



# COMMUNITY ENGAGEMENT OUTCOMES REPORT

## Coastal Survey

# CONTENTS

OVERVIEW.....	3
STAKEHOLDERS.....	5
ENGAGEMENT MATERIALS .....	6
RESPONSE RATE .....	12
DEMOGRAPHICS .....	13
VISITING THE COAST .....	19
VULNERABLE COASTAL AREAS WITHIN THE CITY .....	25
NORTH BURNS BEACH .....	26
ILUKA.....	29
NORTH OF OCEAN REEF BOAT HARBOUR .....	32
MULLALOO .....	35
PINNAROO POINT/KALLAROO .....	38
HILLARYS BEACH (WHITFORDS NODES) .....	41
SORRENTO.....	44
COASTAL ADAPTATION OPTIONS .....	47
FURTHER COMMENTS.....	55
APPENDIX.....	58

# OVERVIEW

The community was invited to complete the Coastal Survey from 31 May 2018 to 29 June 2018 to obtain feedback on how the community values and uses the City's coastline. Feedback was sought by way of an online survey form and the results of the survey will be used to inform the development of a Coastal Hazard Risk Management Adaptation Plan.

The City collected a total of 1,318 valid responses throughout the 30-day advertised engagement period. Approximately one-third of respondents are members of the City's Community Engagement Network, 21 respondents are members of the City's Coastal Vulnerability Stakeholder Notification List, and 6 respondents are community stakeholders, indicating an overall response rate of 21.8%. In addition, 846 responses were received from community members who were not directly engaged by the City.

The majority of respondents (88.6%) indicated that they visit the coast at least once per week in summer, and just under 80% visit the coast at least once per week in spring. 69.2% of respondents rate being able to visit the coast as "very important". The most popular activities along the coast are beach-based (ie walking, running, sitting, relaxing on the sand), coastal path activities (walking, running, cycling on the coastal path), and adjacent commercial/leisure activities (visiting cafés, restaurants, shops); over 80% of respondents indicated that they participate in one or more of these activities.

Regarding those coastal areas within the City which are potentially vulnerable to future climate change impacts, Mullaloo and Hillarys Beach are areas that respondents most often visit (62.1% and 57.1% of respondents respectively). Additionally, Pinnaroo Point/Kallaroo (35.8%) and North Burns Beach (32.9%) are popular also. For each vulnerable coastal area, respondents were asked to indicate their main reason(s) for choosing that location and which coastal spaces (beach, dune, pathways, etc.) of the area they value most highly. The following table provides a summary.

Coastal area:	Reasons for choosing: (% of respondents who selected)	Regions most valued: ( $\bar{x}$ ranking between 1–6*)
<b>North Burns Beach</b>	<ul style="list-style-type: none"> <li>• Good pathways and cycle routes (66.1%)</li> <li>• It is the closest to home (57.5%)</li> </ul>	<ul style="list-style-type: none"> <li>• Coastal pathways (2.1)</li> <li>• Beach/sandy area (2.5)</li> </ul>
<b>Iluka</b>	<ul style="list-style-type: none"> <li>• Good pathways and cycle routes (72.9%)</li> <li>• It is the closest to home (50.9%)</li> </ul>	<ul style="list-style-type: none"> <li>• Coastal pathways (2.1)</li> <li>• Beach/sandy area (2.6)</li> </ul>
<b>North of Ocean Reef Boat Harbour</b>	<ul style="list-style-type: none"> <li>• Good pathways and cycle routes (67.9%)</li> <li>• It is quiet and not too busy (44.0%)</li> </ul>	<ul style="list-style-type: none"> <li>• Coastal pathways (2.1)</li> <li>• Beach/sandy area (2.6)</li> </ul>
<b>Mullaloo</b>	<ul style="list-style-type: none"> <li>• Good beach/sandy area (76.1%)</li> <li>• Good foreshore/park area (65.1%)</li> </ul>	<ul style="list-style-type: none"> <li>• Beach/sandy area (1.7)</li> <li>• Coastal dunes/vegetation (3.2)</li> </ul>
<b>Pinnaroo Point/Kallaroo</b>	<ul style="list-style-type: none"> <li>• Good beach/sandy area (60.7%)</li> <li>• Good pathways and cycle routes (46.9%)</li> </ul>	<ul style="list-style-type: none"> <li>• Beach/sandy area (1.6)</li> <li>• Coastal dunes/vegetation (2.5)</li> </ul>
<b>Hillarys Beach (Whitfords Nodes)</b>	<ul style="list-style-type: none"> <li>• Ample car parking or transport access (56.0%)</li> <li>• Good foreshore/park area (52.9%)</li> </ul>	<ul style="list-style-type: none"> <li>• Beach/sandy area (2.0)</li> <li>• Coastal dunes/vegetation (3.0)</li> <li>• Coastal pathways (3.0)</li> </ul>
<b>Sorrento</b>	<ul style="list-style-type: none"> <li>• Good beach/sandy area (70.2%)</li> <li>• Safe swimming conditions (63.1%)</li> </ul>	<ul style="list-style-type: none"> <li>• Beach/sandy area (1.7)</li> <li>• Coastal pathways (3.0)</li> </ul>

\*1 = most valued, 6 = least valued

Respondents were also asked to rank how supportive they are of a number of different coastal adaptation options. The most strongly supported options are: re-vegetating and stabilising dunes, and preventing/limiting further development in vulnerable areas. Overall, respondents rank: maintaining a sandy beach for amenity and recreational use, and ensuring safe access to the beach for all beach users, to be the most important factors to consider when making decisions about coastal adaptation measures.

# STAKEHOLDERS

A total of 2,231 stakeholders were *directly* engaged by the City. Stakeholders identified included:

- Community Engagement Network members = 2,158
- Coastal Vulnerability Stakeholder Notification List members = 37
- Community stakeholders = 36
  - Beldon Residents Association
  - Burns Beach Residents Association
  - Connolly Residents Association
  - Craigie Resident and Community Association
  - Currambine Residents Association
  - Edgewater Community Residents Association
  - Friends of North Ocean Reef/Iluka Foreshore (2)
  - Friends of Sorrento Beach and Marmion Foreshore
  - Harbour Rise Home Owners Association
  - Heathridge Residents Association
  - Hepburn Heights Landowners Association
  - Iluka Homeowners Association
  - Joondalup Community Coast Care Forum
  - Kingsley and Greenwood Residents Association (2)
  - Kinross Residents Association
  - Marmion Angling and Aquatic Club (2)
  - Marmion, Sorrento, Duncraig Progress and Ratepayers Association Inc (3)
  - Mullaloo Beach Community Group
  - Mullaloo Surf Life Saving Club (2)
  - North Shore Country Club and Residents Association
  - Ocean Reef Sea Sports Club (2)
  - Padbury Residents Association
  - Quality Resort Sorrento Beach
  - Sorrento Surf Life Saving Club (2)
  - Whitfords Volunteer Sea Rescue Group (2)
  - Whitford Community, Ratepayers and Recreation Association Inc
  - Woodvale Waters Landowners Association

Additional stakeholders, including interested residents, ratepayers and community members, were also *indirectly* engaged by the City via the engagement materials described below.

# ENGAGEMENT MATERIALS

Community stakeholders, members of the City's Community Engagement Network, and members of the City's Coastal Vulnerability Stakeholder Notification List were directly contacted via email and invited to complete an Online Comment Form.

**Email to community stakeholders, Community Engagement Network members and Coastal Vulnerability Stakeholder Notification List members (see Appendix 1–3 for full):**



**Online Comment Form (see Appendix 4 for full):**

A screenshot of the 'Coastal Survey' online comment form. The form is titled 'Coastal Survey' and includes an 'Introduction' section. It explains that the City of Joondalup is planning for future climate change impacts on the coast and seeks feedback from residents. A 'Read' button is visible at the bottom of the form.

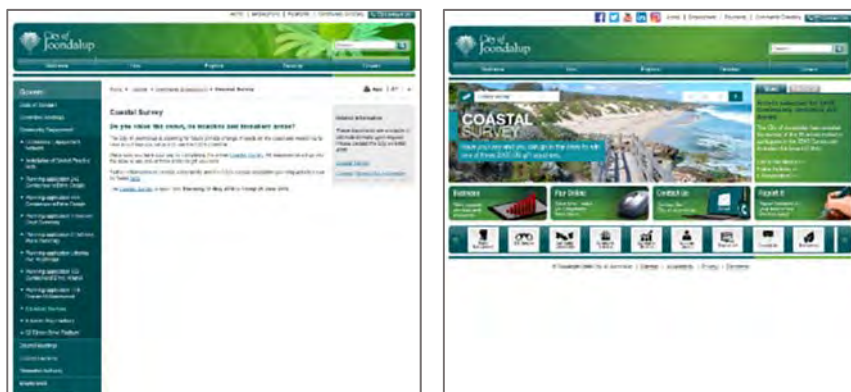
In addition, the City advertised the engagement to other community members via the following means:

- Webpage linked through the Community Engagement section of the City's website visible 31 May 2018 to 29 June 2018.
- Banner advertisement visible on the City's homepage 31 May 2018 to 29 June 2018.
- Flyers distributed to all City of Joondalup residents and available at the City's libraries, leisure centres, community centres, customer services centres.
- Posters erected at the City's libraries, leisure centres, community centres and customer services centres.
- E-screen displays visible on the e-screens located at the City's customer services centres, libraries and Craigie Leisure Centre 31 May 2018 to 29 June 2018.
- Items listed in the City's *Environmental Events* e-newsletters published 31 May 2018 and 21 June 2018 online and emailed to subscribers.
- Items listed in the *Joondalup Voice* community newspaper inserts published 31 May 2018 and 14 June 2018 in print, available online and emailed to subscribers.
- Media release published on the City's website 31 May 2018.
- Facebook advertisements live 31 May 2018 to 29 June 2018.
- Twitter posts published through the City's Twitter account 31 May 2018 and 22 June 2018.
- Facebook posts published through the City's Facebook account 31 May 2018 and 22 June 2018.

