

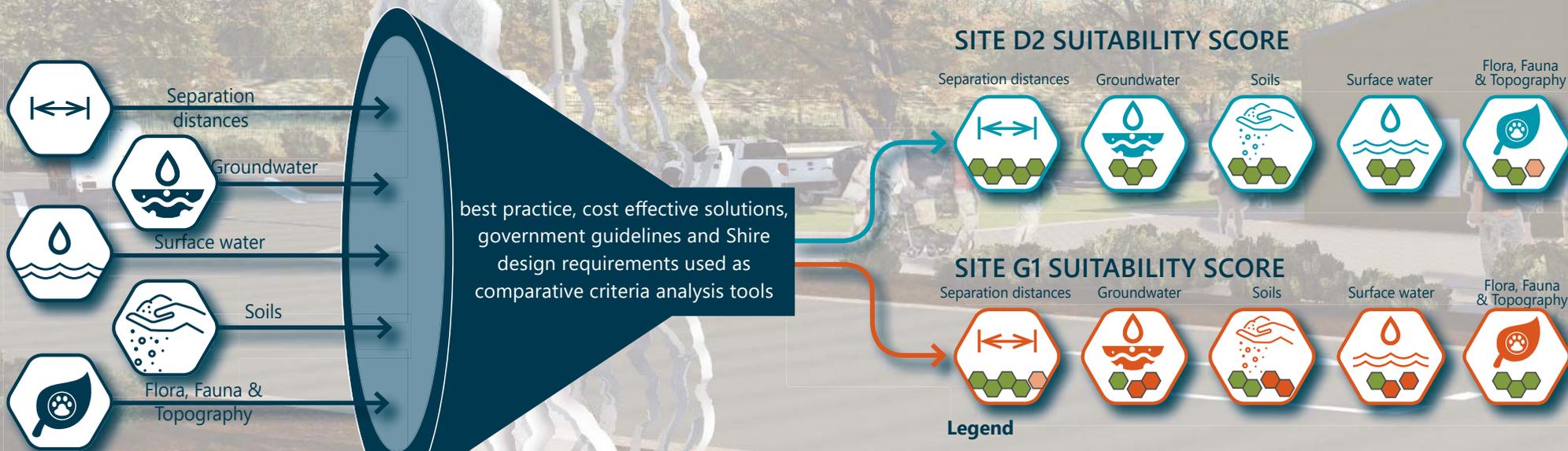
# Regional Resource Recovery Park Site Selection Community Report



REV 4  
28 April 2021

# Site Criteria Analysis Filter System

SITE INVESTIGATIONS → COMPARISON CRITERIA → SUITABILITY SCORE



## SITE D2 SUITABILITY SCORE



## SITE G1 SUITABILITY SCORE

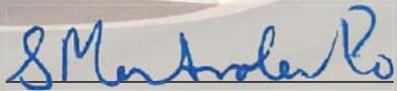


- Legend**
- Green hexagon: The Site has desirable and/or superlative characteristics that meet or exceed requirements
  - Orange hexagon: The Site has acceptable characteristics
  - Red hexagon: The Site has non - desirable and/or non- supportive characteristics

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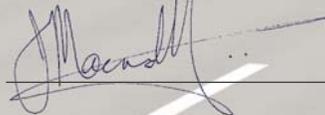
Authorising Officer



Sam Mastrolembo  
Chief Executive Officer  
Shire of Broome

28/04/2021

Responsible Officer



Jeremy Macmath  
Special Projects Coordinator  
Shire of Broome

28/04/2021

| Revision | Date       | Author                    | Status                                   |
|----------|------------|---------------------------|--|
| 1        | 07/04/2021 | Shire of Broome Waste TAG | For Waste TAG Review                     |
| 2        | 13/04/2021 | Shire of Broome Waste TAG | For Executive Review                     |
| 3        | 21/04/2021 | Shire of Broome Waste TAG | For Council Endorsement                  |
| 4        | 28/04/2021 | Shire of Broome Waste TAG | For Council Endorsement (minor revision) |



# Project Background & Site Selection Overview



# Introduction

The Regional Resource Recovery Park (RRRP) is an important project to ensure that the Shire of Broome (The Shire) can continue to provide municipal waste services to the Broome community. This project has been developing for almost a decade, requiring an extensive amount of iterative site consideration and conceptual design. Following endorsement by Shire of Broome Council in December 2020, a Community Engagement Plan was used as a road map for community engagement for the site selection process.

This Engagement Report is a document set to outline the engagement process developed, the engagement methods and activities undertaken as well as the outcomes achieved through the engagement process.

Diagrams through this document have been developed as part of the engagement process and have been selected based on their importance in illustrating the messaging.

Three key time periods are important to understand for this process to understand the development of a facility such as the RRRP.

## Key RRRP Milestones



# Background & Overview

The landfill at Broome's existing Buckleys Road Waste Management Facility is fast approaching the end of its operational life. In preparation for that and in line with the community's desire to see a stronger commitment to waste minimisation and recycling, a new Regional Resource Recovery Park is being planned to support the Broome community for the next 70 years and beyond. This Facility aims to be a state of the art facility that reduces waste to landfill by 70% by 2030 in line with the State's aspirational Waste Strategy targets and driven by the 'Waste Hierarchy' concept shown to the right. This target is one normally reserved for major centres and metropolitan Regional Councils in Australia. It is therefore seen as incredibly advanced for a regional centre to aim for such strong and balanced sustainable municipal service targets.

The RRRP will have multiple key elements including a Community Recycling Centre (CRC) and a new best-practice landfill. The components of each is illustrated in the 'Components Puzzle' diagram below.



**RRRP**

# Site Selection Process

The Shire of Broome has been working for almost a decade to identify a suitable site for the RRRP. This Community Review is an opportunity for the community to be part of this historic and important decision. Along with the Broome community, the Shire of Broome wants to be sure to select a landfill site that is safe for the community and the environment.

The RRRP is not just about landfill, it is also about holistic and sustainable waste management practice. It is about offering a best-practice facility that supports the community to reuse, recycle and recover waste materials. This creates a reduced reliance on landfill and allows the Shire of Broome to reduce the quantity of waste going into landfill.

What is known about the Shire of Broome landscape is that it is located within an area with high social, heritage, native title and environmental values. High level values are partnered by the following making it even more challenging to secure a suitable site for a waste facility. This includes

- limited road networks;
- minimal land availability due to;
  - strict requirements for waste facility sites;
  - tenure and ownership arrangements, and;
- Broome's geographic location on a small peninsular.

An overview of key site selection considerations are shown in the diagram on the right.



## Site Selection Process cont...

The project has remained for almost a decade in the same project stage: site selection. What this exemplifies is the rigorous process and expected pace of the site selection process for a facility such as the RRRP. Site selection works have been the forefront of project development during this period with a simplification of the steps taken shown in the timeline diagram below.

As a result, the options available for a landfill are quite constrained. During the initial site selection works in 2019, the Shire consulted with a range of stakeholders including the Broome community, Nyamba Buru Yawuru and various Government departments.

The result of the consultation formed the basis of the Site Selection Criteria which governed the entire siting process. These criteria were also consistent with EPA Victoria's Best Practice Environmental Management Guidelines. This is a nationally recognised guideline that covers all relevant factors including environmental, social and infrastructure values.

Site selection process has been a long and time consuming task that commenced with investigation of sites within a 60km radius of Broome. The outcomes of this process is summarised in the diagram below. In 2015, Site D1 located just north of the junction of McGuigan and Cape Leveque Roads was identified as a potential location for the RRRP following desktop analysis. Through this process, concerns were raised by local residents about the potential impact on the surrounding groundwater. At the time, the Shire had not conducted sufficient on site investigations and analysis to be sure of the viability of Site D1 and as such, due to community concern and lack of data, Site D1 was ruled out as an option.

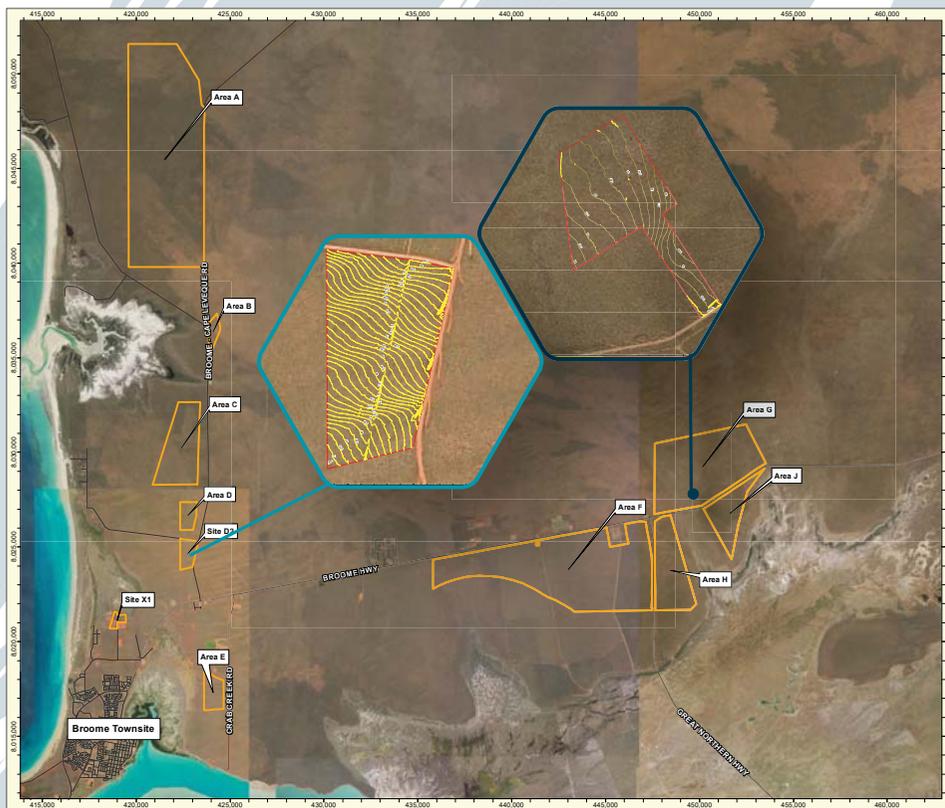
The Shire, with the services of a multi- disciplinary project team (Project Team) has conducted initial desktop site analysis followed by detailed site investigations and further detailed site and data analysis for over 18 months as part of the project in it's current form. On top of this, all deliverables completed and the process undertaken by the Project team has been examined and peer reviewed by a highly regarded multinational, multi- disciplinary consultancy with strong experience in the development of waste projects. This detailed development and review process has galvanised the direction forward with the two remaining sites for the landfill element of the RRRP.



Site information is critical to this project development illustrated and described below.

- **Site D2:** located 12km northeast of Broome's town centre along Cape Leveque Road. The site is 5.5km northeast of the Buckley's Road Waste Management Facility.
- **Site G1:** located 38km northeast of Broome's town centre along Great Northern Highway. The site is 31km east of the Buckley's Road Waste Management Facility.

The two sites of consideration as well as the other sites investigations over the eight year period can be seen in the below location plan with detailed vignettes showing both sites.

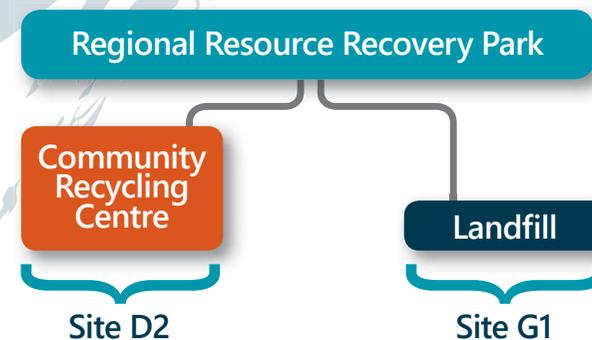


Based on the two sites and requirement to develop the CRC at Site D2, two Development Options have been presented through engagement and are illustrated in the diagram below. The Community Review process has been a broad involvement process that has given the community an opportunity to provide the Shire with feedback on the work undertaken to date and the two development options under consideration.

### OPTION 1: Integrated



### OPTION 2: Network



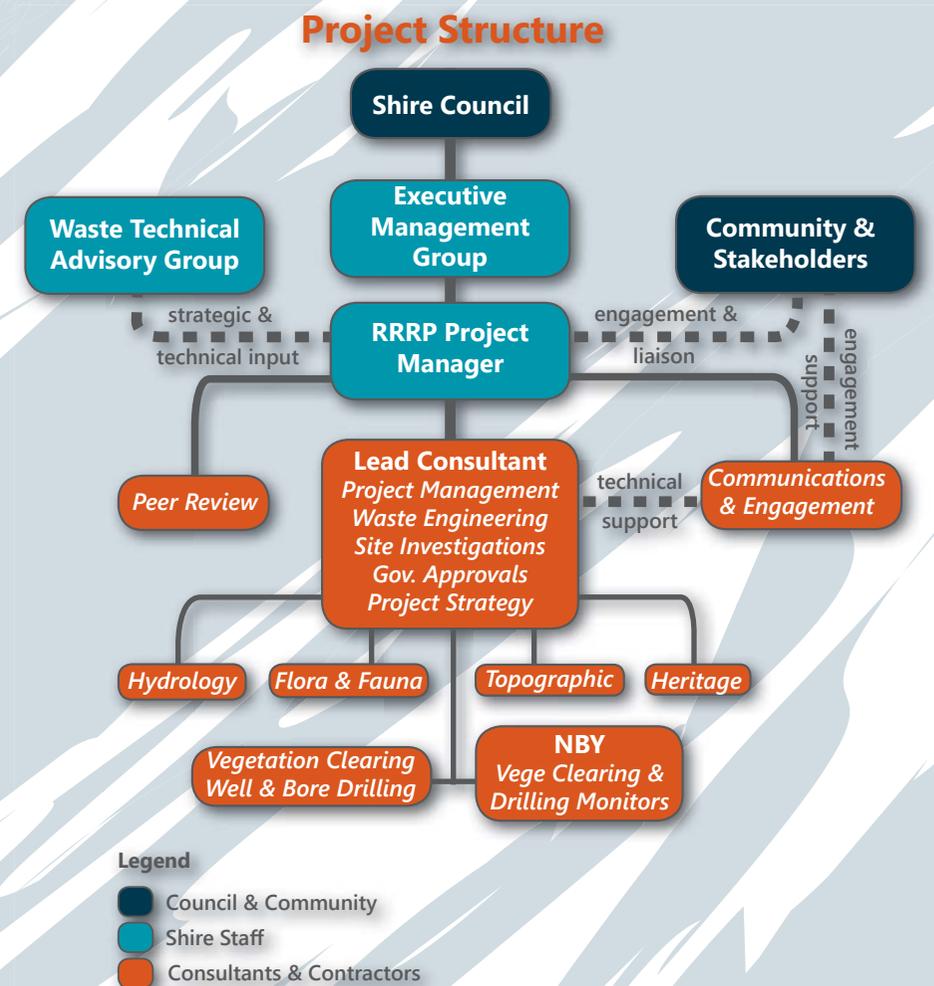
# Engagement Background & Overview

In December 2020 a report was tabled to Council providing an update on the site investigations which had been undertaken on the two preferred locations for the siting of the proposed RRRP. It also provided an update on progress made more broadly on the project and presented a Site Comparison Report for Council’s consideration. The report essentially compared the technical suitability and financial implications of each site Development Option, recommending site D2 as the preferred site for co-location of all components of the RRRP. The below diagram illustrates the analysis process used for site investigations components.

