planting of planter boxes in Wondai completed • Mulching gardens and removal of dead flower heads or old plant growth. • Cleaning and oiling timber furniture and painting some old furniture. • Tree trimming and dead tree removal. • Pressure clean play equipment and footpaths. • Removed weeds and cleaned out Lions Park Murgon • Cleaned out crib room and depot shed in Murgon. • Re-established garden in front of Murgon Museum with new nutrient garden soil, re- planted and mulched. • Complete Tidy up of Murgon / Wondai cemetery. • Continuing pressure cleaning and oiling of shelters Wondai. • Re-mulching Garden bed Wondai. Proston/ Hivesville • Prune lifting and mulching of all trees in parks. • Weed control spraying completed in all Parks • Railway Park upgrades completed • A slab and park chair have been added to Hivesville. • Trees and plants have been ordered for Proston lookout. • Railway Park shelters and tables and BBQ pressure cleaned. • CBD footpath genie clean. • In front of Proston town hall pressure cleaned. • Apex Park Proston, remove old fence, old BBQ and old concrete slabs. • Install bin in apex park Proston. • Weekly rubbish and toilet clean 3 days a week. • Swept all gutters in CBD and surrounding areas by hand.

		• Rebuilt picnic tables and painted for lookout. To be installed in August. • Collect rubbish at Boondooma homestead every weekday. • Finished tree pruning trees in Proston. • House cleaning at depot shed. • Ongoing garden maintenance Hivesville, Proston weeding mulching.
Kingaroy to Kilkivan Rail Trail	Kingaroy to Murgon	Ongoing maintenance along the Rail Trail whipper sniping long grass, cleaning up fallen trees. Recent rain in Murgon and Wondai may increase grass growth on the pavement and therefore follow up spray of weeds in the pavement will be implemented in August.

FACILITIES & PARKS ASSET MANAGEMENT

Item	Background	Actions
Delta S	Maintain accurate database of building asset condition, required maintenance, required capital works, and completed capital works.	Update records based on completed maintenance and capital works.
WIP Capitalisation	Completed projects require accurate cost break up to allow capitalisation of the expenditure.	Review completed projects and provided asset cost break up. Update Delta S database accordingly. Current WIP completed.
Condition Assessment Public Amenities	Complete a condition assessment of public amenities to inform 23/24 Budget	Council officers have undertaken condition assessment of 47 public amenities in the region. Report to be presented to Council to help inform the 10yr Capital Works Budget. Report has been prepared.
Windera Park Kiosk	Demolition of derelict kiosk at Windera Park. Contains ACM in poor condition and has significant termite damage.	Agreement has been reached with TMR to fund the demolition of the Windera Park shelter. SBRC to manage contractor appointment and works with TMR to be invoiced for costs on completion. Demolition complete – Invoice for re-imbursement to be forwarded to TMR.

LAND REVIEW

Item	Description	Actions
LAND ASSET DIVESTMENT UPDATE		
1 Avoca St, Kingaroy SB Child Care	Subdivision of allotment in line with current lease area.	Engaging Surveyors and planning consultant.

Lots 36, 37 & 53 Morris St, Blackbutt	Listed on the Environmental Management Register.	Engaging Environmental Consultants to complete site investigation for removal of the lots from the EMR.
Agnes St, Kingaroy – vacant residential lot	Owned by Council for flood/drainage purposes.	Held for Affordable Housing opportunities – grant funding submission.
Cornish Street, Kingaroy – Kingaroy Regional Enterprise Centre	Contract of Sale executed	Unconditional – Settlement date 4th August, 2023
232-234 Kingaroy Street, Kingaroy RSL Transfer	Investigating transferring to RSL for potential Welfare Centre	Surveyors being instructed to perform boundary realignment survey.
LAND ASSET DIVESTMENT – OPEN MARKET		
Lot 36 Burrows St, Wondai Land not used – Council approved to be sold by tender.	Tender completed – No responses	Block organised to be slashed. Listed with local agent.
29 Jellicoe Street, Proston	Tender closed 4th July 2023 – No responses	Listed with local agent and cash offer received. Contracts awaiting signatures.