- Banner signage erected at 15 busy coastal locations 1 June 2018 to 29 June 2018, including Burns Beach Foreshore, Iluka Park Foreshore, Ocean Reef Boat Harbour, Key West Car Park Mullaloo, Westview Car Park Mullaloo, Tom Simpson Park, Whitfords Beach Car Park, Whitfords Avenue Parking Station Kallaroo, Pinnaroo Point, Hillarys Animal Beach, Whitfords Nodes, Sorrento Foreshore Northern Car Park, Sorrento Foreshore Southern Car Park, Sorrento (West Coast Highway opposite Ross Avenue), and Marmion (West Coast Highway opposite Ozone Road).
- City of Joondalup telephone on-hold message live 1 June 2018 to 29 June 2018.

To encourage diverse responses, three prizes of \$100 vouchers were offered.

**Community Engagement webpage text and banner advertisement from the City's website (see Appendix 5–6 for full):**



**Flyer and poster design and photographs of flyers in situ at 2 locations (Joondalup Library and Joondalup Administration Centre) (see Appendix 7–8 for full):**





## E-screen display design (see Appendix 9 for full):



## Environmental Events e-newsletters (see Appendix 10–11 for full):



## Articles and advertisements from the print Joondalup Voice and online Joondalup Voice community newspaper inserts (see Appendix 12–15 for full):

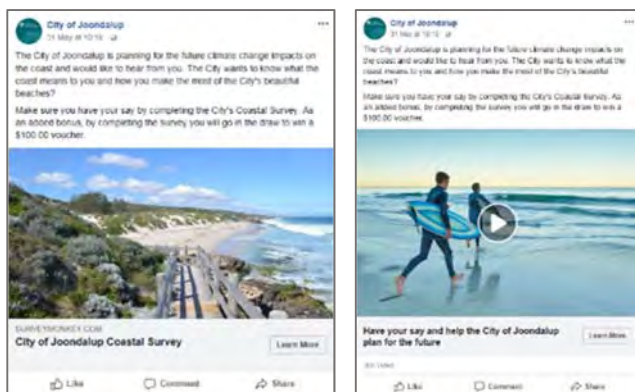


## Media release from the City's website (see Appendix 16 for full):

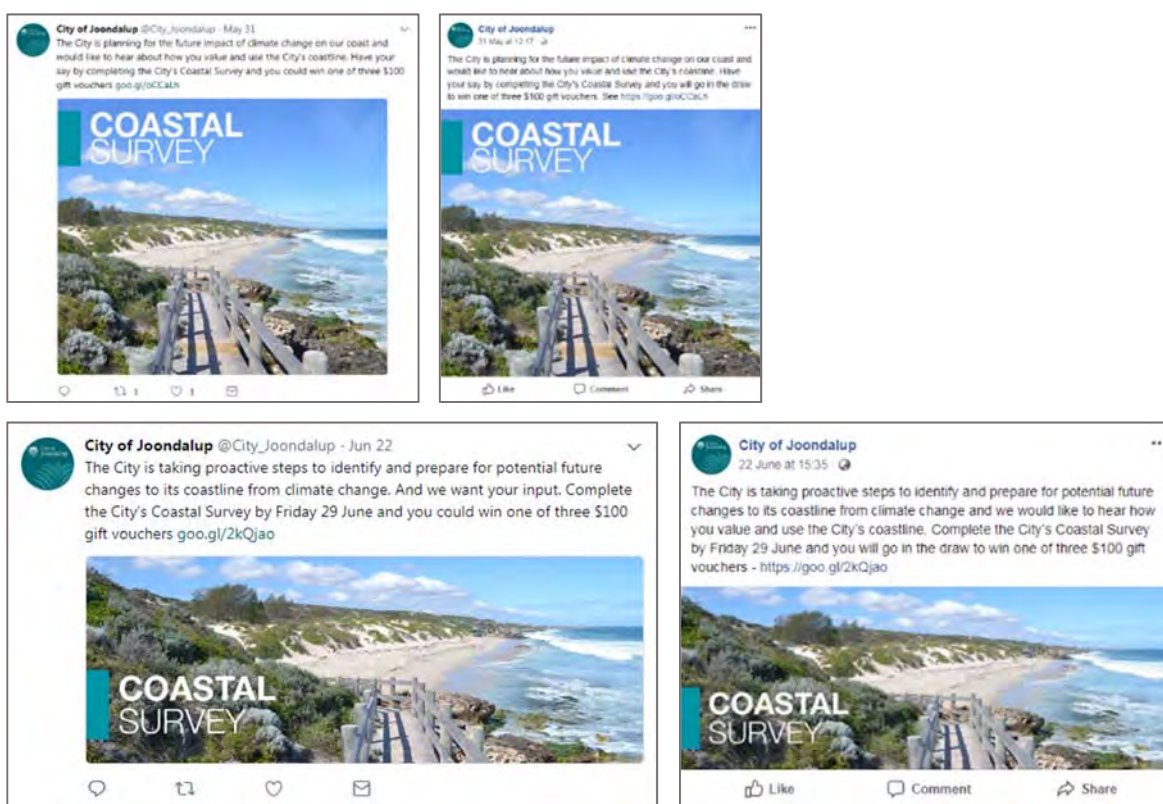





## Facebook advertisements (see Appendix 17 for full):



## Social media posts from the City's Twitter and Facebook accounts (see Appendix 18–19 for full):



**Banner signage design and photographs of signage in situ at 2 locations (Burns Beach Foreshore and Westview Car Park Mullaloo (see Appendix 20–21 for full):**








## COASTAL SURVEY

Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To complete the online survey, scan the QR code, visit the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or call 9400 4527.





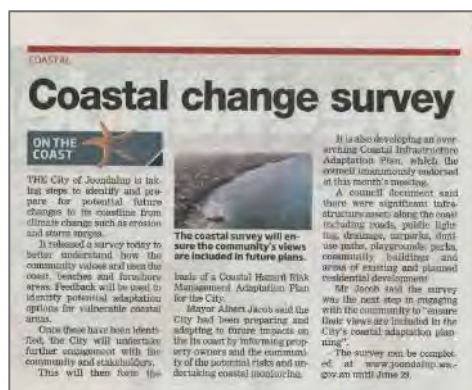
**Script for City of Joondalup telephone on-hold message:**



*Do you value the coast, its beaches and foreshore areas? The City is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. To have your say visit [joondalup.wa.gov.au](http://joondalup.wa.gov.au), complete the Coastal Survey and go in the draw to win one of three \$100 gift vouchers.*

Further to the City's communication, an article about the engagement appeared in the print *Joondalup Weekender* and the online *Joondalup Times* community newspaper 31 May 2018. The Joondalup–Wanneroo Times/Weekender Twitter account also posted about the engagement 31 May 2018 and via Facebook.

**Article from the print *Joondalup Weekender* and online *Joondalup Times* community newspapers (see Appendix 22–23 for full):**



**Social media posts from the Joondalup–Wanneroo Times/Weekender Twitter and Facebook accounts (see Appendix 24 for full):**



## RESPONSE RATE

The City collected a total of 1,318 valid responses throughout the 30-day advertised engagement period. Responses that were considered valid include all those which contained contact details enabling identification and were submitted within the advertised engagement period. Where multiple Comment Forms were received from the same person, these were combined into one response.

Of the 1,318 respondents, approximately one-third (459) are members of the Community Engagement Network, indicating a response rate of 21.3% for these stakeholders. A further 21 respondents are members of the City's Coastal Vulnerability Stakeholder Notification List. In total, 36.4% of responses came from stakeholders who had been engaged *directly* by the City, indicating an overall response rate of 21.8%. In addition, 847 responses were received from community members who were not directly engaged by the City. This data is shown in the table below.

	Forms sent	Forms received	Response rate
Responses received by stakeholder type:	N	N*	%
Community Engagement Network Members	2,158	459	21.3%
Coastal Vulnerability Stakeholder Notification List members	37	21	56.8%
Other community members (engaged <i>indirectly</i> )	—	847	—
Total response rate (engaged <i>directly</i> †)	2,195	480	21.9%
Total responses	—	1,318	—

\*Numbers may not add up to total, as respondents can represent more than 1 stakeholder type.