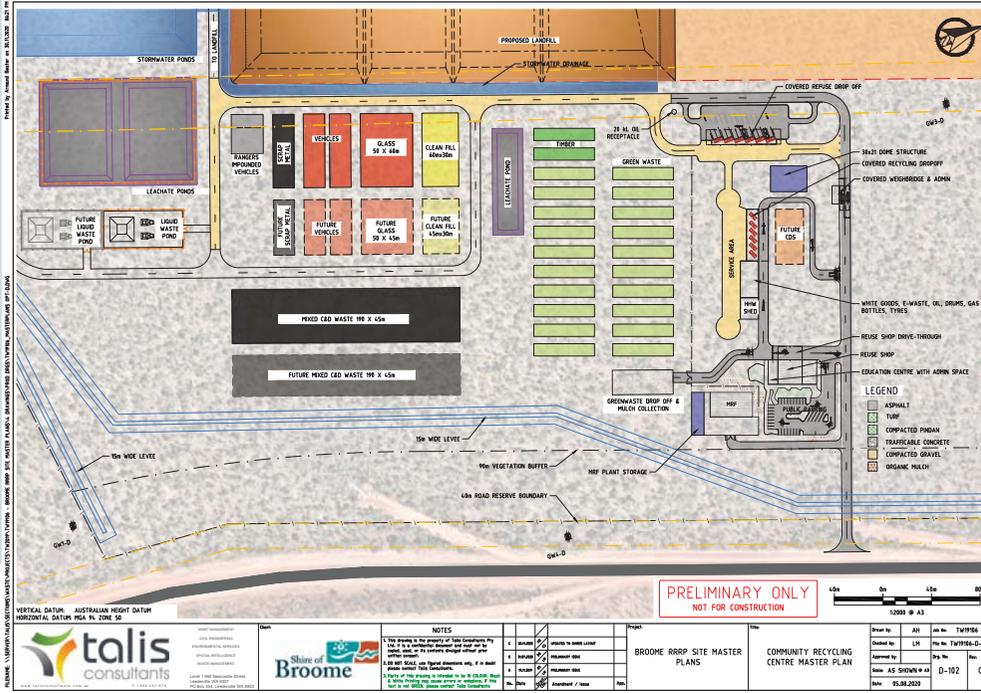
Based on the findings of the site investigations, Groundwater Source Protection Assessment, Financial Review and Assessment and Site Comparison Report, The Project Team recommended proceeding with Development Option 1 as Site D2 has been determined to be a technically superior site to Site G1 for the development of a landfill including groundwater, soils, flooding, downstream receptors, social attributes, compliance with guideline recommendations and capital and operating costs. Co-locating both the CRC and landfill at Site D2 was also deemed more cost effective and a beneficial solution for the delivery of the Shire’s waste management services.

A Community Engagement Plan outlining the proposed engagement process and methodology was also tabled for Council consideration of endorsement at this meeting. Council resolved the following at the 10 December 2020 OMC.

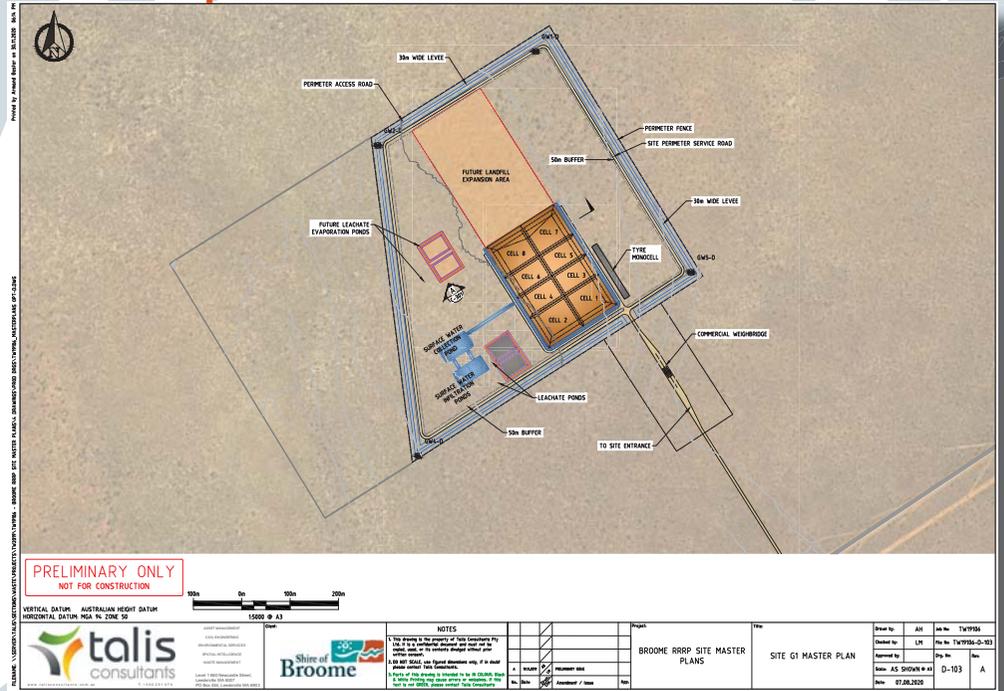
The below project structure diagram simply outlines the all the entities involved in the RRRP Project and illustrates the complexity of the project. The masterplans shown overleaf are the basis of all conceptual design services undertaken over 18 months that shows at a high level all components and layout structure for both Sites G1 and D2 as required for both development options.



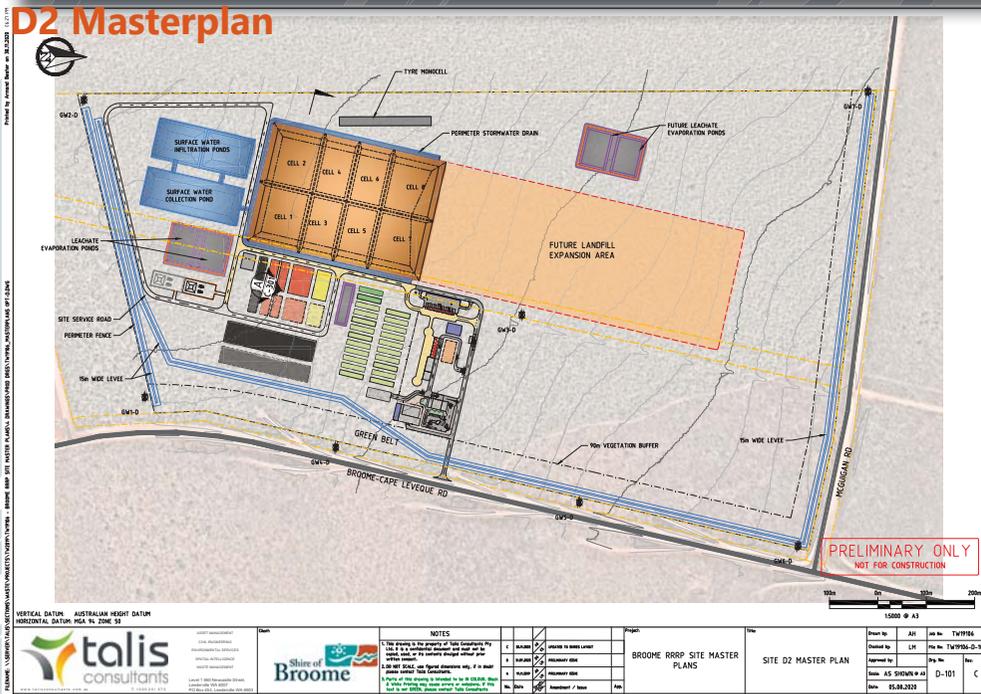
# D2 CRC Detail Masterplan



# G1 Masterplan



# D2 Masterplan



# Community Review Activities & Overview



## Engagement Snapshot

- 4 project deliverables driven community engagement and communications process
- 9 engagement materials created for engagement
- Online Community Surveys taken – 97
- Pop-up Surveys taken – 103
- 28 Facebook posts. Facebook analytics show these posts 'reached' 34,626 people and there were 1512 'engagements' on the Shire's content.
- E-newsletters – Three e-newsletters sent to a total of 2893 people, with 1056 recipients opening the e-mail. This is a 36.5% open rate.
- Registered attendance at Info Sessions:
  - Environs Kimberley – 12 Attendees
  - Coconut Well residents – 22 attendees
  - General community – 6 attendees registered 12 attendees
  - RRRP website visits – 1852 during Community Review period.
- Media coverage:
  - Stories in Broome Advertiser on 18 February & 4 March 2021.
  - ABC Kimberley radio interviews on 15 February & 5 March 2021.
  - Goolarri Radio interview on 16 February 2021.
  - Triple M radio interview on 23 February 2021.
  - Two promotional videos released on YouTube and social media on February 15 and March 17 2021.

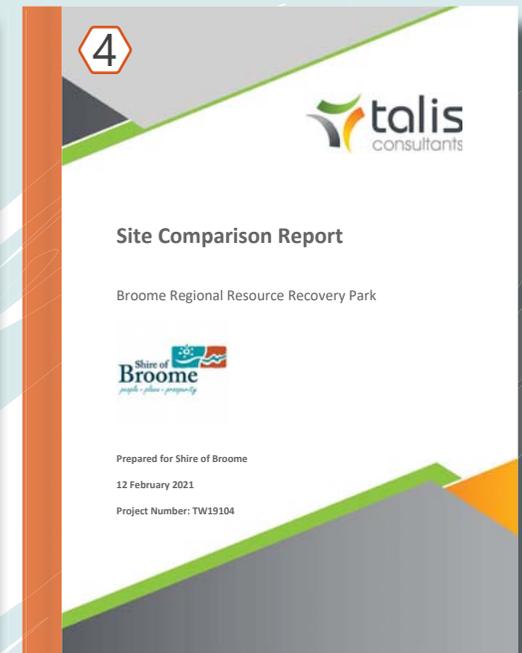
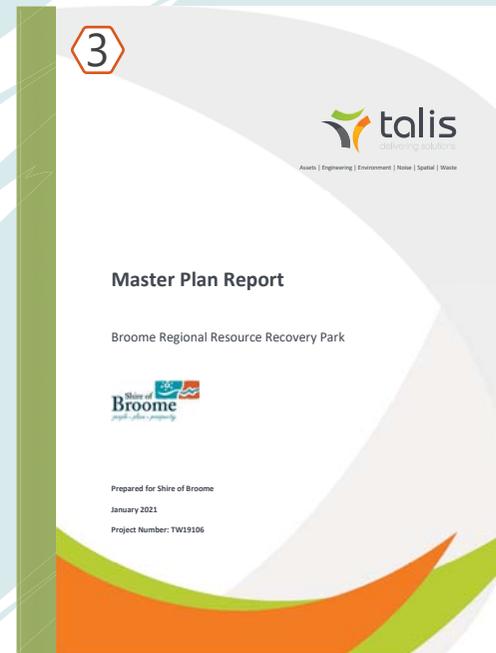
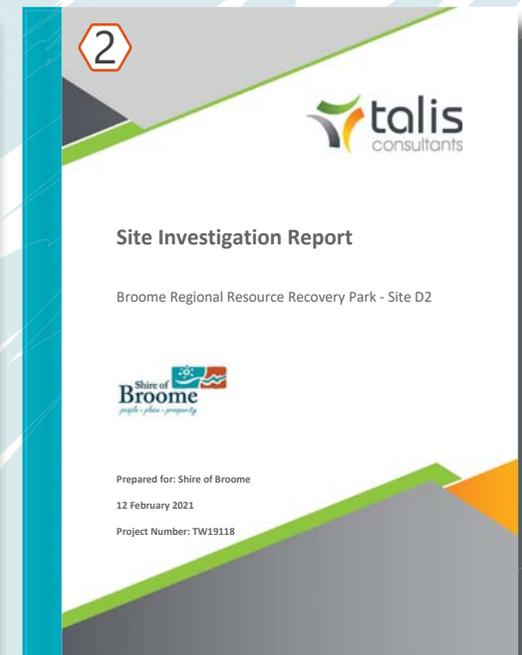
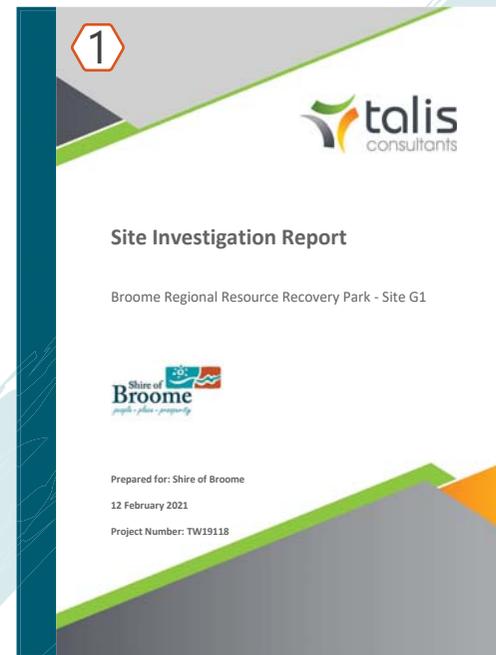
## Project Materials and Engagement Materials

The engagement process was built upon the Shire's desires to ensure the community recognise that practices are open, transparent and honest. This means that all information created in the development of this project over the last 18 months is made available to the public for review and commentary.

The key Documentation to inform the process includes

- ① Site Investigation Report G1- All technical reports undertaken as part of the investigations
- ② Site Investigation Report D2- All technical reports undertaken as part of the investigations
- ③ Masterplan Report- Outline of the conceptual design and process to create this early design stage.
- ④ Site Comparison Report: an amalgam of all works undertaken as part of the Project that compares the two development options to assist Councilors making a formulated decision on which option to follow.
- ⑤ Peer Review Report: Technical overview and investigation of items 1, 2 and 4 by third party multidisciplinary consultant with experience in landfill project review services.

In total this documentation exceeds 400 pages and is unfair to expect Broome Community to read, digest and understand all the theoretical and technical reports developed by expert consultants.



Engagement materials were created to assist the community to understand all the key parts of the studies undertaken including:

- ① **Information Pack:** a synthesis of the Site Comparison Report.
- ② **Fact Sheets:** based on key areas of interest or concern. These include groundwater, landfill requirements, environmental approvals and the CRC. Fact sheets are more technical in terminology and content than other engagement documents and are aimed as takeaway materials for community members who had special interests in particular topics.
- ③ **Story Boards:** Large stand-alone graphic documentation that focused on key messages, findings and illustrations to explain technical content of interest.
- ④ **Website:** A standalone project website developed to be the project hub where all project information would be stored and added for community access and communications.
- ⑤ **Online Survey:** Detailed survey was created to give all Broome community members the opportunity to respond to the project and 'get involved'. This was a long and detailed survey that encompassed background questions, landfill questions and site selection concerns.
- ⑥ **Pop Up Survey:** A simplified Survey was developed to quickly gauge public opinion during community information sessions or pop-up sessions.
- ⑦ **Post Cards:** A take home flyer to 'put on the fridge', aiming to entice other interested householders to take part in the engagement activities.
- ⑧ **PowerPoint Presentations:** For community presentations
- ⑨ **3Ds:** Renders, fly and drive through videos illustrate the RRRP

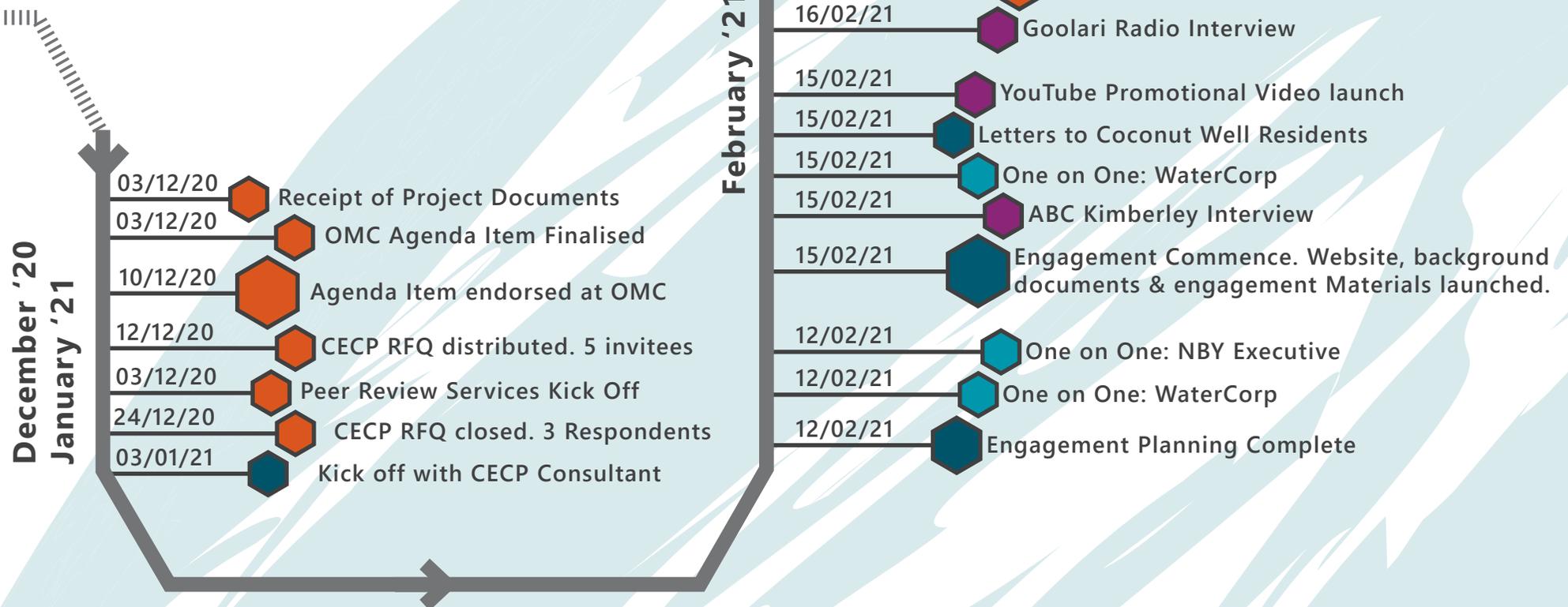


# Community Review Timeline

The exercises undertaken as part of this engagement process are broad and extensive, best summarised as:

- engagement planning
- engagement activities
- Administrative and internal elements or other projects tasks
- Engagement evaluation and reporting
- Media coverage

The process is best illustrated in the colour coded, chronological timeline illustrated below and overleaf.