DIVESTMENT STATS								
	INVESTIGATE/PREPPED FOR SALE	APPROVED TO DIVEST	TENDERED FOR SALE	LISTED FOR SALE	UNDER NEGOTIA-TION	UNDER CONTRACT	SETTLED	PROCEEDS
Agnes St, Kingaroy	Y	Y	-	-	-	-	-	$0
29 Jellicoe St, Proston	Y	Y	Y	Y	Y	-	-	$
24-26 Burrows St, Wondai	Y	Y	Y	Y	-	-	-	$
6 Cornish St, Kingaroy	Y	Y	-	-	-	-	-	$

PARKS – Customer Requests

July 2023

Category	Part Month 01/07/23 – 31/07/23
Animals (Dead)	**1**
Rail Trail	**3**
Dams – Maintenance & Gordonbrook	0
Parks – Enquiries & Requests *	**18**
Public Health	0
Toilets	**35**
Trees	**1**
Roads	0
Water / Waste	0
Footpath	**2**
Local Laws	0
Compliments	3
Use of Council Parkland	**0**
Cemetery Maintenance	**1**

Other	0
Total	64

**Parks – Enquiries & Requests includes:*
Mowing, Parks & Gardens, Street Furniture, Drainage, Weeds, Council Buildings.

13 QUESTIONS ON NOTICE

13.1 QUESTION ON NOTICE - TRUCK TYRES

File Number: **02/08/2023**

Author: **Acting General Manager Liveability**

Authoriser: **Chief Executive Officer**

The following question on notice was received from Councillor Scott Henschen.

Question

What was the outcome with the CRM raised on truck tyres on Strongs Road?

Response

A CRM on this matter could not be located but Officers can recall collecting the truck tyres and relocating them to the Kingaroy Waste Disposal Facility for removal by an authorised contractor.

RECOMMENDATION

That the response to the question regarding truck tyres on Strongs Road raised by Councillor Scott Henschen be received and noted.

ATTACHMENTS

Nil

13.2 QUESTION ON NOTICE - TYRES AT NANANGO LANDFILL

File Number: **02/08/2023**

Author: **Acting General Manager Liveability**

Authoriser: **Chief Executive Officer**

The following question on notice was received from Councillor Katy Duff.

Question

When we collect the tyres from Nanango where do they go and how much does it cost?

Response

S&J Australian Scrap Tyre Disposal are the providers that we utilise to remove tyres from all our waste facilities where tyres are accepted. This company is accredited collector registered with the Tyre Stewardship Australia. The tyres are collected and transported (using the waste tracking system) to a facility at Beenleigh for processing. S&J work closely with Chip Tyre who are the only Queensland producers of rubber crumb, and they are also registered with Tyre Stewardship Australia.

The cost to remove the tyres is on a sliding scale dependent upon the size and level of contamination of the tyre. The fee set by S&J is reflected in the fees and charges for the disposal of the tyres. For 2022/23 a total of 1,026 tyres were removed from the Nanango waste facility at a total of $16,767.30.

RECOMMENDATION

That the response to the question regarding tyres at the Nanango landfill raised by Councillor Kathy Duff be received and noted.

ATTACHMENTS

Nil

13.3 QUESTION ON NOTICE - MATTRESSES

File Number: **02-08-2023**

Author: **Acting General Manager Liveability**

Authoriser: **Chief Executive Officer**

The following question on notice was received from Councillor Cr Scott Henschen.

Question

Is there a regulation or law about selling a second-hand mattress?

Response

There are no restrictions or laws in Queensland for the selling of a second-hand mattress.

RECOMMENDATION

That the response to the question regarding the selling of second-hand mattresses raised by Councillor Cr Scott Henschen be received and noted.

ATTACHMENTS

Nil

13.4 QUESTION ON NOTICE - INFRASTRUCTURE

File Number: **02-08-2023**

Author: **Executive Assistant Infrastructure**

Authoriser: **General Manager Infrastructure**

The Infrastructure Department has received the below Question on Notice from Councillor Schumacher:

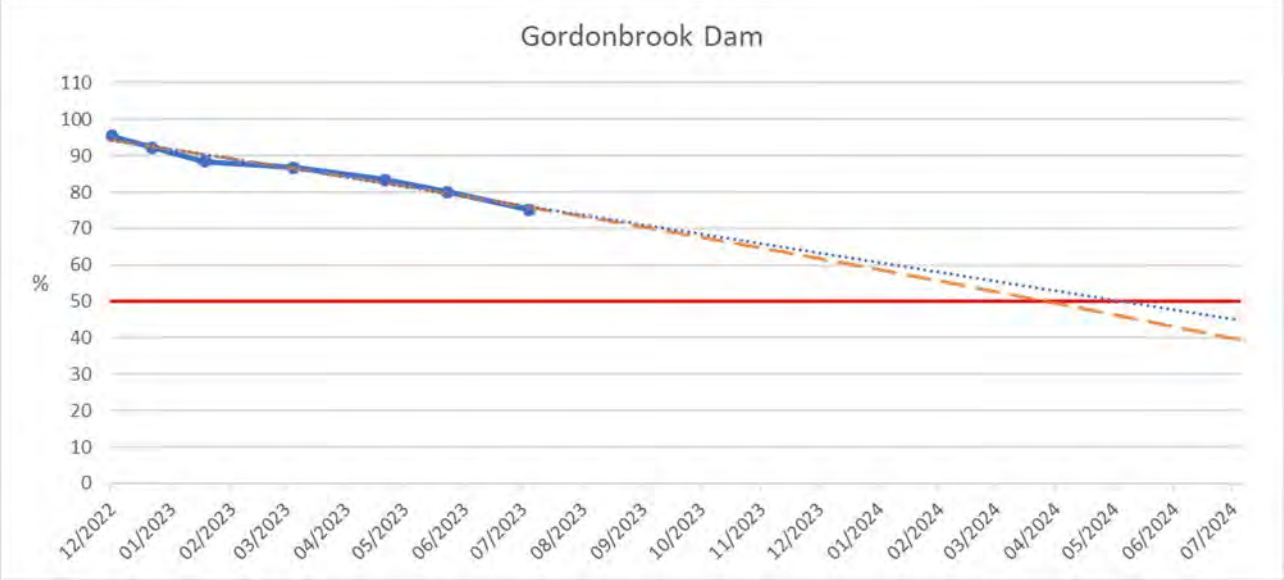
Question

1) Has any modelling of how long that water source will last been done and how long till we reach the 50% level?

Response

1) 50% likely around February – March based on current demand and climate.

   Below is a graph of the current trendline for Gordonbrook Dam. This is indicative only and does not allow inflows or increased evaporation rates during the warmer months.



RECOMMENDATION

That the response to the question be raised, received and noted.

ATTACHMENTS

Nil

13.5 QUESTION ON NOTICE - MURGON SHADE SHELTERS

File Number: **02/08/2023**

Author: **Manager Facilities and Parks**

Authoriser: **General Manager Infrastructure**

The following question on notice was received from Councillor Kathy Duff. This matter was laid on the table from the Infrastructure, Environment and Compliance Standing Committee Meeting 5 July 2023.

Question

With the Murgon shade shelters, there has been some feedback from the community that a lot of people can't get between the seat and the tables because they are too close. Is it possible the seats could be put further back?

Response

The table and seat settings have been installed as per the manufacturer's instructions. It is possible to re-locate the bench seats to be further away from the table edge however this will incur some expense.

Moving the tables will expose fixing holes in the slabs which will need to be repaired. Additional anti-vandal fixings will need to be purchased to replace those destroyed during the re-location.

The applied finish to the slabs has been installed around the furniture legs so moving the seats will expose raw concrete which will need to be re-finished.

RECOMMENDATION

That the response to the question regarding Murgon Shade Shelters raised by Councillor Kathy Duff be received and noted.

ATTACHMENTS

1. **Design of table settings for Murgon QEII Park**
2. **Design of table settings for Kingaroy Lions Park**

PICTORIAL VIEW
TOP VIEW
SCALE 1:20
SIDE VIEW
SCALE 1:20
ELEVATION
SCALE 1:20
Concrete shown for reference only
Concrete shown for reference only
DRAWING No.
CTS-SM-DEL-005-PD
REVISION
0
grillex
PROJECT:
CITISTYLE TABLE SETTING
PRODUCT DRAWING
DESCRIPTION:
2xBENCH 1xTABLE 2000 LONG - SURFACE MOUNT DELUXE 60x35 FINISH

LIONS PARK KINGAROY
DRAWING No.
IXTS-SM-DEL-001-PD
REVISION
0
PICTORIAL VIEW
SIDE VIEW
SCALE 1:20
2480 Recommended slab size
500
1480
685
800
340
570
450
750
Concrete shown for reference only
TOP VIEW
SCALE 1:20
ELEVATION
SCALE 1:20
3000 Recommended slab size
2000
1400
300
5 Endcap
4 Wedge anchors per leg base
Concrete shown for reference only
100
grillex
PROJECT:
INTEGRA-EX TABLE SETTING
PRODUCT DRAWING
DESCRIPTION:
2xBENCH 1xTABLE 2000 LONG - SURFACE MOUNT DELUXE FINISH | 10x35 FINISH
T: 1300 552 302
grillex.com.au

14 CONFIDENTIAL SECTION

OFFICER'S RECOMMENDATION

That Council considers the confidential report(s) listed below in a meeting closed to the public in accordance with Section 254J of the *Local Government Regulation 2012*:

14.1 Update - Kingaroy Swimming Pool Water Management

This matter is considered to be confidential under Section 254J - g of the Local Government Regulation, and the Council is satisfied that discussion of this matter in an open meeting would, on balance, be contrary to the public interest as it deals with negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government.

15 CLOSURE OF MEETING