†Community Stakeholders have not been included in response rate as these stakeholders were encouraged to distribute the survey to their members, rather than submit formal responses themselves.



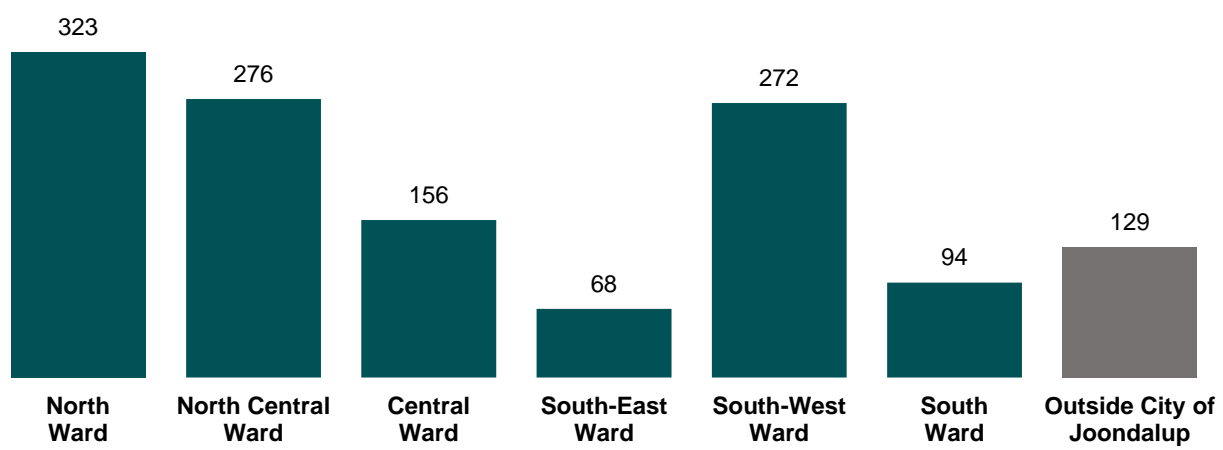
# DEMOGRAPHICS

## Respondent address

Respondents were asked to provide their contact address and the majority of respondents are residents of the City of Joondalup (1,189). Further, a large number of these are from coastal suburbs, including Hillarys, Mullaloo, Iluka, Burns Beach and Sorrento. This data is shown in the table and chart below.

<b>Responses received by suburb:</b>	<b>N</b>	<b>%</b>
<b>City of Joondalup</b>	<b>1,189</b>	<b>90.2%</b>
<b>North Ward</b>	<b>323</b>	<b>24.5%</b>
Burns Beach	92	7.0%
Currambine	36	2.7%
Iluka	93	7.1%
Joondalup	43	3.3%
Kinross	59	4.5%
<b>North Central Ward</b>	<b>276</b>	<b>20.9%</b>
Connolly	27	2.0%
Edgewater	30	2.3%
Heathridge	47	3.6%
Mullaloo	107	8.1%
Ocean Reef	65	4.9%
<b>Central Ward</b>	<b>156</b>	<b>11.8%</b>
Beldon	23	1.7%
Craigie	34	2.6%
Kallaroo	65	4.9%
Woodvale	34	2.6%
<b>South-East Ward</b>	<b>68</b>	<b>5.2%</b>
Greenwood	38	2.9%
Kingsley	30	2.3%
<b>South-West Ward</b>	<b>272</b>	<b>20.6%</b>
Hillarys	126	9.6%
Padbury	67	5.1%
Sorrento	79	6.0%
<b>South Ward</b>	<b>94</b>	<b>7.1%</b>
Duncraig	64	4.9%
Marmion	16	1.2%
Warwick	14	1.1%
<b>City of Wanneroo</b>	<b>84</b>	<b>6.4%</b>
<b>City of Stirling</b>	<b>25</b>	<b>1.9%</b>
<b>Other</b>	<b>20</b>	<b>1.5%</b>
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

Responses received by address:

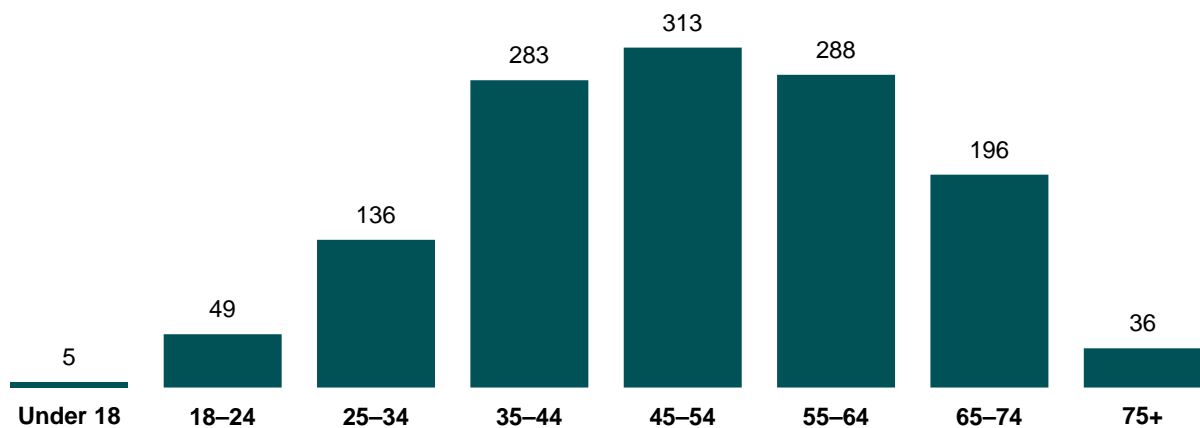


## Respondent age

Respondents were asked to provide their age and the majority are between the ages of 35–44 years (283), 45–54 years (313) and 55–64 years (288). Few respondents (less than 7%), are under 25 years or over 75 years of age. This data is shown in the table and chart below.

Responses received by age:	N	%
Under 18 years	5	0.4%
18–24 years	49	3.7%
25–34 years	136	10.3%
35–44 years	283	21.5%
45–54 years	313	23.7%
55–64 years	288	21.9%
65–74 years	196	14.9%
75+ years	36	2.7%
No response	12	0.9%
Total responses	1,318	100.0%

Responses received by age:





## Respondent knowledge of survey

Respondents were asked to identify where they had heard about the survey from the following advertising methods:

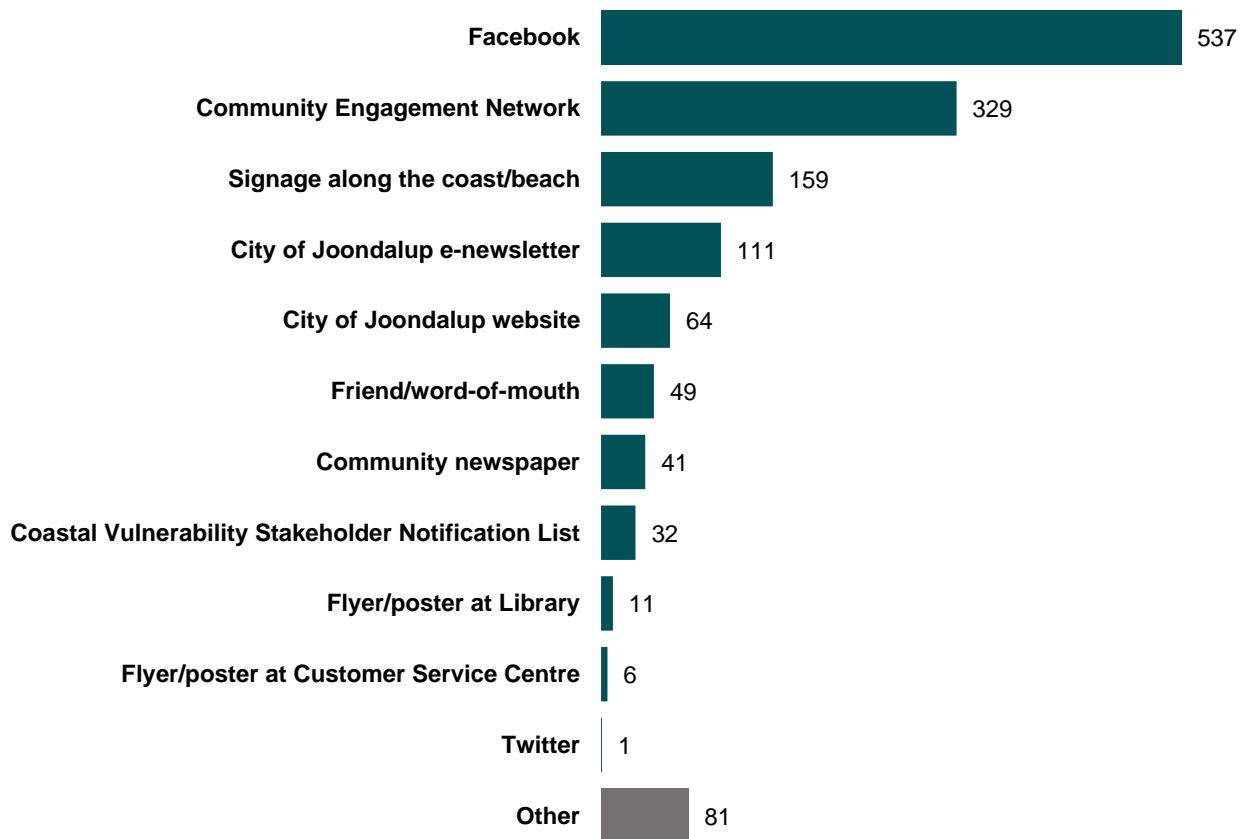
- Community newspaper
- Facebook
- Twitter
- City of Joondalup website
- Community Engagement Network email
- Coastal Vulnerability Stakeholder Notification List email
- City of Joondalup e-newsletter
- Signage along the coast/beach
- Flyer or poster at a City of Joondalup Library
- Flyer or poster at a City of Joondalup Customer Service Centre
- Friend/word-of-mouth
- Other

A large proportion of respondents (40.7%) indicated that they had heard about the survey through Facebook, and approximately one-quarter indicated that they had heard about the survey through the Community Engagement Network. A large number of respondents (159) also indicated that they had heard about the survey via banner signage along the coastline. This data is shown in the table and chart below.