March '21

- 03/03/21 Info Session: Environs Kimberley
- 04/03/21 Article in Broome Advertiser
- 04/03/21 Info Session: Coconut Well
- 04/03/21 Survey Launch
- 05/03/21 ABC Kimberley Interview
- 05/03/21 Info Session: Broome Community
- 04/03/21 Broome Advertiser Content
- 05/03/21 Pop Up Stall: Paspaley Plaza 11:30 - 13:30
- 06/03/21 Pop Up Stall: Boulevard 11:30 - 14:00
- 06/03/21 Pop Up Stall: Broome Markets 8:30 - 11:00
- 10/03/21 Completion of Peer Review Report
- 11/03/21 'Shire News' Advertorial in Broome Advertiser
- 15/03/21 Pop Up Stall: Shire Admin (remains set up)
- 17/03/21 YouTube Promotional Video launch
- 19/03/21 Info Session Minutes to All Attendees
- 19/03/21 Shire E newsletter
- 20/03/21 Pop Up Stall: Broome Markets 8:30 - 11:00
- 25/03/21 'Shire News' Advertorial in Broome Advertiser
- 26/03/21 28 FaceBook posts on RRRP Project between 15/03 - 26/03/2021
- 26/03/21 Shire E newsletter
- 27/03/21 Survey Close
- 29/03/21 Recurring advert on Triple M and Hit FM end
- 29/03/21 Six week Engagement Completion (end of CECP consultancy)

Legend

- Engagement Planning
- Engagement Activities
- Media Coverage
- Administrative / Other
- Engagement Evaluation & Reporting

April '21

- 21/04/21 Completion of Community Engagement Report
- 20/04/21 Response to Submissions
- 20/04/21 Completion of OMC Agenda Item
- 16/04/21 EMG Review of Agenda Item
- 16/04/21 Draft OMC Agenda Item to EMG
- 16/04/21 Draft Community Engagement Report to EMG
- 16/04/21 Engagement Report Content
- 16/04/21 Survey result critical analysis
- 16/04/21 Survey result download

# Community Review Responses and Involvement

## Primary Stakeholder Engagement Responses

All questions raised as part of the Info Sessions were captured and responded to. Most responses were able to be developed with existing documents, whilst some additional plans were created using existing data to assist in explain responses that were given. All questions asked and responses formed summary reports from each individual engagement session that can be found on the website. Response from community info session were the basis of most questions and comments raised through the engagement process.

## Written Submissions

Three written submissions were received:

- James and Lynda Hagan: concerns relating to location of RRRP on Site D2 due to proximity to coast, potential residential growth pathways and littering.
- Environs Kimberley (received late): Regarding management of waste and illegal dumping, groundwater concerns, proximity to Cape Leveque Road, waste acceptance and EPA referral pathways.
- Broome International Airport (received as an email) regarding flight paths and bird strikes of the future Broome International Airport (construction of which is yet to be forecast or determined).

All concerns raised are answerable with existing or project data and documentation or with other background information that governs best practice landfill site design. On top of the above formal submissions, several emails were received throughout engagement period with a broad range question relating to the project. All question asked will be responded to and are comfortably answerable

based upon the holistic responses and messaging on the RRRP, based on the site Investigations works undertaken to date.

## Tony Laws Engagement

Tony Laws is a renowned, now retired hydrogeologist. Most importantly to the Project, he was engaged by Coconut Well Residents whose response to desktop analysis findings were influential in Council calling off detailed site investigations on Site D1 (Cape Leveque Road, northern side of McGuigan Road) in 2015.

Based on the Shire's desire to maintain transparency and to mitigate risks, Shire Staff and the CEO held a workshop on 25 February 2021 with Tony Laws, WaterCorp and the Principal Consultant on RFQ19-72 Talis Consultants. This was established to discuss and walk through the Project deliverables after sending them to Tony for review some weeks prior. The workshop was a collegial exercise whereby Tony Laws outlined that he saw no risks in the works undertaken as part of The Project, nor any risks developing the RRRP at Site D2.

Tony amicably outlined his intentions to assist in presenting his findings to Coconut Well residents and would aim to support them to understand the documentation provided. A copy of this Information Session Report, including responses from the Project Team is on the project website.

## Further Studies

Additional water sampling results have been provided by the Project Team. Based on feedback received through the Community engagement process, the Project Team drilled down into further detailed analysis of areas of concern to attempt to allay concerns and also 'involve' the community input into the development consideration process. A variety of reoccurring

questions regarding groundwater from various stakeholders were raised. The Project Team is conducting ongoing groundwater monitoring for each site and has provided additional information back to the various stakeholders. Key additional information includes Surface and Groundwater Contours across both Sites and meeting minutes from Tony Laws engagement.

## Involvement

This community engagement exercise was defined as 'involvement' through the planning. The definition of the goal of 'involve' as per the endorsed Community Engagement Plan is "To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered".

The Project Team has worked diligently to ensure this occurs, evident through community concern responses, additional works and additional engagement with key parties through the engagement period.



Ref: TW19118 - Broome RRRP - G1  
Rev. 1.4

1300 251 070  
Level 1, 604 Newcastle St  
Leederville WA 6007  
PO Box 444  
Leederville WA 6003  
info@talisconsultants.com.au  
www.talisconsultants.com.au

**Memorandum**  
Groundwater Monitoring Data – 14/12/2020 to 30/3/2021  
Broome RRRP – Site G1

To: Jeremy Macnath, Shire of Broome

CC:

From: Gray Ralph, Talis Consultants

Date: 7 April 2021

The purpose of this Memo is to provide results of ongoing monitoring for groundwater levels (DWL) at the proposed Broome RRRP Site G1 located on the Great Northern Highway, Roadblock WA approximately 2.8 km north east of the town centre.

**1 Groundwater Monitoring Wells**

To understand the depth to water (DTW) and groundwater level response to rainfall across Site G1, five groundwater well clusters (GW5) which consisted of one deep well 'D' and one shallow well 'S' were installed at each location during November 2020 as part of the Phase 1 Hydrogeological Risk Assessment (see Talis, Site Investigation Report, February 2021). Groundwater monitoring is undertaken on a quarterly basis to confirm the baseline conditions. Groundwater levels for the 'D' wells, screened across the water table, are being monitored daily since installation using pressure transducers. The 'S' wells targeted the Pindin Plain Solls above the water table to allow future assessment of the significance of any temporary (wet season) perching of groundwater.

**2 Groundwater Monitoring Well Locations**

The groundwater monitoring wells have been placed at strategic locations across the site with particular focus on the proposed landfill footprint. The location of the monitoring wells is shown in Figure 1 and survey data is presented in Table 2.1 showing the elevation of the monitoring well top of casing (TOC) and ground level in meters above Australian Height Datum (m AHD).

TW19118\_Groundwater Monitoring\_G1\_2021\_G1.1a Page | 1



Ref: TW19118 - Broome RRRP - D2  
Rev. 1.4

1300 251 070  
Level 1, 604 Newcastle St  
Leederville WA 6007  
PO Box 444  
Leederville WA 6003  
info@talisconsultants.com.au  
www.talisconsultants.com.au

**Memorandum**  
Groundwater Monitoring Data – 14/12/2020 to 30/3/2021  
Broome RRRP – Site D2

To: Jeremy Macnath, Shire of Broome

CC:

From: Gray Ralph, Talis Consultants

Date: 7 April 2021

The purpose of this Memo is to provide results of ongoing monitoring for groundwater levels (DWL) at the proposed Broome RRRP Site D2 located at the corner of MtGaugan Road and Broome - Cape Leveque Road, Broome Western Australia.

**1 Groundwater Monitoring Wells**

To understand the depth to water (DTW) and groundwater level response to rainfall across Site D2, seven groundwater well clusters (GW1-7) which consisted of one deep well 'D' and one shallow well 'S' were installed at each location during November 2020 as part of the Phase 1 Hydrogeological Risk Assessment (see Talis, Site Investigation Report, February 2021). Groundwater monitoring is undertaken on a quarterly basis to confirm the baseline conditions. Groundwater levels for the 'D' wells, screened across the water table, are being monitored daily since installation using pressure transducers. The 'S' wells targeted the Pindin Plain Solls above the water table to allow future assessment of the significance of any temporary (wet season) perching of groundwater.

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TW19118\_Groundwater Monitoring\_D2\_2021\_G1.1a Page | 1



Ref: TW19104 - Broome RRRP  
Rev. 1.4

1300 251 070  
Level 1, 604 Newcastle St  
Leederville WA 6007  
PO Box 444  
Leederville WA 6003  
info@talisconsultants.com.au  
www.talisconsultants.com.au

**Meeting Minutes**

**Meeting with Tony Laws – Broome RRRP**

Project: Broome Regional Resource Recovery Facility

| Attendees                             | Meeting Information                         |
|---------------------------------------|---|
| Mr. Sam Mastroiello - Shire of Broome | Date: Thursday 25 <sup>th</sup> of February |
| Mr. Jeremy Macnath - Shire of Broome  | Time: 11:00am - 12:30pm (approximate)       |
| Mr. Tony Laws                         | Location: Talis Consultants - Boardroom     |
| Mr. Ross Cullen - Talis Consultants   |   |
| Mr. Gray Ralph - Talis Consultants    |   |
| Mr. Robert Woods - Water Corporation  |   |

The meeting was arranged by the Shire of Broome (the Shire) to engage with Mr. Laws on the hydrogeological aspects of the RRRP project. Mr. Laws was identified as a key stakeholder based on his significant knowledge and experience of the hydrogeological regime across the Broome Region. Mr. Laws has also had some involvement in previous Site Selection works for the RRRP including the preparation of Report on the Proposed Locations for the future RRRP site for Broome in 2015 (Laws Report, 2015).

The focus of the meeting was to introduce Mr. Laws to the RRRP, the various investigations and key findings to date. In preparation for the meeting Tony Laws had reviewed the following reports prepared by Talis available from the RRRP website:

- Site Comparison Report;
- Site D2 Site Investigation Report; and,
- Site G1 Site Investigation Report.

Overall, Mr. Laws did raise a major concern about the investigations undertaken to date or key findings in relation to the hydrogeology on or surrounding the various Sites. In addition, previous investigations at the location of Site D2 was largely addressed since the location of the RRRP has moved from Site D1 (north of the Cape Leveque Road and MtGaugan Road intersection) to Site D2 and is therefore no longer considered to be in the catchment of Coconut Well private bores.

Mr. Laws did raise a variety of comments on the various reports that were discussed during the meeting. The following table provides a summary of the key topics discussed including the key comments raised by Mr. Laws and the responses discussed.

TW19104\_Meeting Minutes.1a Page | 1

| RRRP SITE SELECTION INFORMATION SESSION   COCONUT WELL RESIDENTS                                     |   |
|--|---|
| Session: Coconut Well Residents Workshop<br>Engagement and Communications                            | Project: Regional Resource Recovery Facility Site Selection Community<br>Client: Shire of Broome Date: 19 March 2021 Revision: 1.4  |
| Question   | Response  |
| <b>THEME: LOCATION</b>   |   |
| 1. Can you confirm the location and size of the sites?   | <ul style="list-style-type: none"> <li>Site D2 - a 98 hectare site located 12km northeast of Broome's town centre along Cape Leveque Rd.</li> <li>Site G1 - 119 hectare site located 38km northeast of Broome's town centre along Great Northern Highway.</li> <li>The proposed landfill location within Site G1 is conceptually designed approximately 1,030m from Great Northern Hwy</li> <li>Site D2 is located on the corner of Cape Leveque Rd and MtGaugan Rd with a 110m setback to the CRC and 385m to proposed landfill location from Cape Leveque Rd.</li> </ul>  |
| 2. Is it possible for the landfill to go to Site G1?   | <ul style="list-style-type: none"> <li>Both Sites G1 and D2 have been assessed as suitable for landfill and are currently being considered.</li> <li>Based on the results of the site investigations and data gathered on both sites to date, Site D2 is the preferred site for environmental and operational reasons. Council will make the final decision on the preferred location of landfill taking into consideration technical reports as well as the feedback from the Community Review process.</li> </ul>   |
| 3. Why can't both CRC and the landfill be located at Site G1?  | <ul style="list-style-type: none"> <li>385m travel for community to travel to drop off their recycling and waste materials at the CRC has been deemed to be too far. Therefore, the CRC is to be developed at D2.</li> </ul>  |
| 4. Please provide an aerial of Site D2 without the landfill.   | <ul style="list-style-type: none"> <li>Site Drawing C-101 which shows Site D2 with the CRC and associated Site Infrastructure (Appendix One).</li> </ul>  |
| 5. Can you confirm Site D2 is in Water Corp Lease?   | <ul style="list-style-type: none"> <li>Site D2 is located within Reserve 25716, which is a Crown Reserve leased to Water Corp. The Shire has obtained agreement from The Water Corporation (Water Corp) to transfer the vesting of the land to the Shire.</li> <li>Site D2 is not located within the Broome Water reserve.</li> <li>The Public Drinking Water Resource Area borefield is approximately 1.5km to the east of Site D2.</li> <li>The PDWISA is up hydraulic gradient to Site D2.</li> </ul>  |
| THEME: GROUNDWATER   |   |
| 6. When were the groundwater bores installed and what is the difference between the two bores types? | <ul style="list-style-type: none"> <li>Groundwater bores were installed during November 2020.</li> <li>Monitoring bores comprise a shallow and deep well (a cluster). <ul style="list-style-type: none"> <li>Shallow wells are screened in Pindin sand above the regional water table to assess if there is perching of groundwater during the wet season that would be needed to be understood, for geotechnical and engineering reasons.</li> <li>Deep wells are used to assess groundwater levels and to collect samples for laboratory analysis to determine the baseline conditions at the sites.</li> </ul> </li> <li>One larger (100mm ø) bore was installed centrally at each site to ~60-65m below ground level for connection to a production bore through used currently for pumping tests. It is proposed on the selected site that the production bore will be used for site water requirements including dust suppression.</li> </ul> |