<b>Responses received by advertising method:</b>	<b>N*</b>	<b>%</b>
<b>Community newspaper</b>	41	3.1%
<b>Facebook</b>	537	40.7%
<b>Twitter</b>	1	0.1%
<b>City of Joondalup website</b>	64	4.9%
<b>Community Engagement Network email</b>	329	25.0%
<b>Coastal Vulnerability Stakeholder Notification List email</b>	32	2.4%
<b>City of Joondalup e-newsletter</b>	111	8.4%
<b>Signage along the coast/beach</b>	159	12.1%
<b>Flyer or poster at a City of Joondalup Library</b>	11	0.8%
<b>Flyer or poster at a City of Joondalup Customer Service Centre</b>	6	0.5%
<b>Friend/word-of-mouth</b>	49	3.7%
<b>Other</b>	<b>81</b>	<b>6.1%</b>
Flyer in mailbox	42	3.2%
Communication from a community group (email or social media)	24	1.8%
Other	15	1.1%
<b>No response</b>	2	0.2%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have heard about the survey through multiple advertising methods.

## Responses received by advertising method:

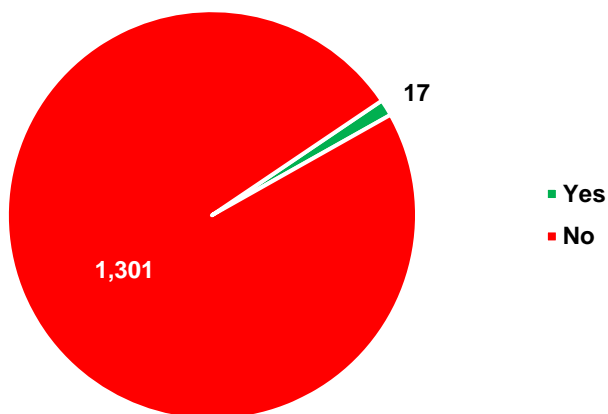


## Respondent residing in an identified Coastal Hazard Area

Respondents were asked “The City has identified a number of Coastal Hazard Areas where coastal processes (such as storm erosion and sea level rise) may impact the City's coastline in the future and have previously advised affected landowners. To the best of your knowledge, do you live in an identified Coastal Hazard Area?” 1,317 respondents answered this question with 193 indicating “yes” and 303 indicating “unsure”. A review of the addresses provided by respondents shows that only 17 do in fact live in an identified Coastal Hazard Area. This data is shown in the table and chart below.

Responses received by residence in an identified Coastal Hazard Area:	N (response)	N (actual)	% (actual)
Yes	193	17	1.3%
No	821	1,301	98.7%
Unsure	303	—	—
No response	1	—	—
Total responses	1,318	1,318	100.0%

Responses received by residence in an identified Coastal Hazard Area (actual):



## VISITING THE COAST

**QUESTION:** “How often do you visit the coast? (This could include the beach, dunes, foreshore and park areas, coastal paths, adjacent facilities, etc.)”

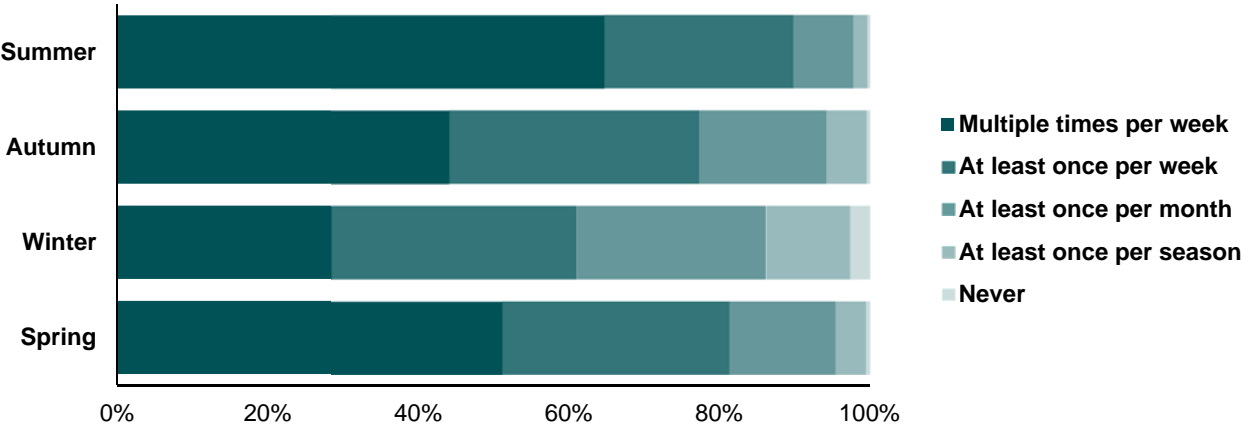
Respondents were asked to indicate how often they use the coast, inclusive of the beach, dunes, foreshore and parks areas, coastal paths, and adjacent facilities, over the four seasons. The following options were provided:

- Multiple times per week
- At least once per week
- At least once per month
- At least once per season
- Never

Over 80% of respondents indicated that they visit the coast at least once per week in summer, and just under 80% visit the coast at least once per week in spring. In autumn and winter, these numbers drop to around 75% and 60% respectively. Overall, respondents are much more likely to visit the coast in the warmer months. This data is shown in the table and chart below.

<b>How often do you visit the coast:</b>	<b>N</b>	<b>%</b>
<b>Summer (December–February)</b>		
Multiple times per week	841	63.8%
At least once per week	327	24.8%
At least once per month	103	7.8%
At least once per season	24	1.8%
Never	5	0.4%
<i>No response</i>	18	1.4%
<b>Autumn (March–May)</b>		
Multiple times per week	570	43.2%
At least once per week	429	32.5%
At least once per month	218	16.5%
At least once per season	69	5.2%
Never	6	0.5%
<i>No response</i>	26	2.0%
<b>Winter (June–August)</b>		
Multiple times per week	367	27.8%
At least once per week	420	31.9%
At least once per month	323	24.5%
At least once per season	144	10.9%
Never	34	2.6%
<i>No response</i>	30	2.3%
<b>Spring (September–November)</b>		
Multiple times per week	659	50.0%
At least once per week	389	29.5%
At least once per month	181	13.7%
At least once per season	52	3.9%
Never	7	0.5%
<i>No response</i>	30	2.3%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

How often do you visit the coast:



## QUESTION: “When you visit the coast, do you usually participate in the following activities?”

Respondents were asked to indicate whether they usually participate in the following activities when then visit the coast:

- Walking, running, sitting, relaxing (on the sand)
- Walking, running, cycling (on the coastal path)
- Exercising pets
- Swimming, snorkelling, scuba diving
- Surfing, boarding, rowing, paddling
- Sailing, motor boating, jet skiing, water skiing
- Fishing, crabbing, abalone
- Picnicking, barbecuing, playground
- Visiting cafés, restaurants, shops

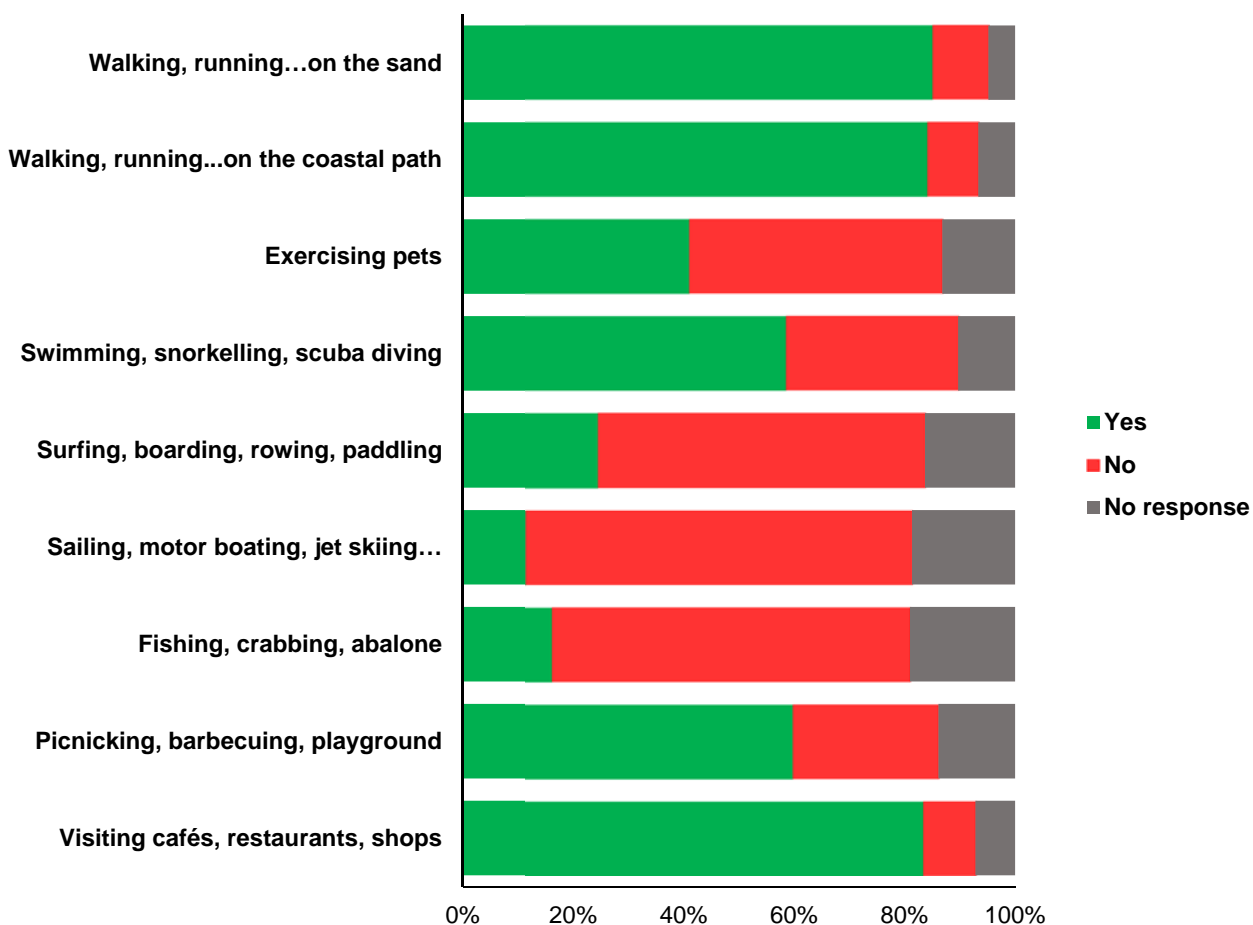
The most popular activities to participate in on the coast are beach-based activities (ie walking, running, sitting, relaxing on the sand), coastal path activities (walking, running, cycling on the coastal path), and adjacent commercial/leisure activities (visiting cafés, restaurants, shops); over 80% of respondents indicated that they participate in these activities. Also popular are park-based activities (picnicking, barbecuing, playground), and low impact water-based activities (swimming, snorkelling, scuba diving); over 50% of respondents indicated that they participate in these activities. This data is shown in the table and chart below.

When you visit the coast, do you usually participate in the following activities:	N*	%
<b>Walking, running, sitting, relaxing (on the sand)</b>		
Yes	1,118	84.8%
No	136	10.3%
No response	64	4.9%
<b>Walking, running, cycling (on the coastal path)</b>		
Yes	1,106	83.9%
No	124	9.4%
No response	88	6.7%
<b>Exercising pets</b>		
Yes	540	41.0%
No	604	45.8%
No response	174	13.2%
<b>Swimming, snorkelling, scuba diving</b>		
Yes	770	58.4%
No	412	31.3%
No response	136	10.3%
<b>Surfing, boarding, rowing, paddling</b>		
Yes	323	24.5%
No	780	59.2%
No response	215	16.3%
<b>Sailing, motor boating, jet skiing, water skiing</b>		
Yes	151	11.5%
No	921	69.9%
No response	246	18.7%

When you visit the coast, do you usually participate in the following activities:	N*	%
<b>Fishing, crabbing, abalone</b>		
Yes	214	16.2%
No	853	64.7%
No response	251	19.0%
<b>Picnicking, barbecuing, playground</b>		
Yes	786	59.6%
No	349	26.5%
No response	183	13.9%
<b>Visiting cafés, restaurants, shops</b>		
Yes	1,096	83.2%
No	127	9.6%
No response	95	7.2%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may participate in more than 1 activity.

**When you visit the coast, do you usually participate in the following activities:**





## QUESTION: “Are there any other activities you enjoy on the coast?”

Respondents were asked to indicate whether there are any other activities they enjoy on the coast. 275 respondents answered this question and many of the respondents provided specific examples of the types of activities already listed. These included a number of water-based activities, such as windsurfing, kitesurfing and surf lifesaving; as well as beach and park-based activities, such as sandcastle-building, beachcombing, volleyball, yoga and meeting up with friends.

Other frequently mentioned activities included the following:

- Photography, drawing and painting
- Four-wheel driving and driving/riding along the coastline
- Environmental conservation activities
- Litter collection and removal
- Enjoying/admiring the view
- Watching the sunset
- Relaxing, watching beach activities and “just being there”

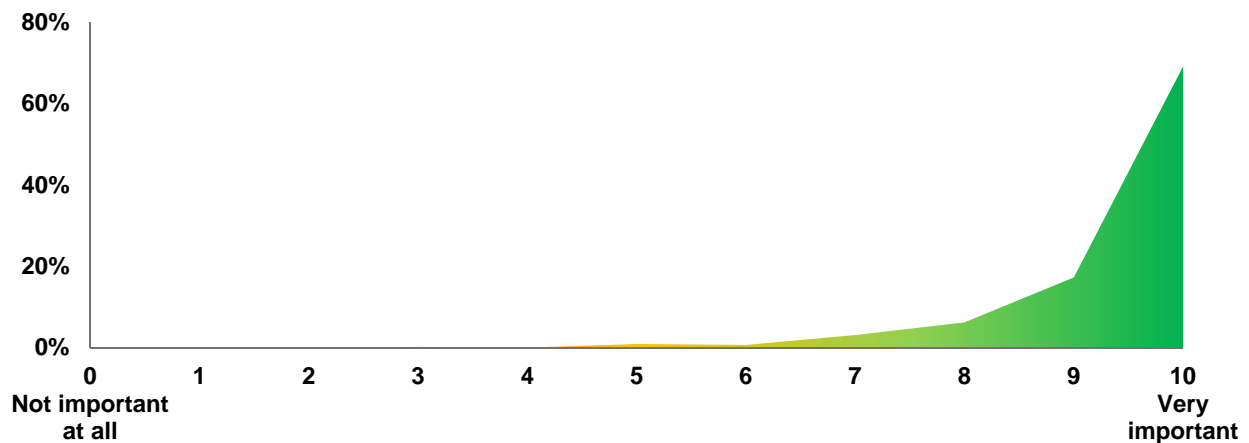
Verbatim comments have been randomised and are provided at Appendix 25.

## QUESTION: “In general, how important is being able to visit the coast to you?”

Respondents were asked how important it is to them to be able to visit the coast on an 11-point slider from 0 — “not important at all” to 10 — “very important”. 69.2% of respondents rate being able to visit the coast at 10 — “very important”. Over 90% of respondents rate it at 8 or above with an average rating of 9.5. This data is shown in the table and chart below.

In general, how important is being able to visit the coast to you:	N	%
0 — Not important at all	1	0.1%
1	0	0.0%
2	1	0.1%
3	3	0.2%
4	1	0.1%
5	12	0.9%
6	9	0.7%
7	41	3.1%
8	82	6.2%
9	228	17.3%
10 — Very important	912	69.2%
No response	28	2.1%
Total responses	1,318	100.0%

In general, how important is being able to visit the coast to you:



## VULNERABLE COASTAL AREAS WITHIN THE CITY

QUESTION: “A number of coastal areas within the City of Joondalup are potentially vulnerable to future climate change impacts. Which of these vulnerable coastal areas do you most often visit?”