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| RRRP SITE SELECTION INFORMATION SESSION   ENVIRONS KIMBERLEY                      |  |
|---|--|
| Session: Environs Kimberley Workshop<br>Engagement and Communications             | Project: Regional Resource Recovery Facility Site Selection Community<br>Client: Shire of Broome Date: 19 March 2021 Revision: 1.2   |
| Question  | Response   |
| 1. Who are the investors in the project?  | <ul style="list-style-type: none"> <li>The RRRP is the Shire's project and will be funded by the Shire. The Shire will therefore own and operate the RRRP. Talis has assisted the Shire with concept design, site selection and environmental investigations to date through a contract endorsed by Council in November regarding RF019-76 Broome Waste Facilities Site Investigation Project.</li> <li>The Shire has been committed to sustainable waste management practice and the diversion of valuable resources away from landfill for many decades now. The Shire was one of the first councils in the north west to implement a kerbside recycling services for its rate payers both domestic and commercial. In addition, the Shire provide the community with a variety of recycling options at Buckley's Road.</li> <li>The CRC to be developed at Site D2 will further expand on the sustainable waste management practices provided in line with modern best practice standards. The CRC will include a Tip Shop for reuse of suitable goods including furniture, household items and sports equipment. There will also be a range of recycling and recovery options for various materials from cardboard through to scrap metal as well as household hazardous waste materials. The CRC will also include an Education Centre to facilitate workshops with community and school groups on the important of recycling and how to participate with the Shire's recycling initiatives.</li> <li>The Shire has recently completed a Strategic Waste Management Plan as required by the State Government. This plan assesses a variety of future sustainable waste management options for the Shire to further divert materials away from landfill. The CRC at Site D2 will be a critical piece of waste infrastructure to support the future expansion of the Shire's waste recovery initiatives and already includes a variety of provisional spaces for future facilities. The RRRP is the Shire's project and will be funded by the Shire using reserves from waste fees and charges. The Shire will therefore support and operate the RRRP. Talis has assisted the Shire with the site selection process and environmental investigations to date under the contract RFQ19-76 Broome Waste Facilities Site Investigation Project that was endorsed by Council in November 2019.</li> </ul> |
| 2. What is the Shire's plan to further reduce waste to landfill going forward?    | <ul style="list-style-type: none"> <li>Waste education is an important element of successful resource and waste management systems. The Shire will include a waste education program as part of the development of the RRRP. The CRC will also include an Education Centre to further increase community awareness of sustainable waste management practices, as well as educating the community on the use of the facility. The centre will include a multifunctional room with displays, IT equipment for presentations and associated parking for visitors and school bus bays.</li> </ul>  |
| 3. There is a need for greater waste education. What is the Shire's plan on this? | <ul style="list-style-type: none"> <li>Cable Beach north boro are not on the public drinking water scheme and therefore do not use their bores for potable water. The Shire is of the understanding that the bores are used for irrigation and gardening purposes.</li> </ul>  |
| 4. Is the Shire aware that the Cable Beach north bores are not used?              |  |

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| RRRP SITE SELECTION INFORMATION SESSION   ENVIRONS KIMBERLEY                                 |  |             |         |         |                                    |            |            |  |             |             |
|--|--|-------------|---------|---------|------------------------------------|------------|------------|--|-------------|-------------|
| Session: Broome Community Workshop<br>Engagement and Communications                          | Project: Regional Resource Recovery Facility Site Selection Community<br>Client: Shire of Broome Date: 19 March 2021 Revision: 1.3   |             |         |         |                                    |            |            |  |             |             |
| Question   | Response   |             |         |         |                                    |            |            |  |             |             |
| <b>LOCATION</b>  |  |             |         |         |                                    |            |            |  |             |             |
| 1. Can you confirm the location and the distance to the sites?                               | <ul style="list-style-type: none"> <li>Site D2 - located 12km northeast of Broome's town centre along Cape Leveque Road.</li> <li>Site G1 - located 38km northeast of Broome's town centre along Great Northern Highway.</li> </ul>  |             |         |         |                                    |            |            |  |             |             |
| 2. What is the Shire's plan to further reduce waste to landfill going forward?               | <table border="1"> <thead> <tr> <th>Type</th> <th>Site D2</th> <th>Site G1</th> </tr> </thead> <tbody> <tr> <td>Single isolated residence/dwelling</td> <td>3.8km west</td> <td>2.5km west</td> </tr> <tr> <td>Nearest Residence with a Rural or Residential Zone</td> <td>3.4km south</td> <td>15.5km west</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Site G1 was recommended as a potential site through a desktop review process however was removed based on community concerns and the Shire not having sufficient detailed data at the time.</li> <li>Sites D2 and G1 have now undergone extensive investigations and return favourable results for the development of the various RRRP elements. All these works are being shared with the community through this engagement to obtain feedback that will be provided to the Councilors to ensure there is a well-informed decision-making process.</li> </ul> | Type        | Site D2 | Site G1 | Single isolated residence/dwelling | 3.8km west | 2.5km west | Nearest Residence with a Rural or Residential Zone | 3.4km south | 15.5km west |
| Type   | Site D2  | Site G1     |         |         |                                    |            |            |  |             |             |
| Single isolated residence/dwelling   | 3.8km west   | 2.5km west  |         |         |                                    |            |            |  |             |             |
| Nearest Residence with a Rural or Residential Zone   | 3.4km south  | 15.5km west |         |         |                                    |            |            |  |             |             |
| 3. Why is Site D2 being considered when Site G1 was discounted as viable?                    | <ul style="list-style-type: none"> <li>A site selection process originally commenced in 2013 which assessed a variety of potential locations for the siting of the RRRP.</li> <li>These works have been ongoing particularly after potential site locations have been removed.</li> <li>Sites located further north along Cape Leveque Road were in Area A but these sites were excluded from further consideration as a Native Title Prescribed Body Corporate had not been established.</li> </ul>   |             |         |         |                                    |            |            |  |             |             |
| 4. What about other sites located further north along Cape Leveque Road?                     | <ul style="list-style-type: none"> <li>Yes, the proposed location of the CRC is Site D2 with the site investigations deeming it a suitable location.</li> <li>This location is convenient to community and will help to encourage reuse and recycling. If the CRC were located further away i.e., at Site G1, the community would be less likely to use the facility due to the 76km return journey.</li> </ul>  |             |         |         |                                    |            |            |  |             |             |
| 5. Irrespective of the landfill location, will the CRC be located at site D2?                | <ul style="list-style-type: none"> <li>There have been eight sites identified within a 60km radius of the Broome locality.</li> <li>These sites were discounted for a range of matters including environmental, social, land ownership and lifelines.</li> </ul>   |             |         |         |                                    |            |            |  |             |             |
| 6. What other sites were investigated for the landfill?                                      | <ul style="list-style-type: none"> <li>The proposed future airport location is already zoned for this purpose so the landfill cannot go to that location. Furthermore, in accordance with the best practice siting standards adopted for this industry, landfills cannot be located within 5km of an airport which has been applied to the proposed landfill area.</li> </ul>  |             |         |         |                                    |            |            |  |             |             |
| 7. If the airport is not developed its proposed location can this land be used for the RRRP? | <ul style="list-style-type: none"> <li>The Water Corporation undertook a Groundwater Source Protection Assessment for a landfill located at Site D2 which determined that the proposed landfill is a low risk groundwater contamination source to the P1 Public Drinking Water Source Area.</li> <li>The Water Corporation is supportive of the proposed use of Site D2 for both the CRC and Class III Landfill.</li> </ul>  |             |         |         |                                    |            |            |  |             |             |
| 8. What is the Water Corporation's view of the proposed use of Site D2?                      |  |             |         |         |                                    |            |            |  |             |             |

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## Survey Responses

During the six-week Community Review process, 200 submissions were received of the online survey or pop-up survey at one of the engagement sessions. Many respondents left comments detailing their thoughts about the project, opinions on the Shire's work to date and sentiments in relation to Sites D2 and G1. Demographic data on all surveys was collected. Survey analysis of online and pop up surveys are outlined below.

### Online Survey Response Summary

Key questions and responses from the engagement survey are outlined below in infographics and key word 'collection maps'. This is followed by general response statements. All questions that offered written responses have been categorised based on the theme of the response type written and are located in the next section of the report that outlines key themes. All raw data has been provided in the final section of the report.

**Q1:** Do you have any questions about how this landfill will be operated?

**A1:** Answers were provided by 71% of respondents and have been summarised in the 'word map' below:

Shire<sub>operation</sub> etc<sub>concerned</sub> facility<sub>dumped</sub> waste<sub>people</sub> will  
Yes landfill<sub>town</sub> water<sub>class</sub> plans<sub>long</sub> Broome

**Response:** This 'word map' aligns with public concerns related to groundwater safety and management of illegal dumping. 50% of respondents had no questions regarding landfill operations, with some respondents stipulating they had read the documentation and which had been well explained. ~22% of respondents had questions, which related to employment, environmental concerns and community recycling program management. Many questions were answerable with investigation of documentation provided which highlights the needs for future community liaison and education.

p 97, n-1 30, n 67

**Q2:** Are there any other operational considerations that you feel the Shire needs to be aware of as it plans for the development of a landfill?

**A2:** Answers were provided by 69% of respondents and have been summarised in the 'word map' below:

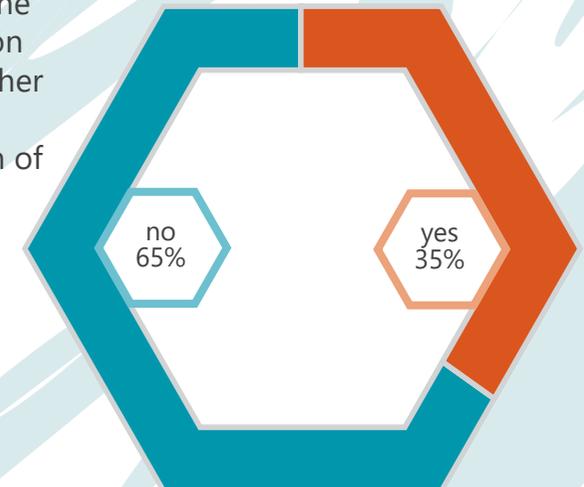
tip<sub>road</sub> town<sub>think</sub> use<sub>gas</sub> needs<sub>people</sub> recycling<sub>Make</sub>  
will<sub>Broome</sub> waste<sub>dumping</sub> landfill<sub>illegal dumping</sub> shire<sub>community</sub> far  
rubbish

**Response:** This 'word map' aligns with public concerns related to management of illegal dumping as well as the community's understanding for resource recovery practice available elsewhere such as stronger recycling and waste to energy components

p 97, n-1 30, n 67

**Q3.** When considering the above list of investigation criteria, are there any other criteria that need to be included in the selection of the landfill site?

**A3.** Shown right



**Response:** 65% of respondents were happy with the investigation criteria used by the Shire in relation to site selection. If 'Yes' was answered, the following word map summarised the most consistent terms and messaging for rational into decision on landfill selection criteria.

rubbish<sub>eg</sub> people Distance also access will road site area  
 illegal dumping<sub>impact</sub> dumping<sub>town</sub> cost  
 p 97, n-1 30, n 67

**Q5: How would you prioritise the following considerations in determining a landfill location?**

Respondents were asked to rank four key criteria based on priorities of values for landfill location on a scale of 1 – 4 with 1 being the highest rank.

**A5 and Response:** From this, an aggregate score was determined whereby the lowest the score showed the consideration of the highest the importance. Averages from all responses were assessed with the lowest figures of highest value as shown in the infographic below right.

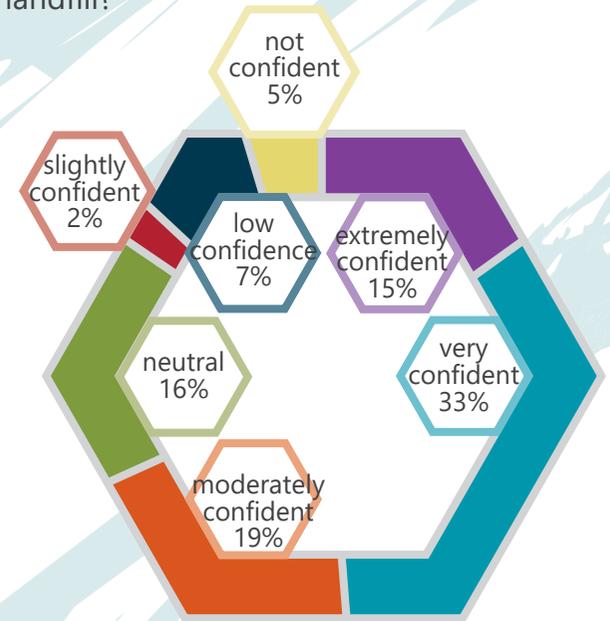
This concluded that the most prioritised consideration for a new landfill was Environmental Risk, followed by Distance from Town, Cost to residents and Community Well-being. This is similar in findings to the web based survey.

p 78, n-1 18, n 96



**Q9:** How confident do you feel that the necessary investigations have been undertaken to ensure there is an informed decision about the location of the landfill?

**A9:** As shown right, 67% of survey respondents were extremely, very or moderately confident in the Shire's investigations relating to the landfill location component of the RRRP. 16% were neutral, with 14% stating slight, low or no confidence.



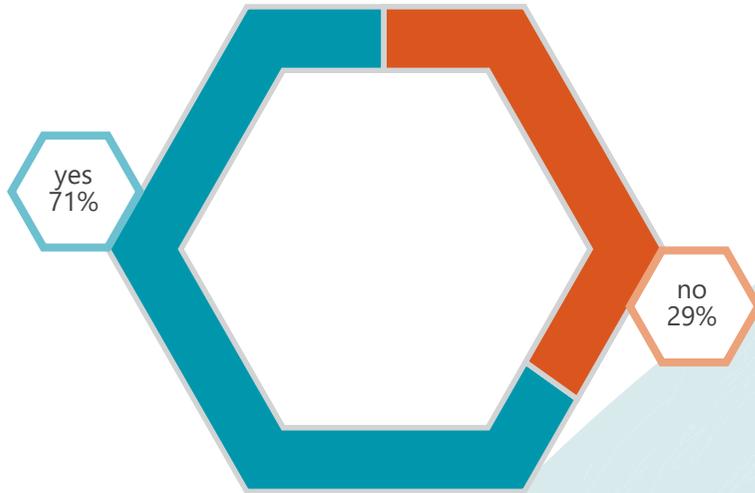
**Response:** This shows majority of confidence in the investigative practice and results received through the Project. When asked what further could be done to increase confidence, the following were the most frequently used terms.

good independent Department Water testing Nothing public  
 studies site water protection see think  
 investigations sites provided well report  
 Kimberley Shire meetings consultants expert review science G1

## Pop Up Survey Results Overview

Some Key questions are summarised below in infographics with simple responses provided.

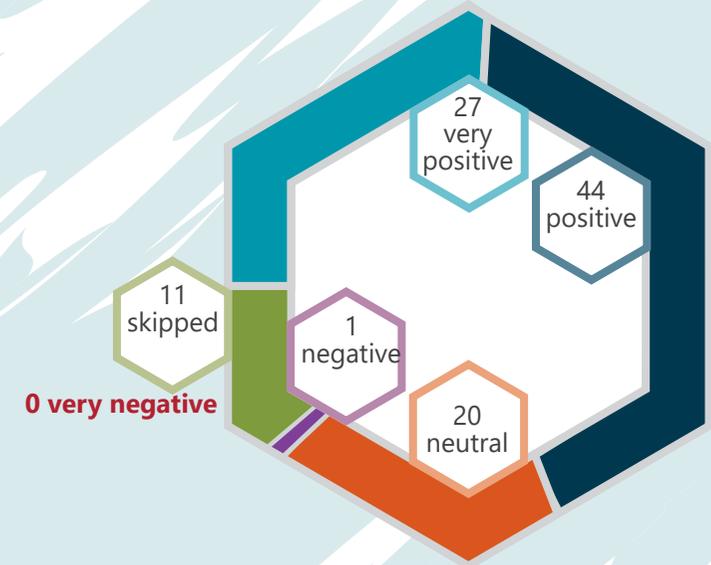
**Q2.** Before today, had you heard about the RRRP?