Respondents were provided with a map and asked to indicate which vulnerable coastal areas they most often visit from the following options:

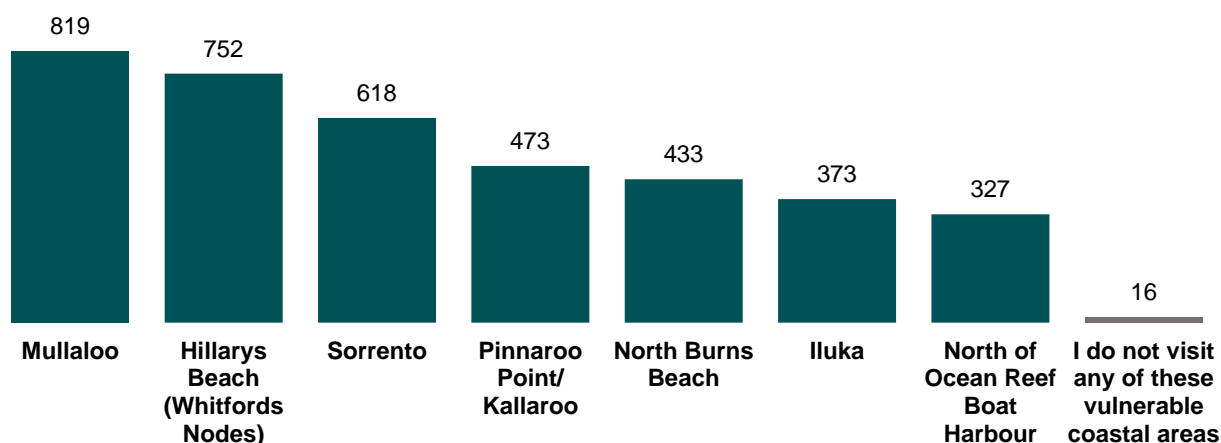
- North Burns Beach
- Iluka
- North of Ocean Reef Boat Harbour
- Mullaloo
- Pinnaroo Point/Kallaroo
- Hillarys Beach (Whitfords Nodes)
- Sorrento
- I do not visit any of these vulnerable coastal areas

Over half of respondents indicated Mullaloo (62.1%) and/or Hillarys Beach (57.1%) as coastal areas they most often visit, and just under half selected Sorrento (46.9%). Additionally, approximately one-third of respondents selected Pinnaroo Point/Kallaroo (35.8%) and/or North Burns Beach (32.9%). This data is shown in the table and chart below.

Which of these vulnerable coastal areas do you most often visit:	N*	%
North Burns Beach	433	32.9%
Iluka	373	28.3%
North of Ocean Reef Boat Harbour	327	24.8%
Mullaloo	819	62.1%
Pinnaroo Point/Kallaroo	473	35.9%
Hillarys Beach (Whitfords Nodes)	752	57.1%
Sorrento	618	46.9%
I do not visit any of these vulnerable coastal areas	16	1.2%
No response	23	1.7%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may visit in more than 1 coastal area.

Which of these vulnerable coastal areas do you most often visit:



# NORTH BURNS BEACH

QUESTION: “When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area?”

Respondents who selected “North Burns Beach” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

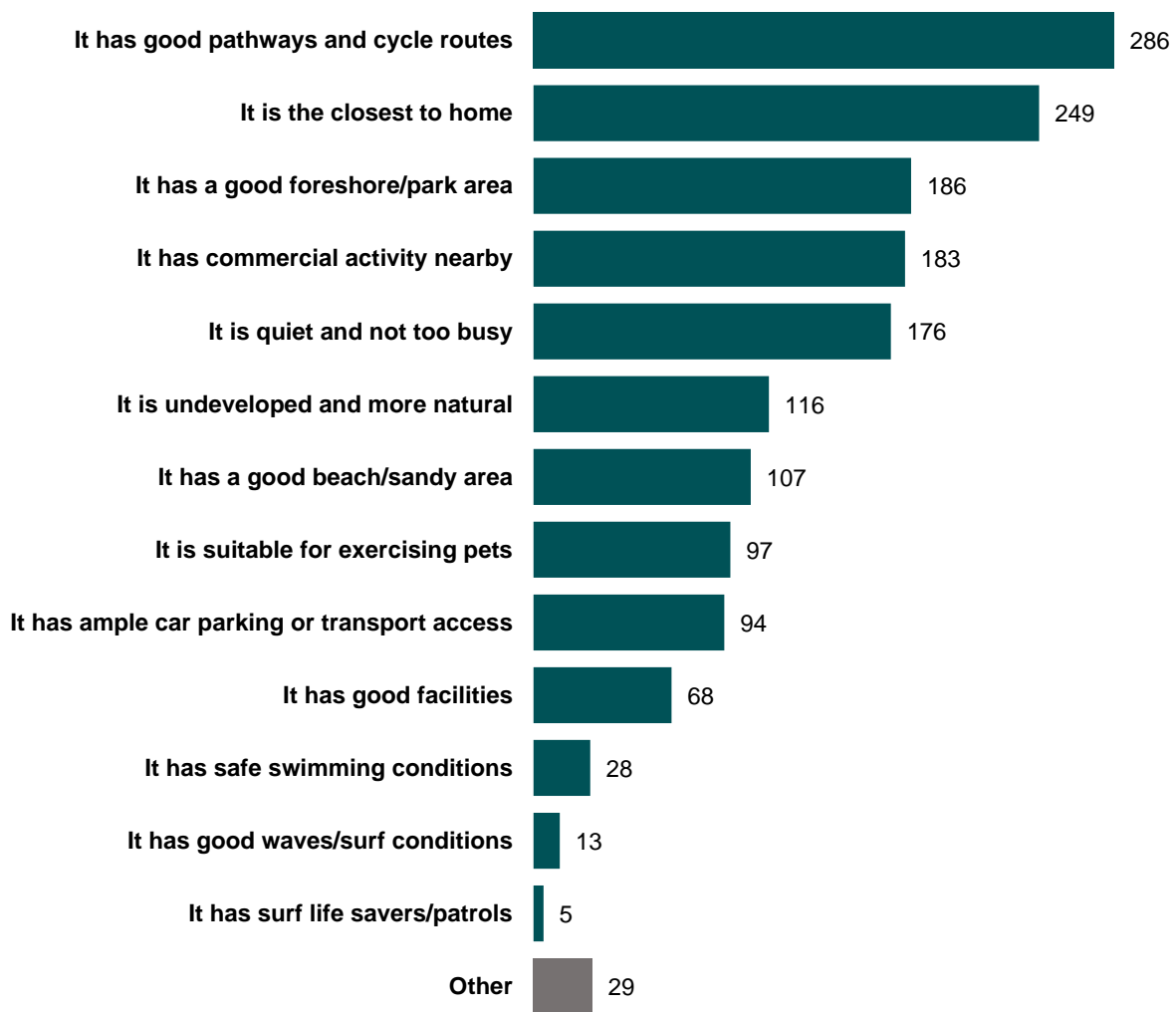
- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

The most popular reasons for choosing North Burns Beach are because it has good pathways and cycle routes (66.1%), and it is the closest to home (57.5%). Other popular reasons include that it has a good foreshore/park area (43.0%), that it has commercial activity nearby (42.3%), and that it is quiet and not too busy (40.6%). Few respondents selected surf lifesavers/patrols, or good wave/surf conditions as reasons for choosing North Burns Beach. Of those respondents who selected “other”, reasons cited include close to friends or family, good for walking and cycling, and good for bird watching. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 26.

When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area:	N*	%
It is the closest to home	249	57.5%
It has good facilities	68	15.7%
It has ample car parking or transport access	94	21.7%
It has surf life savers/patrols	5	1.2%
It has a good beach/sandy area	107	24.7%
It has safe swimming conditions	28	6.5%
It has good waves/surf conditions	13	3.0%
It has a good foreshore/park area	186	43.0%
It is suitable for exercising pets	97	22.4%
It has good pathways and cycle routes	286	66.1%
It has commercial activity nearby	183	42.3%
It is quiet and not too busy	176	40.6%
It is undeveloped and more natural	116	26.8%
Other	29	6.7%
No response	23	5.3%
<b>Total responses (respondents who selected North Burns Beach coast)</b>	<b>433</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.

**When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area:**



**QUESTION: “Please rank the following coastal spaces of North Burns Beach in order of (1) most valued to (6) least valued.”**

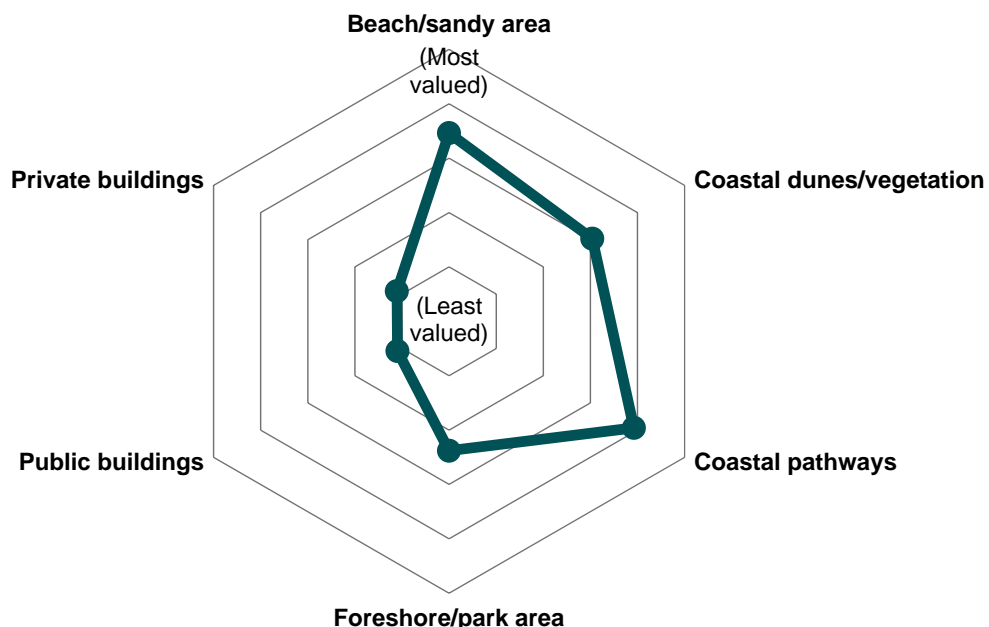
Respondents who selected “North Burns Beach” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of the North Burns Beach coast in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

371 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal spaces at North Burns Beach to respondents are coastal pathways (2.1), followed by the beach/sandy area (2.5). Least valued to respondents at North Burns Beach are public and private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of North Burns Beach in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
Beach/sandy area	2.5
Coastal dunes/vegetation	3.0
Coastal pathways (for walking/cycling)	2.1
Foreshore/park area (ie grassed area)	3.6
Public buildings (eg surf lifesaving clubs, toilets, changerooms)	4.9
Private buildings (eg residential housing, cafés, shops)	4.9

**Please rank the following coastal spaces of North Burns Beach in order of (1) most valued to (6) least valued (average scores):**



# ILUKA

**QUESTION: “When you visit the Iluka coast, what are your main reasons for choosing this coastal area?”**

Respondents who selected “Iluka” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

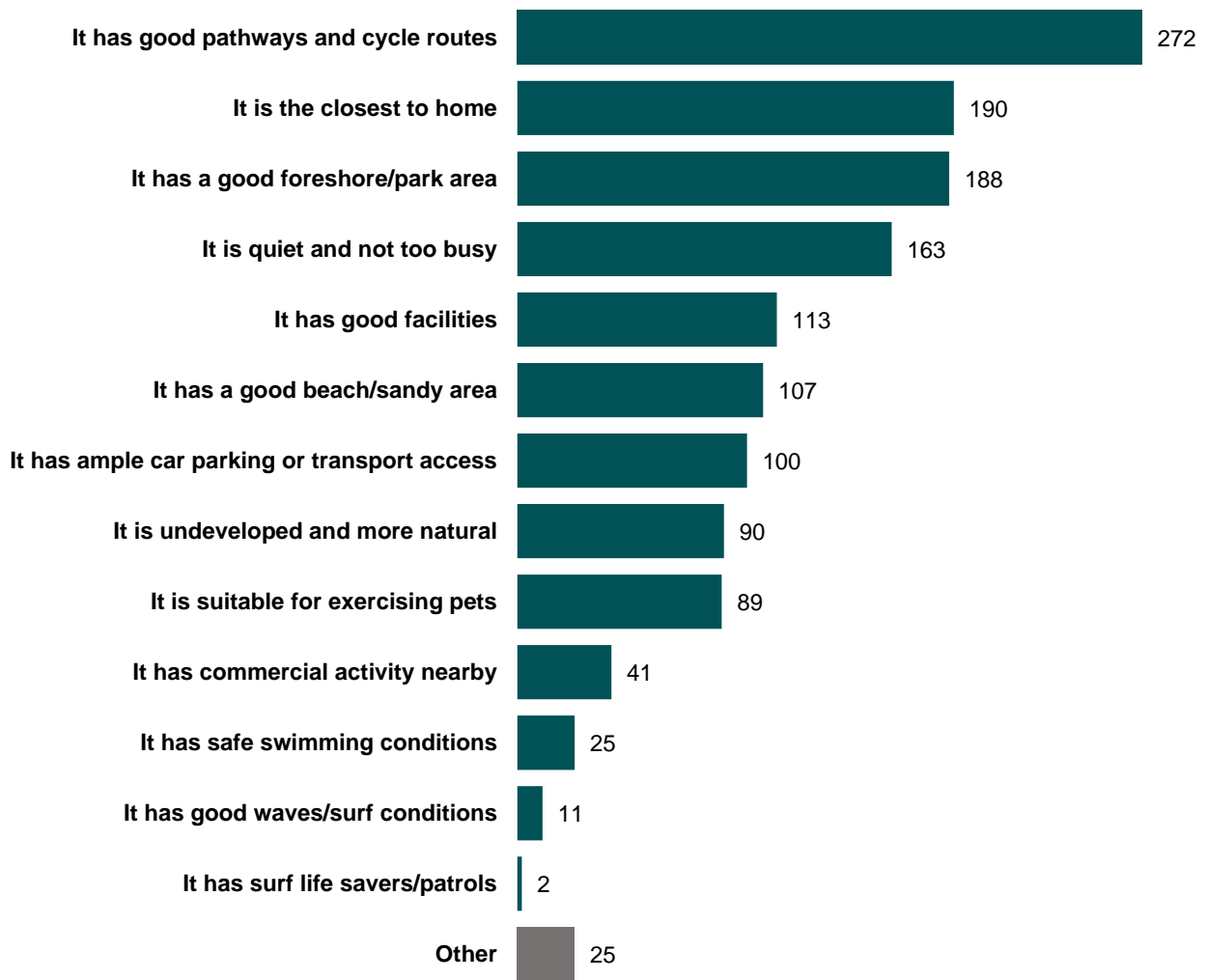
The most popular reason for choosing Iluka is because it has good pathways and cycle routes (72.9%). Other popular reasons include that it is the closest to home (50.9%), that it has a good foreshore/park area (50.4%), and that it is quiet and not too busy (43.7%). Few respondents selected surf lifesavers/patrols, or good wave/surf conditions as reasons for choosing Iluka. Of those respondents who selected “other”, reasons cited include it being close to friends or family, and good for observing wildlife and birdwatching. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 27.

<b>When you visit the Iluka coast, what are your main reasons for choosing this coastal area:</b>	<b>N*</b>	<b>%</b>
<b>It is the closest to home</b>	190	50.9%
<b>It has good facilities</b>	113	30.3%
<b>It has ample car parking or transport access</b>	100	26.8%
<b>It has surf life savers/patrols</b>	2	0.5%
<b>It has a good beach/sandy area</b>	107	28.7%
<b>It has safe swimming conditions</b>	25	6.7%
<b>It has good waves/surf conditions</b>	11	2.9%
<b>It has a good foreshore/park area</b>	188	50.4%
<b>It is suitable for exercising pets</b>	89	23.9%
<b>It has good pathways and cycle routes</b>	272	72.9%
<b>It has commercial activity nearby</b>	41	11.0%
<b>It is quiet and not too busy</b>	163	43.7%
<b>It is undeveloped and more natural</b>	90	24.1%
<b>Other</b>	25	6.7%
<b>No response</b>	22	5.9%
<b>Total responses (respondents who selected Iluka coast)</b>	<b>433</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.



**When you visit the Iluka coast, what are your main reasons for choosing this coastal area:**



**QUESTION: “Please rank the following coastal spaces of Iluka in order of (1) most valued to (6) least valued.”**

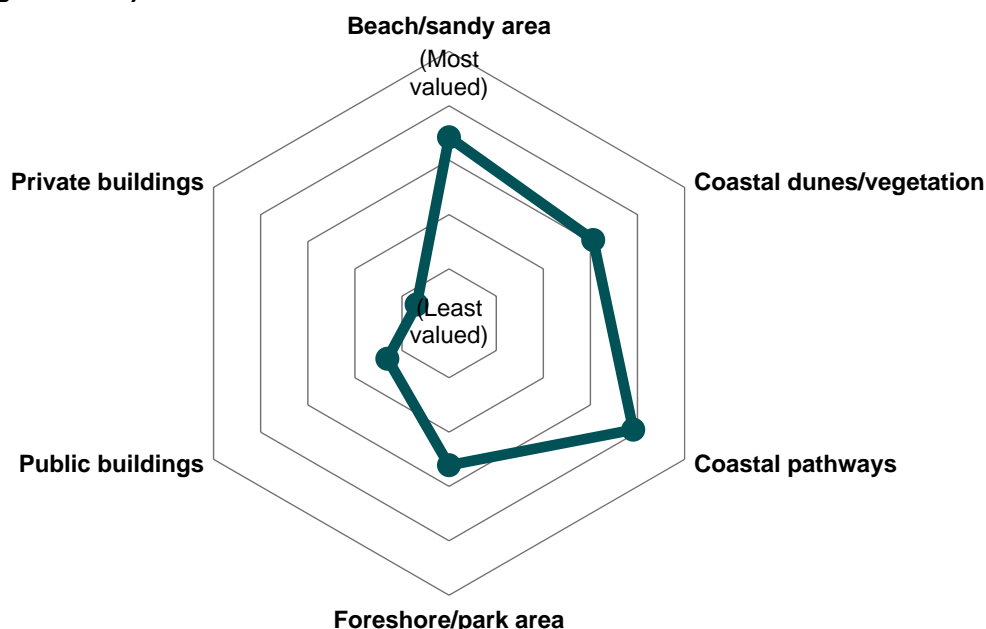
Respondents who selected “Iluka” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of Iluka in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

314 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal spaces at Iluka to respondents are coastal pathways (2.1) and the beach/sandy area (2.6), followed by coastal dunes/vegetation (2.9). Least valued to respondents at Iluka are private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of Iluka in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
Beach/sandy area	2.6
Coastal dunes/vegetation	2.9
Coastal pathways (for walking/cycling)	2.1
Foreshore/park area (ie grassed area)	3.4
Public buildings (eg surf lifesaving clubs, toilets, changerooms)	4.7
Private buildings (eg residential housing, cafés, shops)	5.3

**Please rank the following coastal spaces of Iluka in order of (1) most valued to (6) least valued (average scores):**



# NORTH OF OCEAN REEF BOAT HARBOUR

QUESTION: “When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area?”