**Response.** Shows the duration of the project and high level of engagement and communication materials through the engagement period.

p 92, n-1 11, n 103

**Q4.** Based on what you know about the project, how are you feeling about the RRRP?



**A4.** 77% of respondents felt positive or very positive about the RRRP project. 22% felt neutral, and 1% felt negative. 0% felt very negative.

**Response.** This is very similar in findings to the web based survey and shows a high majority of support for the RRRP.

p 92, n-1 11, n 103

**Q6.** How would you prioritise the following considerations in determining a landfill location?



**A6.** Environmental Risk was the most prioritised consideration, followed by Community Well-being, Cost to residents and Distance from Town rated the highest. Again, answers are aligned with web survey results, strengthening the view that the Broome community share similar views regarding this project.

**Response.** This is very similar in findings to the web based survey and shows a high majority of support for the RRRP.

p 92, n-1 11, n 103

**Q5.** Do you have any questions about the RRRP project?  
**A5.** The following 'word map' was created that outlined the community's outstanding queries.

Green community cost Tip waste information will site FOGO better

FOGO (Food Organics Garden Organics) was raised and is a consideration that was raised through the Shire of Broome's Waste Survey in 2020 and aligns with best practice resource recovery components that will aim to be developed through the RRRP's 70 year life.

Survey data



**0 at Shire of Broome Admin**

# Engagement Response Themes



# Themes Snapshot

During the six-week Community Review process:

- 200 submissions were received of the online survey or pop-up survey at one of the engagement sessions
- Many respondents left comments detailing their thoughts about the project, opinions on the Shire's work to date and sentiments in relation to Sites D2 and G1.

The Shire has assessed the received responses in detail and grouped the comments in relation to common topics. From this, a total of seven key themes and six minor themes were identified, as below. These are then explained in more detail within this section of the document.

## Key Themes

- ① Importance of recycling / Community Recycling Centre
- ② Protection of flora and fauna
- ③ Groundwater concerns
- ④ Proximity to housing, visual amenity and odour
- ⑤ Increased illegal dumping due to distance town centre
- ⑥ Cost to ratepayers and commercial operators
- ⑦ The future of the current Buckleys Road site

## Minor Themes

- ① Ability of the new site to manage extreme weather events
- ② Gas emissions
- ③ Cultural considerations
- ④ Access and surrounding infrastructure
- ⑤ Capabilities of Class III landfill
- ⑥ Employment

# Key Theme One



## Findings

In 2020, the Shire of Broome undertook a public survey to guide the actions and outcomes of the Broome Waste Strategy. One of the key messages arising from this process was the community sentiment that recycling could be improved and reducing the amount of waste going to landfill should be a priority.

This desire to apply sustainable waste practice was apparent during the Community Review process, with many attendees articulating their wishes through the survey and at information sessions. The need to increase community education around recycling was also expressed frequently. This feedback is a mandate for the Shire to proceed with the establishment of a modern, best-practice Community Recycling Centre (CRC).

The CRC will replace and improve the community drop-off facilities currently at Buckleys Road Facility, with the intended provision of:

- A Reuse Shop to assist with the acceptance, inspection and sale of second-hand and reusable items, including furniture, household items, kitchenware, sports and recreation equipment.
- An Education and Administration Centre to offer school and community group tours, information and resources to raise awareness of sustainable waste management practice.

- An On- Ground Recycling Drop- Off Area. Anticipated items that will be accepted include cardboard, scrap metal, white goods, gas bottles, batteries, E- waste and tyres.
- Future entrepreneurial business & community led initiatives.

## Conclusion

- The Shire has listened to and understands the community's desire for improved recycling and waste minimisation – the CRC component of the RRRP project presents the ideal opportunity to make meaningful change.
- Community education will be of paramount importance to change habits and ensure the CRC's facilities are maximised.
- One of the major goals of the RRRP project is to reduce the amount of waste to landfill and to be innovative in the reducing, reusing and recycling of products.

## CRC Benefits



*"I believe more needs to be done in community education and policing of rubbish separation so that our actual landfill requirements are drastically reduced."*

## Key Theme Two



### Findings

As with any infrastructure project on previously undeveloped land, some concerns in relation to the flora and fauna were raised during the Community Review. Respondents expressed concerns about the potential for disruption to Bilbies and other endemic wildlife, regardless of whether Site D2 or G1 is used.

The Shire can confirm that flora and fauna surveys were undertaken prior to both sites being considered for the RRRP project. The reports concluded that there was a low likelihood that the habitats on either site supports priority fauna species with distribution restricted to the sites. Reports also found that flora species found on both sites were not critically endangered nor limited to the sites. Regardless of the development option selected, progressive clearing will be undertaken to allow larger fauna species to relocate. Minimisation and management of flora species will also take place.

An information session was held specifically with Environs Kimberley staff, Board and Members on 03 March 2021 to ensure meaningful involvement took place. This was to ensure the group could ask questions and provide feedback; the Shire will be working closely with this group moving forward. When a decision is made by Council in relation to site selection, a stringent environmental approvals process will need to be undertaken to ensure the desired location is suitable to be developed.

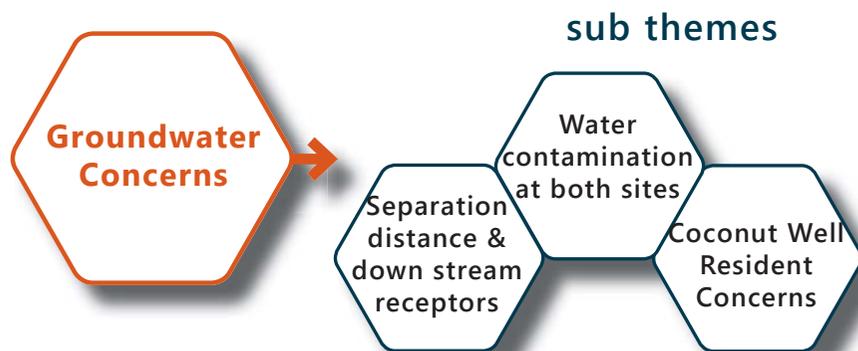
### Conclusion

- Flora and fauna surveys have been undertaken by the Shire to ensure both sites D2 and G1 are suitable for the landfill component of the RRRP.
- No high priority fauna or flora species were identified.
- Environs Kimberley have been consulted as an important stakeholder in the project.
- Self referred EPA Approvals process will need to be undertaken after Council decides whether the landfill will be based at Site D2 or G1.



*"I haven't seen much detailed information regarding the flora and fauna aspect of the sites in question; although it sounds like there have been reviews undertaken."*

# Key Theme Three



*"It absolutely cannot affect our water supply, or that of wetlands 'downstream' of underground water flows."*

## Findings

With landfill projects, stringent and exhaustive measures are required by the Department of Water and Environmental Regulation (DWER) to mitigate risks to the environment through water, air and land contamination.

Given that Site D1 was ruled out by the Shire in 2015 due to groundwater contamination fears, anxiety exists among Coconut Well residents about the potential use of Site D2 for a landfill.

Detailed hydrogeological investigations have been undertaken by the Project Team to understand the groundwater values on and surrounding, the proposed sites. In November 2020, 12 bores were installed – seven at Site D2 and five at Site G1 - to measure the depths to groundwater and assess groundwater quality.

The Department of Water and Environmental Regulation (DWER), who manages approvals for landfill facilities, requires a 3m minimum separation from the base of a landfill to the groundwater water table.

The depth to groundwater at Site D2 ranges from 15.0 - 31.3m below ground level, with an average of 24.2m. This means Site D2 can easily accommodate DWER's regulatory requirement of a 3m minimum separation distance to the groundwater water table.

The depth to groundwater at Site G1 ranges from 3.8 - 9.2m below ground level, with an average of 6.1m. However, the Shire wishes to excavate the landfill to 6m to retrieve sufficient materials (soil) for use on the site. These groundwater levels therefore present a challenge in achieving the regulatory requirement of a 3m minimum separation distance to the water table. This is a significant technical difference between the two sites.

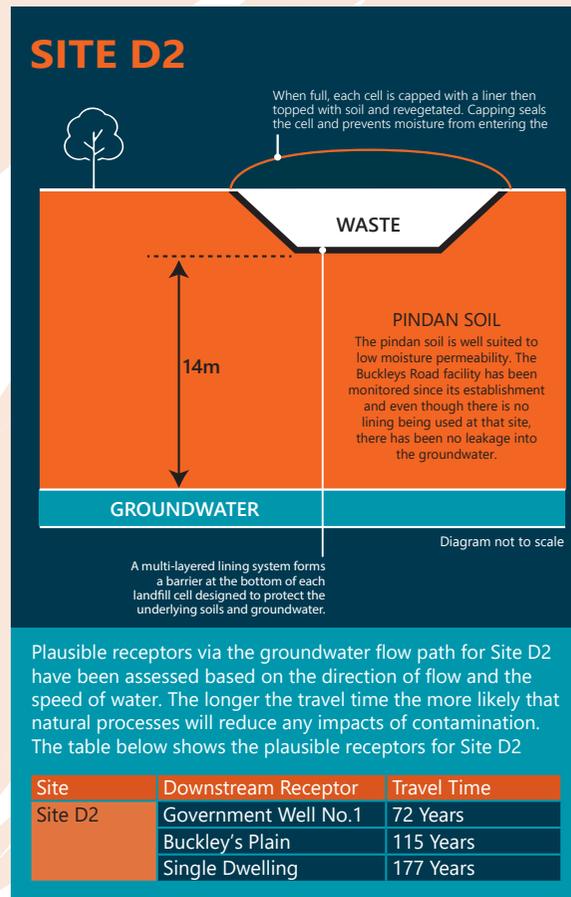
Regarding groundwater flow direction, the Broome town water supply bore field is near Site D2; however, it has been assessed by The Project Team and the Water Corporation as not being at risk from a landfill facility. The bore field capture zone is upstream from Site D2.

Coconut Well is further to the north of the proposed RRRP site and is not a downstream receptor so there is insignificant risk to the groundwater resources at that area. Potential receptors via the groundwater flow path for Site G1 include wetlands on Roebuck Plains, however the potential for groundwater contamination at this site was identified as low.

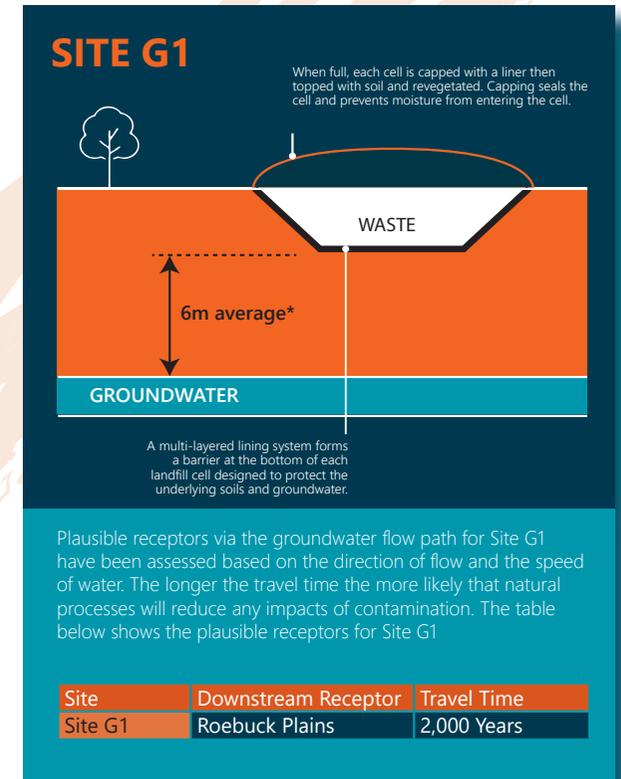
The Project Team will continue to assess the hydrogeological systems at both sites. This will include obtaining additional groundwater level data using data loggers installed in the wells to determine seasonal variability, as well as additional baseline groundwater quality to be used to support future approval applications.

## Conclusion

- DWER requires a 3m minimum separation from the base of a landfill to the groundwater water table. Both sites can comfortably achieve this, but D2 has a greater depth to groundwater at an average of 24.2m.
- If Site D2 is selected for the landfill, there is considered to be insignificant risk to Coconut Well or the town water supply, which are north of Site D2, while ground water flows in a south- west direction.
- Ongoing hydrogeological testing will monitor groundwater quality on a quarterly basis.



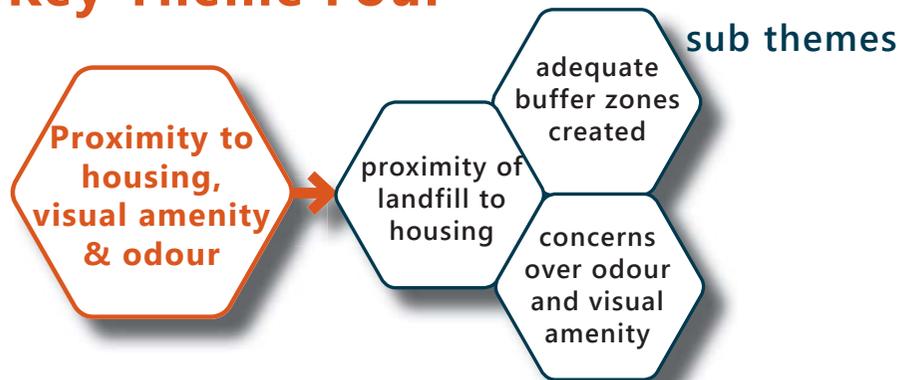
Groundwater Receptors | D2



Key Landfill Design Parameters | Groundwater



# Key Theme Four



## Findings

Some Coconut Well community expressed concern over the proximity of Site D2 to their homes, while a number of responses to the online survey reiterated the need for adequate buffer zones. The recommended separation distance from a landfill to multiple dwellings in Australia is 500 metres, but the Shire of Broome wanted to ensure a minimum of 1km before exploring potential sites for consideration.

At Site D2, the nearest dwelling is 4.4km away, which is almost nine times the recommended separation distance. At Site G1, the nearest dwelling is 2.5km away. The minimum separation distances are put in place by DWER to minimise odour, noise and dust impacts.

Given the distance from both sites to dwellings, the Shire anticipates few issues with odour or dust. For comparison, the closest home to the current Buckleys Road waste management facility is 1.2km away. The buffer of 2.5km from the landfill to dwellings is sufficient to ameliorate the noise and dust generated from the landfill.

The proposed landfill will be a maximum of 20m above ground level to achieve the desired shape and profile.

Some survey respondents indicated concerns that if Site D2 was selected, the landfill could be an eyesore for tourists travelling up the Dampier Peninsula. If Site D2 is selected, it will be screened from the roadside with endemic vegetation, while a 2-3m levee bund will also provide visual screening. Further, the proposed landfill cell will be 385m from Cape Leveque Road, minimising visual amenity concerns.

## Conclusion

- Both Sites D2 and G1 significantly exceed the DWER required separation distances from landfill to dwellings, meaning issues such as odour and dust will not be pertinent.
- Adequate buffer zones made up of endemic vegetation will reduce visual amenity issues.
- If Site D2 is selected for landfill, the facility would be 385m from Cape Leveque Road. This is deemed to be distance sizeable enough not to negatively visually impact motorists and tourists.



*"Make sure that there is a decent buffer zone around whichever site is selected."*

## Key Theme Five

sub themes



### Findings

A frequent concern for survey respondents was the potential for illegal dumping to increase, given that the new landfill and CRC are set to be based out of town.

With the CRC to be established at Site D2, community drop-off facilities for all recycling and waste materials will be provided within 12km of Broome, a 2 km increase in distance from Buckleys Road. However, illegal dumping is already an issue in Broome and across Australia, with the Shire committed to continually work on alleviating the problem.

One measure will be to increase community awareness and education, which has been established in Key Theme 1 as a priority. The Shire Council also adopted the Waste Local Law 2021 at February 2021's Ordinary Meeting of Council.

As well as existing laws against illegal dumping of rubbish, this new piece of legislation means anyone who does not safely secure their loads on vehicles, leading to littering or dumping, can be prosecuted.

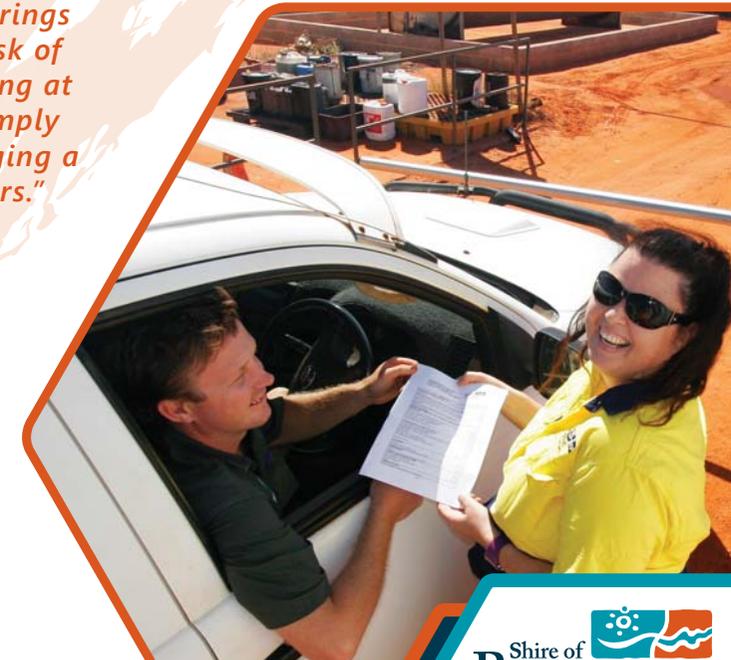
Regardless of whether the landfill is based at Site D2 or Site G1, the community recycling centre will be located at site D2 for the processing of all domestic recycling and waste.

Given this site is further from town than the current Buckleys Road Waste Management Facility, the Shire will continuously monitor illegal dumping, prosecute those undertaking it and ensure community education assists in informing the Broome Community of the correct processes.

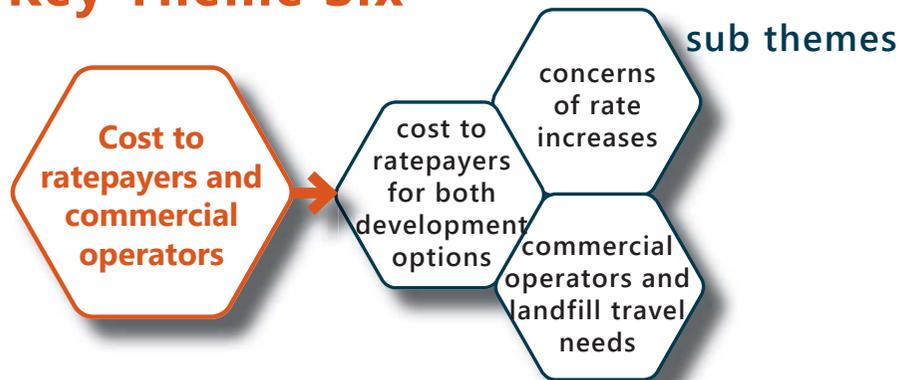
### Conclusion

- Illegal dumping is a concern for the community and an issue that residents want the Shire to rectify.
- Concerns that the new landfill site will encourage illegal dumping and littering
- Community education will be paramount in attempts to rectify the situation.
- Regardless of whether Site D2 or G1 is selected for the landfill, residents will need to travel to D2 to drop-off their recycling and waste.

*"A new facility brings the very high risk of increased dumping at sites in town simply by virtue of bringing a change for users."*



# Key Theme Six



## Findings

A key primary consideration for the Shire when assessing the available sites is the cost to ratepayers to establish, maintain and operate the RRRP. A key theme articulated in survey responses was concern from residents over the potential cost to ratepayers, especially if Site G1 was selected for the landfill component.

For the landfill to be based at Site G1, a transfer station would be required at Site D2 to process waste and move it to landfill. This would incur additional costs. The long-term financial impacts show this would mean the network option (landfill at G1) would require an additional \$62.02 million over 40 years and \$154.61 million over 70 years.

The RRRP project will also cost more if this option is selected, as the Shire owns the land at Site D2. Site G1 is privately owned and would be leased to accommodate the landfill.

The Shire hopes to secure State and/or Federal funding for the project but there will undoubtedly be an additional financial burden passed to ratepayers should Site G1 be selected for the landfill.

Commercial operators both attended information sessions and completed the online survey, with concerns over having to

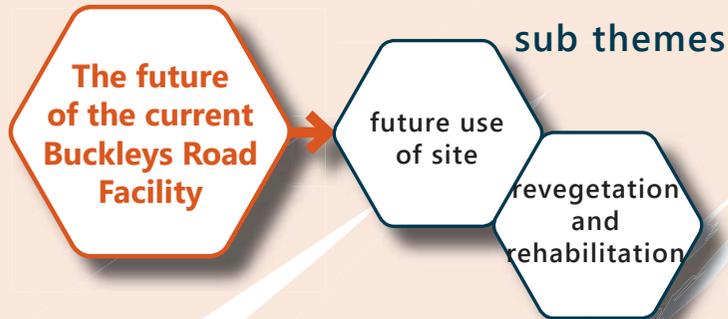
potentially travel 38kms from Broome to Site G1 to access the landfill. The selection of site G1 would lead to increased travel costs for operators, given the additional distance (if required).

## Conclusion

- Opting to locate the landfill at Site G1 would add significant expense to the project, which would almost certainly mean higher rates for residents.
- The Shire will have to lease Site G1 if it is selected as the preferred landfill location.
- Commercial operators have expressed their support for Site D2 as a landfill location, given it is closer to town and would be cheaper for them to access as a result. All commercial operators, apart from Cleanaway trucks, would still use D2



# Key Theme Seven



## Findings

The current landfill at Buckleys Road is fast approaching the end of its operational life, with approximately three more years of waste disposal left. During the Community Review, members of the public questioned whether the current landfill site could be expanded to avoid the search for a new RRRP site.

The landfill footprint has already been expanded to increase the life of the existing landfill. Without this expansion, the landfill would already be closed. Once the new CRC has been built, the landfill footprint will extend into the existing transfer station area.

This expansion into Lot 400 is not an option, as this is part of DevelopmentWA's future planning for the growth of Broome North.

Residents were also concerned and interested in what would happen with the current Buckleys Road landfill once it ceased operation. The Shire can confirm that a rehabilitation and revegetation process will commence once the waste management facility closes. This will take 30 years, once the landfill has closed and there is an expectation that the land will have limited future use as a result.

## Conclusion

- Expanding the current landfill at Buckleys Road has been explored by the Shire and acted upon.
- It is not an option to develop Lot 400, as the land is on a short term Management Order.
- The current landfill will be revegetated and rehabilitated once closed in forthcoming years.



*"What revegetation/ rehabilitation is budgeted for and planned for at the existing site?"*

## Minor Theme One

RRRP ability to manage extreme weather events

### Findings

The Project Team has undertaken investigations to ensure the RRRP can withstand 1-in-200-year storm events. This includes the production of a surface water management system on site to allow for over topping and discharge as required if an extreme storm event occurs.



## Minor Theme Two

Gas emissions

### Findings

It is common in large landfill facilities accepting approximately 200,000 tonnes of waste per annum to convert the landfill gas generated into power. The Shire's current landfill accepts approximately 20,000 to 25,000 tonnes of waste per annum. This volume is not anticipated to be sufficient to make power generation a financially viable option. It may be an option in the future if waste volumes increase significantly or technology for smaller scale systems become viable.

Nonetheless, gas will be collected and flared, converting Methane into Carbon Dioxide which is 23x less impacting to the greenhouse effect.



## Minor Theme Three

### Cultural Considerations

#### Findings

Over the course of this Project, the Shire has worked closely with Nyamba Buru Yawuru throughout the investigation process. As the PBC responsible for Yawuru Native Title lands, the Shire will continue to work with NBY through the next phases of the project. Over the past two

years, engagement with NBY has included meetings, workshops and involvement with the following on varying occasions in the project and at varying frequency

- NBY Executive Team
- Country Manager & Land and Sea Teams
- NBY Board
- Prescribed Body Corporate (PBC) Board
- 'All Boards Forums'
- Cultural Reference Group
- Cultural Monitors
- Law Bosses and Elders



## Minor Theme Four

### Access

#### Findings

Regardless of whether Site D2 or G1 is selected for the landfill component of the project, the Shire will investigate whether there is a need for additional roadworks, new road design and associated infrastructure to ensure safe and practical access to the site.



# Minor Theme Five

## Capabilities of a Class III landfill

### Findings

The Shire of Broome is committed to best-practice landfill standards for the siting, design and construction of the RRRP landfill component to ensure this critical waste disposal service is delivered to stringent regulatory standards.

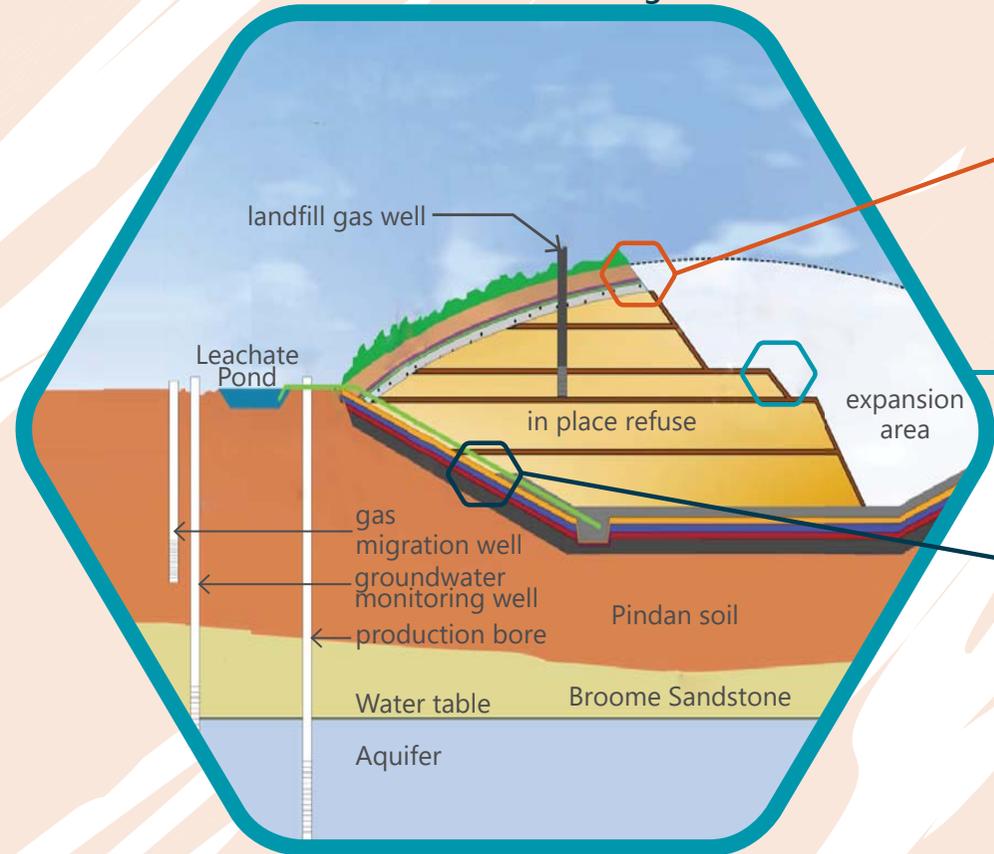
The RRRP's Class III Landfill has been designed based on the Environmental Protection Authority Victoria's Best Practice Environmental Management (BPEM) guidelines. This covers the siting, design, operation and rehabilitation of landfills.

There is no current Western Australian standard and the BPEM guidelines are known to be the most stringent in Australia and consistent with international standards. Unlike the current Buckleys Road landfill site, the RRRP Class III Landfill will be a fully engineered facility to minimise the potential for uncontrolled emissions into the environment. The design will consist of:

- A basal lining system
- Leachate management system
- Landfill gas management system
- Landfill capping
- Surface water management system

There are strict regulations about what types of waste can be put into a Class III landfill. All waste accepted at the new landfill needs to meet requirements that will be validated through laboratory testing. Test results will be supplied to the Shire and if the material does not comply, loads will not be accepted at the site.

Class III Landfill Cell Diagram

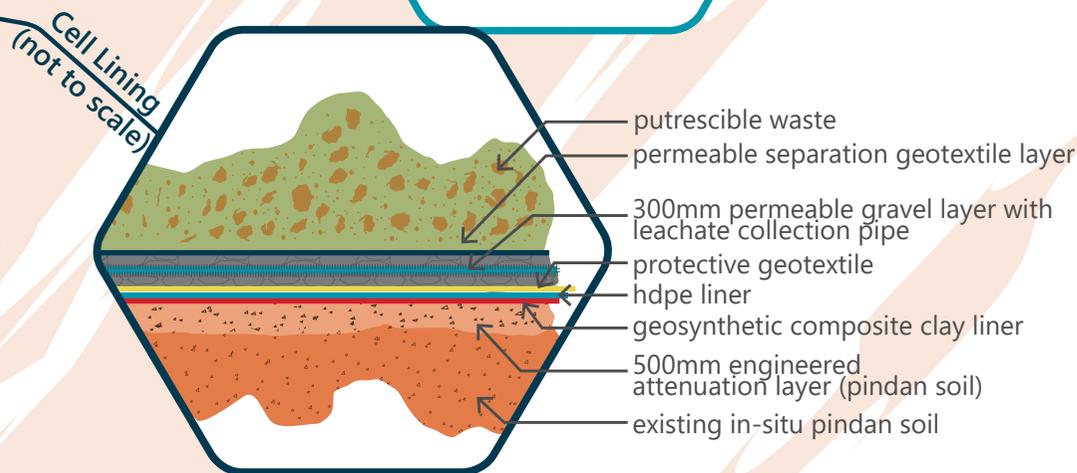
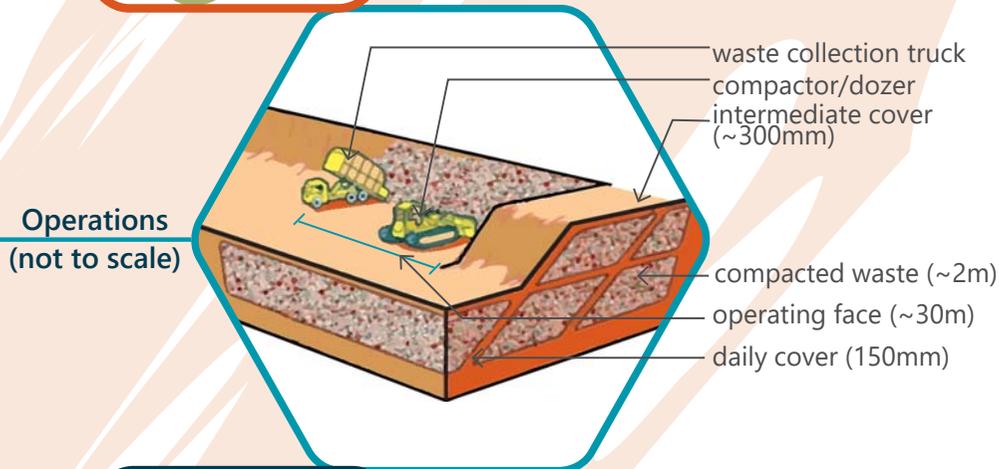
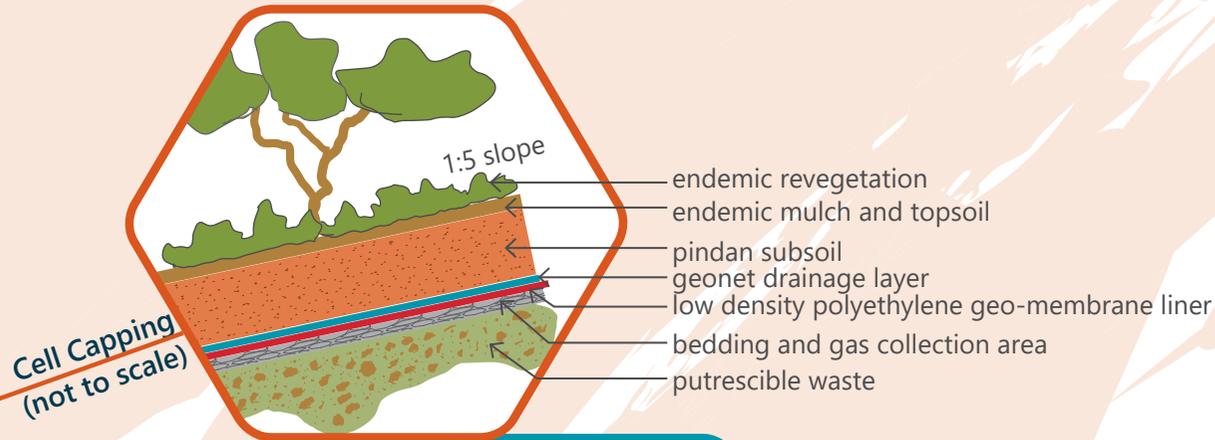


# Minor Theme Six

## Employment and Management of the RRRP

### Findings

It is anticipated that several new employment opportunities will be created with the establishment of the RRRP due to the increased scale of the facility. Entrepreneurial leases with commercial and community based groups for waste avoidance initiatives may be considered.



# Themed Survey Responses



## Overview

All responses received during the survey component of the Community Review process have been logged and sorted into common themes. All statements have been developed by respondents. Responses with terms or formatting relating to rude language, offensive behaviour or otherwise have been removed or edited and shown.

## Recycling

- Environmental sustainability and zero waste controls.
- Aiming for environmentally sustainable operations.
- Large enough to enable all functions and recycling and waste management.
- Don't believe Broome Shire can sustainably maintain, resorting to poor 'recycle' outcomes in times of overload
- What steps are being made to reduce the amount of waste entering landfill - are there targets for reduction and how will these be met?
- I would like to ask whether the aim is to ensure that only items/materials that have zero recovery options enter landfill.
- Use third-world country ideas to improve outcomes, as mainstream waste in this country isn't considered that bad, but unless drastic and effective recycling occurs, landfill will cop the 'overspill'.
- I believe more needs to be done in community education and policing of rubbish separation so that our actual landfill requirements are drastically reduced. We should be putting more effort into re-use and recycle, rather than dumping. How much money has been set aside for recycling efforts versus landfill?
- Australia currently has a recycling crisis - with materials piling up in storage centres (at risk of fire) with no recycling actually occurring due to China's ban on taking waste. Can the RRRP involve on-site recycling?

- We need to do more to reduce the amount of landfill our community is creating in the first place.
- I think waste could be separated at the household level to keep costs down.
- Recycle and re-use! Landfill should be last resort. There is so much we could do better. Educate the community. Police our rubbish separation. Police illegal dumping of rubbish. Hold community members accountable for their waste. Put pressure on suppliers of goods to only use recyclable/biodegradable packaging. If your packaging is not biodegradable (e.g. plastic wrapped vegetables in supermarkets) it cannot be sold in our town (just an example).
- Three bins to reduce landfill. Has incineration options/ costing been looked at and what volumes would be required to make economic? Landfill is lazy option. Why are we not looking at innovative countries like Japan and small European countries with land constraints?
- Community awareness campaign

## Flora & Fauna

- The flora and fauna investigation seems to have neglected to identify the significant population of bilbies on site D2. These were considered of such high significance that the proposed Motorplex was not allowed to go on this site due to the bilbies, so unless they have been successfully relocated, that population must still be there?
- The full flora and fauna report should have been made available and considering bilbies are known in the area, long-term studies should be included.
- There is a natural goanna crossing at the D2 site.
- Bilby habitat.
- The site at D2 was deemed so significant due to bilby populations that the Motorplex was not able to go there so how come the landfill can go there? Just wondering if anyone has any idea where the bilbies went?
- Put the environment first.

- I would like it based on flora and fauna sites. We need to not clear their homes.
- Get independent environmental groups to provide comment on the science i.e. Environs Kimberley.
- I haven't seen much detailed information regarding the flora and fauna aspect of the sites in question; although it sounds like there have been reviews undertaken.

### **Buckleys Road**

- What plans are in place for revegetation at the end of this landfill life? What revegetation/ rehabilitation is budgeted for and planned for at the existing site? No point moving onto new grand plans if we are not held accountable for the existing landfill operations.
- Seems a waste to ruin a whole new site when there is land adjacent to the existing tip.

### **Proximity to Houses**

- Make sure that there is a decent buffer zone around whichever site is selected. In today's environment, too close to residential population.
- One house 2.5kms away for G1 but an expanding residential area 3.4 kms away on D2, will the residential area at Coconut Wells be stopped from expanding due to this landfill? And what about planning for the future, will this location at D2 impact on any future expansion of Broome in 25 or 50 years' time?
- Consideration that Development WA had four blocks of land earmarked for Motoplex and people often camp at these events, so will camping still be allowed that close to landfill?

### **Containing toxic waste / Class III criteria**

- What happens to the waste that is buried in the landfill over time? If the lining is successful in preventing leakage what happens to the toxic waste - such as heavy metals (batteries), asbestos (undeclared), radioactive elements (smoke detectors) etc over the long term (say 100 to 500 years)?

- What happens to toxic chemicals, fuel, batteries etc?
  - I understand this will be a Class III facility. What improvements will be made by the Shire and DWER in regards to ensuring only up to Class III waste will be able to be dumped at this new facility?

### **Groundwater**

- I have faith that in this day and age all eco investigations have been conducted correctly.
- I am concerned about leakage into the water table. I know you have tried to address that but one earth tremor, one exceptional wet season etc could see the work undone and the community water source poisoned. Is it possible to put where the aquifer that we draw our water is not from?
- It sounds like the distances from groundwater are not ideal. Is there any chance of improving that before the facility goes ahead?
- So long as it is sealed/ impermeable and the contents cannot leach out and contaminate surrounding areas.
- Will this affect Broome's drinking water quality?
- Ground water impact.
- Keep it away from the aquifer that we draw our water from.
- I don't believe you have adequately covered possible contamination of drinking water.
- Runoff of Site G1 concerns me. It looks like there could be run off into Roebuck Bay.
- Water security is paramount.
- Risk of ground water contamination cannot be guaranteed to be eliminated.
- Groundwater at 14m vs Groundwater at 1+m, seems to be odd that the groundwater at G1 is so close to the surface, why is it thought to be that shallow, as to be almost surface water, not groundwater?
- Yes possible water contamination. Crazy for landfill in D2 area.
- It absolutely cannot affect our water supply, or that of wetlands 'down stream' of underground water flows.

- Something I read recently in the Broome Historical Museum. In the early 1900's people in Broome were getting really ill and dying. Everybody thought it was from mosquitoes. In fact Broome had poisoned its own water supply. This is a highly concerning scenario with this site. I note that the water guy in the clip is saying there is no risk to the Broome water supply. I would think that there is a low or very low risk to the Broome water supply. All sorts of assumptions are being made in regard to the hydrology. Many subterranean events can occur overtime that could alter the current water situation, including overuse of the bore field, salt water intrusion, seismic events and other events that we are yet to learn about. The basic principle should be that you protect your water at all costs and no possibility of its pollution should be allowed to occur.
- I have concerns about contamination of the current and future bore fields.
- Potential groundwater contamination seem relatively high.
- Too close to town drinking water supply. I have previously worked at several mine sites where the same quality and type of linings and assurances of impossible for ground utilised. Ground water contamination still occurred and is an ongoing issue worldwide.
- Landfill sites should be as far from town and water supply as possible.
- Longer hydrological studies. Its great that we now see Department of Water studies being done here in the Kimberley. Sadly most of this is done for future allotment. I would like to see studies more to focus on the protection of water and its quality. Could you release all the Department of Water studies that have been done around this area historically? I note Water Corporation is mentioned often but not the Department of Water. .
- Groundwater movement has to be an inexact science.
- Ongoing investigation regarding impact to groundwater.
- Provide us with the test bore outcomes - water depth, water quality, flow rates etc.

### Community Recycling Centre

- Will the operation include a shop for recyclables, household goods, car parts, construction material, greenwaste (mulch) etc?
- Is the Shire aware of any other tip recovery shops in Australia that are operated on a cost recovery basis? What model will be used in Broome?
- Ensure there is going to be a goods for repurpose section.
- Provide a reuse shop where items can be resold.
- Don't overcomplicate things. Allow a recycle shop so others can use items thrown away that are still viable.

### Gas Emissions

- Will gas from decomposing waste be collected? If so, what will the gas be used for?
- Does the RRRP include gas recovery and use?
- Flaring. We keep hearing it won't be visible from the road. Gas is a precious resource and should be captured for use, not flared and wasted. Will this flare be visible from the road?

### Employment / Contracts at Landfill

- Will this operation be Shire run? who will be accepted for employment positions?
- Will this employ more people?
- Will the landfill be managed under Contract or by the Shire of Broome directly?

### Illegal dumping in correlation to RRRP location

- I'm worried about the landfill being out of town. At the moment at Buckley's Plains, we already have a lot of people illegal dumping in the bush between Broome North and the tip road. By having this facility out of town, it is only going to get worse.

- Illegal dumping being a main problem. People can't be bothered driving to Buckley's Plain, let alone 12km to Cape Leveque Road or 38km to the roadhouse tip. Illegal dumping needs to be taken more seriously by the rangers etc. The back of Broome North has a small rubbish tip at the moment.
- I'm also concerned about the amount of litter that will be on the Cape Leveque Road.
- As the distance is going to be further from town, people will be lazy and carry out illegal dumping. Something needs to be factored in to mitigate this inevitable occurrence- e.g. re-introduce kerbside pickups?
- Distance and likelihood of increase in illegal dumping.
- Ease of access, so less dumping in bushland.
- Rubbish in surrounding bush at the present site is an absolute eyesore. Yes, some of this is from illegal dumping but it is also from wind events including willie willies. How will this be managed? Also the 9km stretch from Broome townsite will be littered with blow-off waste. I understand this is Main Roads but this will also have a negative impact on visitors to the town.
- Closest proximity to town is best to try and reduce illegal dumping from the less caring people.
- The site has to be located within a reasonable distance to the town. Having the site a long way from the township, I can only imagine the dumping of rubbish that would occur. Please consider this as a lot of people are lazy.
- Traffic issues with increased volumes of traffic, loose loads impacting visual amenity of area approaching tip.
- Ease of access for users e.g. distance from town, temptation/possibility of dumping enroute.
- People are lazy. If it is not easy, cheap and quick they will not go to the tip. They will dump in the bush. I think more Indigenous rangers need to be part of a program to monitor and fine illegal dumping.
- Ongoing debris / rubbish left outside and around the area. i.e. have a look at all the rubbish left alongside the road at current site - would hate to see this strewn along Cape Leveque Road.

- Distance to community, if too far people will drop items off in bush.
- Mitigation of illegal dumping due to increased distance from town.
- Yes, rubbish strewn along Cape Leveque Road.
- How the preceding roadside amenity will be preserved. People often travel with a loose load spilling greenwaste/rubbish on their way to the RRRP.
- A new facility brings the very high risk of increased dumping at sites in town simply by virtue of bringing a change for users (including increased dumping at in-town conservation parks). Some greater attention to planned collaborative efforts and resourcing for addressing increased dumping is required.
- We already have illegal dumping with a tip 1km from town, the closer the better.

#### Odour

- I'm the nearest resident of the of the D2 site. I'm concerned about the noise and odour when there is an easterly breeze.
- Smell drift on prevailing winds
- Noise pollution, and odour pollution

#### Visual Amenity

- Cape Leveque Road is a tourist route, query sufficient buffer to the roads and visual amenity.
- Negative effect on other industries e.g. the incredible future tourism potential of the Dampier Peninsula. I note Talis are saying it won't be visible from the road. Will this still be the case when the cells are full? And therefore, affect other industries e.g. tourism - should be a consideration in site selection.
- 20-metre-high landfill - I will be able to see it from my home.
- Will the visual impact be the same on McGuigan Road and the Cape Leveque Road?
- At 20m high, these mounds will be significantly higher than the surrounding terrain.
- It will look horrible. There will be lots of traffic congestion, with trucks turning onto the Cape Leveque Road, which is a bad turn-off anyway.

## Extreme Events Management

- Impacts of possible fire and flood on this area.
- Does the pump and equipment used to manage and monitor leachate ponds and groundwater have redundant back-up systems so that a prolonged power failure or equipment failure will not jeopardise the plan to pump leachate back into the pit in the case of deluge or flood?
- What happens in a significant storm/cyclone event?
- Engineered contingency for extreme weather events.
- Major floods like January to May 2018.
- The lack of fire management in the area bordering that site.
- I think they should do water samples and drilling after there has been a major flood.
- There is a need for engineered contingency for extreme rainfall events.

## FOGO / Green Waste

- Will it be supplemented by additional bins for households to separate garden and food waste?
- Does the RRRP include mulch-to-compost process?
- Is there anywhere or any way that green waste could be treated closer to town?

## Cost

- What will it cost to dispose of domestic waste?
- Costs and access are always the question.
- I think it would also be good to know what the likely gate fees would be for each option and how this compares regionally?
- Its closer to town so it will be cheaper.
- As a ratepayer I would be keen to ensure the cost of development and future waste management services is as economic as possible.
- Would be interested to see more information regarding the cost to residents to develop and operate the site.
- Financial costs. 1. Will two sites with G1 require more staff? 2. Potential costs to ratepayers for both sites 3. Potential costs to ratepayers where a decision on location of a new

landfill is delayed and 4. Will the Shire reconsider cyclone clean up on a once-a-year basis?

- I'm concerned about cost.
- Cost. As rates costs are too high as it is.

## Distance / Access

- A rubbish pick-up service for ratepayers who do not have access to transport and want to be rid of dangerous rubbish e.g. pre cyclone clean up.
- Access by the public and hours of operation.
- Traffic management and access to regional arterial transport routes to move stockpiles if and when required.
- Is the road surface going to need strengthening for the increase in heavy traffic?
- Management plans for increased traffic flows due to people visiting the tip and also those heading to Cape Leveque now the road is sealed.
- I believe the distance from town will prevent people from using it regularly.
- You need to do some serious roadworks e.g. widening of the roads, line marking, signage, speed limits, and power and lighting.

## Business / Contractor Access

- Convenience for businesses who require access to site regularly. Distance a big issue. Paying an employee to drive 38km each way will add to gardening services cost and may result in roadside dumping, particularly green waste.
- The cost comparison should include any additional costs that would be passed on by commercial contractors to residents i.e. the cost of driving to and from each of the options.

## Native Title & Traditional Owner Engagement

- Assuming cultural consultation has or will occur prior to approval.

- Has the law ground of the Northern Tradition at the Overseas Telecommunications Centre been fully considered and the Goolarabooloo been consulted in this regard?

- The site is on a songline of the local Yawuru.

#### Other

- Information has been provided well.
- It has been well explained.
- I think the investigations have been thorough and well explained.
- The information provided is very clear.
- Nothing is 100%. The Shire has done very well.
- Longevity of site.
- The tip won't allow for the natural expansion of Broome. The tip will once again be right beside the town.
- This feels like a cynical exercise of pretend choice. If the options are so limited (one or one + another) then it could reasonably be argued that in fact the choices are so limited as to not be a choice.
- Start again please, find more suitable sites.
- It seems the Shire have had a lot of trouble locating a site. What is going to happen in the future when the Shire needs to expand? There appears to be nowhere to go. Development WA appear to have a lot of land sewn up yet nobody to go into their big ideas e.g. Broome Road Industrial Park. Likewise with the airport. That land has been out of reach for anybody for 20 years now and there is still no sign of them moving. What does the Shire do next? Nowhere left to go.
- Look for somewhere more stable and seek to maximise diversionary efforts to minimise the site now and continuously.
- How about in near Water Corporation, near the rifle range.
- Consideration for future growth of residential housing.
- Please give the recycling centre a different name. Broome Shire Recycling Centre (SRC) seems more fitting. Broome CRC is already in use by at least two community organisations.
- More information that is not presented in science but on how it will impact in layman's language.

- More testing, study and expert assessments.
- Provide more opportunities for members of the public to ask expert consultants questions. Make available the tender agreements between the Shire and consultants on the project. Make minutes and notes of any meetings between Shire staff and consultants available along with reports provided by consultants.
- You have to trust in the experts.
- I probably need more info e.g. who chose the peer reviewer? How independent are they in reality? Do they have Kimberley experience? Have they considered 100 year+ events? Have they taken climate change into account? Perhaps this is all in the reports that I haven't read? If you say both sites are suitable, why does the RRRP report say that site G1 does not meet the 3m separation criteria across all locations? Surely this should be enough for G1 to be considered unsuitable.
- Additional peer review with published feedback from Yawuru, Environs Kimberley and the Broome Bird Observatory - funding should be provided to enable them to provide informed commentary.
- I know if the EPA was involved at all the assessment would be flawed. Also some of the features of the new facility do not have the highest ratings. I think we should pursue the highest ratings for safety of our living space. This includes water, soil and fauna and flora.
- Some real consideration of alternate sites.
- I have checked all sources I can and am unable to identify this fault that apparently runs through G1, can someone please advise me of the fault and its alignment (and previous activity if any?)

#### Direct comments regarding Site D2

- Fully support the development of this site as landfill. It ticks all the environmental and financial boxes and will have no impact on community well-being at Coconut Wells.
- It cannot be too far from town - people simply will not travel that far to dispose of rubbish unfortunately - Site D2 is my preferred option.

- Only that it should be situated where transport distances of waste are minimised - Site on the Cape Leveque Road.
- This would be the recommended site.
- Preferred option.
- We are involved with Motocross and are trying to grow this sport - I see having landfill at D2 as a negative.
- Not to be used.
- Preferred.
- Would be best to have the landfill.
- I think it has been well explained and researched well to minimise impact.
- One site only needed.
- I think this is the better option.
- Very supportive of site D2 as a preferred site as it is closer and seemingly will cost less to ratepayers.
- My preference, due to the greater depth of soil.
- Proximity to town is a positive. Proximity to tourism road is a negative.
- This site makes sense in almost every aspect.
- Too close to residential population and can't guarantee no groundwater contamination. Appears as though decision already made.
- This location is a bad idea. That is the direction the town will expand to. Also there be rubbish flying around everywhere at the gateway to the peninsula.
- How can you guarantee this does not affect water to Coconut Well and surrounds?
- Still a long way from town. Is there an alternative location closer to town for green waste available?
- A one-stop shop. Lease areas for Cleanaway in Hunter Street.
- Screening for the Cape Leveque Road boundary is a good idea. Clearly the preferred site.
- Preferable option as Broome already experiences illegal dumping. Relocating the site further out of town may increase this practice.
- Seems like the best site. Given the science, environmental and cost saving it is only the power and privilege of a small minority that would prevent it from going there.

- Better than G1.
- It's close to water supply. Possible contamination.
- Without having extensive knowledge in the area, the elements that stick out to me are that having both components in the one place would make procedural sense; and also that the closer to town (within reason) the more practicable and useful a site would be.
- Unsure how it has already been selected as the community recycling site. Wasn't aware of any consultation on this?
- Closer to town is better but not perfect.
- Coconut Wells people will be not pleased I would imagine.
- It is my preferred site.
- Better option as less distance for commercial operators.
- D2 a good site if groundwater secure.
- I really like the idea of an integrated facility with a proactive and comprehensive reuse/recycle/tip shop area. I think this is very appealing.
- D2 is the better option but still too far away from town.
- Think about the obligation of the Shire to plan not react, the D2 site is only a short-term solution to a long-term problem, it will get us through a decade or maybe two decades (I doubt it) and then we must repeat this process all over again. "Begin with the End in Mind" means that we need to do it once and do it properly. The RRRP can go on D2 for sure (perfect location actually) but not the landfill.
- If it doesn't go ahead on Cape Leveque Road then you'd have to say our Shire's democratic processes are seriously compromised.
- Is this decision on location being determined by the parcel of land already held by the Shire for this purpose? If so, this is less consultation and more confirmation and approval, with G1 offered as a poor and not at all competitive landfill.
- Previous correspondence had ruled out the D2 site due to possible drinking water contamination.

- A second opinion - mainly to assuage the residents of Coconut Wells.
- Remove site D2 from consideration.
- Somehow the original report from specialists has been ignored on the D2 site. Prior council meetings had removed this area from selection. Based on this I don't see how you can increase our confidence in the D2 site when it had already been ruled out. Obviously purely financially driven selection.

### Direct comments regarding Site G1

- Having the landfill at site G1 will incur significant financial and environmental costs - extra transport, additional cost of developing the landfill site, flood risk and danger to Roebuck Bay.
- If the landfill is at G1 then I'm sure our rates will go up even more for transporting costs from D2 to G1.
- Would far prefer to see the resource recovery bit on D2 and the landfill at G1.
- Looks like there could be runoff into Roebuck.
- I don't like either site option. One is too close to prime residential sites and the other is right over our aquifer. I am disturbed that this is the best we can do.
- Distance from town too great; bushland dumping likely to increase. Pit would be more horizontal than D2 due to less depth to groundwater.
- Being Aboriginal land, what future costs are going to be asked for?
- Perfect place.
- Makes sense.
- Having the landfill at site G1 will incur significant financial and environmental costs- extra transport, additional cost of developing the landfill site, flood risk & danger to Roebuck Bay.
- Leachate into Roebuck Bay.
- Think this is the best location for landfill, but can see it will cost more for transporting from D2 to G1.
- Too far out of town.
- It would be great as it is out of town, can expand, and will be convenient for trucks coming from other regional areas.
- I think this would add unnecessary expense and time pressure on the waste contractors.
- Too far from town.
- Too far out... people will dump rubbish rather than go 38km.
- Even more worried about contamination of ground and surface water and the impact on Roebuck Plains and eventually Roebuck Bay.
- Too far, rates are already too expensive. Broome residents have a distance tax on everything already.
- Less supportive given significantly larger distance from town, making access more difficult.
- Would be my second choice, when considering the traffic light scoring.
- The distance from town will definitely prevent me from using it.
- I think its too far from town.
- it seems that while groundwater contamination is lower than D2 that floodwater contamination is a higher risk and a more stable site should be considered.
- It has higher risks.
- It's a long way away. How will rubbish be transported there?
- Water table is too close, transporting waste would cost way too much over time.
- Preferable to D2 but shallow distance to groundwater table should mean both sites rejected. Understand that timing is of the essence, but this is a once-in-70-year decision so can't be rushed.
- Better.
- The risk of contamination of the groundwater as well as the flood risk should be heavily considered. With the change in climate it is very hard to accurately predict the risk of extreme weather events. If an unpredictable weather event happens in the next 70 years the health damage to the community and to the surrounding flora and fauna would be massive, that's before taking into account the run-off of the Roebuck catchment into the protected Roebuck Bay.
- Perfect solution - pretty sure Bidyadanga gets bin service from Broome so why is this not the obvious site?

- Distance is a disadvantage, risk of illegal dumping closer to town. Financial burden will be passed on to residents to cover increased costs of weekly rubbish collection.
- Bad choice.
- The operating costs to residents are higher than stated as the stated costs do not allow for increases in non-residential waste disposal costs via a contractor. These are significant.
- Broome already experiences illegal dumping. Relocating the site further out of town may increase this practice.
- Too far out of town.
- Far better option for mine to use G1 as Landfill and D2 for the RRRP. G1 will last into the future whereas the D2 site is only a short-term option for landfill and then we will be out at G1 anyway.
- It should not be considered due to the leachate risk to Roebuck Plains.
- Clearly not preferred to D2.
- Seems a long way away; this has pros and cons though.
- Too far from town.
- Too far away.
- A new facility brings the very high risk of increased dumping at sites in town simply by virtue of bringing a change for users (including increased dumping at in-town conservation parks).
- Some greater attention to planned collaborative efforts & resourcing for addressing increased dumping is required.
- Double handling from D2 is wasteful of ratepayers' money. Too far for town folk.
- Way too far out, illegal dumping is already a problem. I believe this will add to the issue, even with a transfer station.
- Distance is important...38km is too far.
- Reading your report G1 is not a good candidate for a landfill, given your own reports saying it isn't the best for groundwater protection.

# Conclusion



The Shire of Broome embarked on the six-week RRRP Community Review period in an effort to inform the community of the work undertaken to date and receive input on the two proposed sites for the landfill component of the facility.

While acknowledging that both Sites D2 and G1 have pros and cons, the Site Comparison Report and Project Team's extensive investigations show that Site D2 is the preferred option for the landfill component. This is based on geographical, environmental, geological, financial and social grounds.

Through the Community Review, the overwhelming public sentiment from survey respondents and attendees at information sessions mirrored the opinion that Site D2 was a better option for the landfill than Site G1.

This has been confirmed by the fact that:

- 65% of survey respondents were happy with the investigation criteria used by the Shire in relation to site selection – criteria and investigations that show Site D2 is a better option for the landfill.
- 68% of survey respondents were extremely, very or moderately confident in the Shire's investigations related to the landfill component of the RRRP – which show Site D2 is a better option for the landfill.
- 77% of Pop-Up Survey respondents said they were feeling positive or very positive about the RRRP project.
- The vast majority of comments in relation to Site D2 from survey respondents (see pages 44-46) stated that it was a better option for the landfill component.
- The vast majority of comments in relation to Site G1 from survey respondents (see page 46-47) raised concerns about the location, additional cost and reduced distance to groundwater, compared to Site D2.

- The Shire met with respected hydrogeologist Tony Laws on February 25, who had been critical of plans to establish a landfill at Site D1 in 2015. Mr Laws indicated no major concerns about Site D2 in relation to the landfill component.

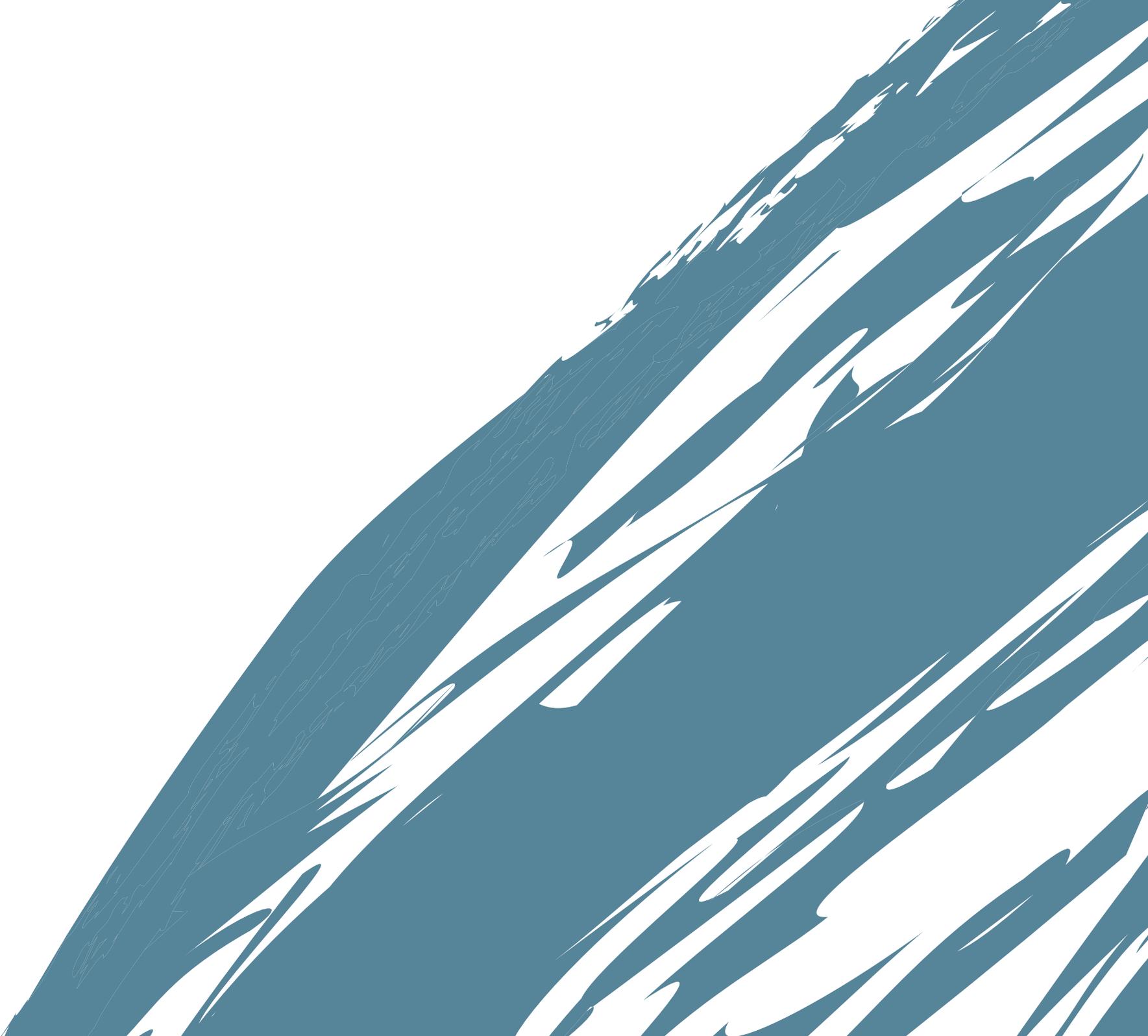
As with any new landfill facility or major infrastructure project, concerns were raised and a level of dispute was witnessed.

In relation to Site D2, this was predominantly from Coconut Well residents, who raised concerns over the proximity of the site to their properties.

However, after a constructive Information Session with Coconut Well residents, all concerns have been answered in a fashion the Shire feels should allay these fears and all questions about the potential use of Site D2 as a landfill have been answered comprehensively by the Project Team.

The main concerns raised by Coconut Well residents and the wider community are covered in this document in Key Themes 1-7. The corresponding conclusions to each Key Theme show that the Project Team has undertaken the required scientific investigations and peer-reviewed research to allay these concerns. While the Themes raised are pertinent, they are not reason for either Site D2 or Site G1 to be ruled out as an option for landfill.

The overarching community sentiment, as can be seen in the survey responses and when garnering feedback from the community at engagement sessions, mirrors the Project Team's investigations and subsequent prognosis – that Site D2 is a superior option for the RRRP's landfill component.





Shire of  
**Broome**  
people • place • progress

REUSE  
REUSE  
RECYCLE

< Reuse shop  
< Mulch  
< White goods  
< Recycling  
Weighbridge  
Refuse drop off