Respondents who selected “north of Ocean Reef Boat Harbour” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

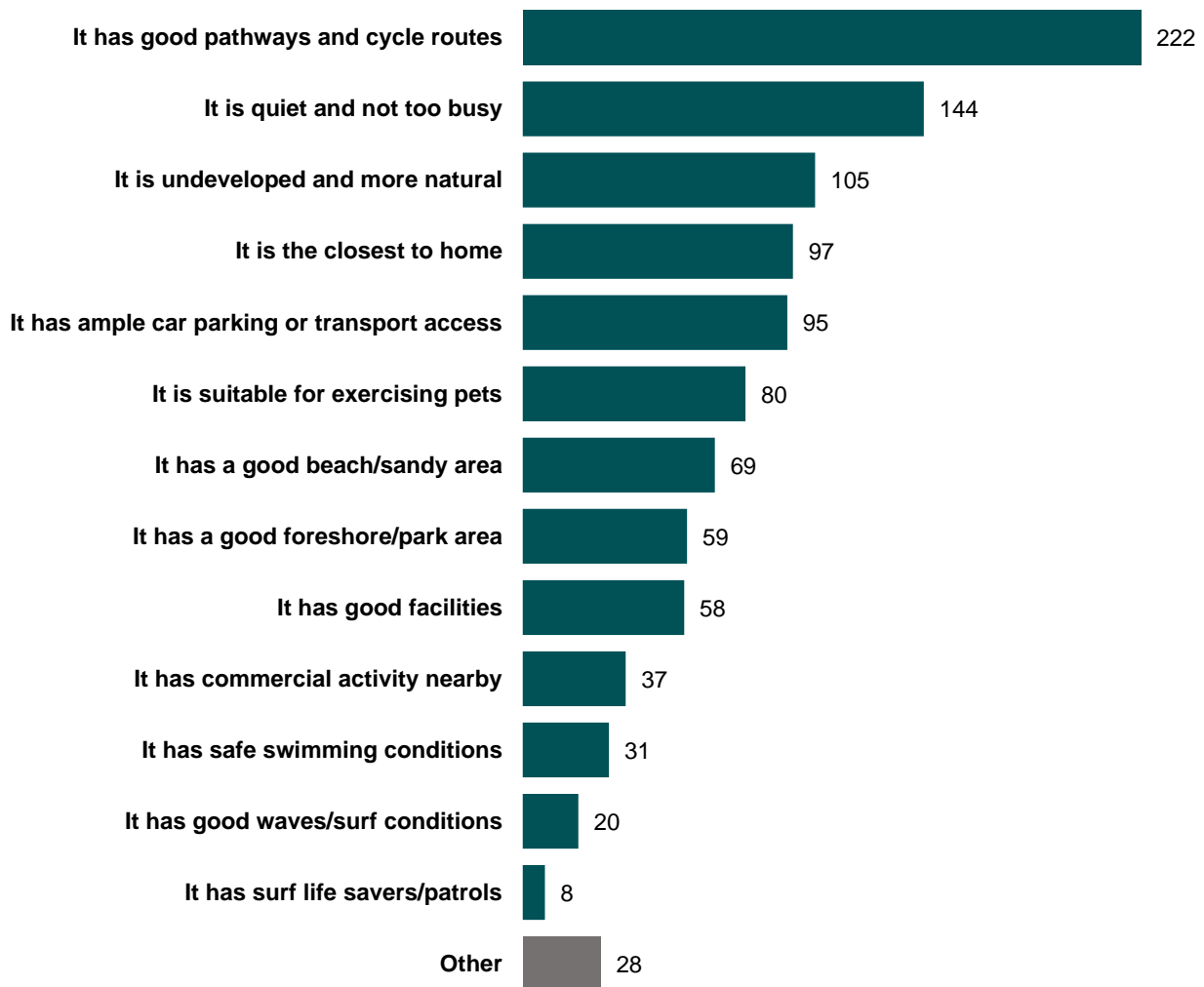
- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

The most popular reason for choosing north of Ocean Reef Boat Harbour is because it has good pathways and cycle routes (67.9%). Other popular reasons include that it is quiet and not too busy (44.0%), and that it is undeveloped and more natural (32.1%). Few respondents selected safe swimming conditions, or good wave/surf conditions as reasons for choosing north of Ocean Reef Boat Harbour. Of those respondents who selected “other”, reasons cited include it being good for observing wildlife and birdwatching, good for fishing, and good for launching boats. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 28.

When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area:	N*	%
It is the closest to home	97	29.7%
It has good facilities	58	17.7%
It has ample car parking or transport access	95	29.1%
It has surf life savers/patrols	8	2.4%
It has a good beach/sandy area	69	21.1%
It has safe swimming conditions	31	9.5%
It has good waves/surf conditions	20	6.1%
It has a good foreshore/park area	59	18.0%
It is suitable for exercising pets	80	24.5%
It has good pathways and cycle routes	222	67.9%
It has commercial activity nearby	37	11.3%
It is quiet and not too busy	144	44.0%
It is undeveloped and more natural	105	32.1%
Other	28	8.6%
No response	33	10.1%
<b>Total responses (respondents who selected north of Ocean Reef Boat Harbour)</b>	<b>327</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.

**When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area:**



**QUESTION:** “Please rank the following coastal spaces of the coast north of Ocean Reef Boat Harbour in order of (1) most valued to (6) least valued.”

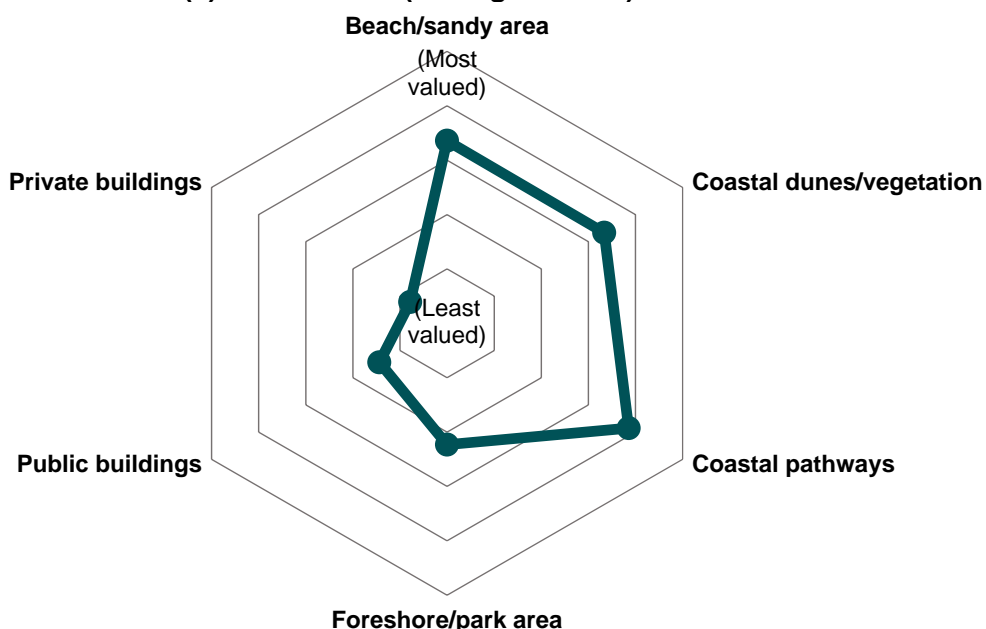
Respondents who selected “north of Ocean Reef Boat Harbour” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of north of Ocean Reef Boat Harbour in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

263 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal spaces at north of Ocean Reef Boat Harbour to respondents are coastal pathways (2.1), the beach/sandy area (2.6), and coastal dunes/vegetation. Least valued to respondents at North of Ocean Reef Boat Harbour are private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of the coast north of Ocean Reef Boat Harbour in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
Beach/sandy area	2.6
Coastal dunes/vegetation	2.7
Coastal pathways (for walking/cycling)	2.1
Foreshore/park area (ie grassed area)	3.8
Public buildings (eg surf lifesaving clubs, toilets, changerooms)	4.6
Private buildings (eg residential housing, cafés, shops)	5.2

**Please rank the following coastal spaces of the coast north of Ocean Reef Boat Harbour in order of (1) most valued to (6) least valued (average scores):**



# MULLALOO

**QUESTION:** “When you visit the Mullaloo coast, what are your main reasons for choosing this coastal area?”

Respondents who selected “Mullaloo” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

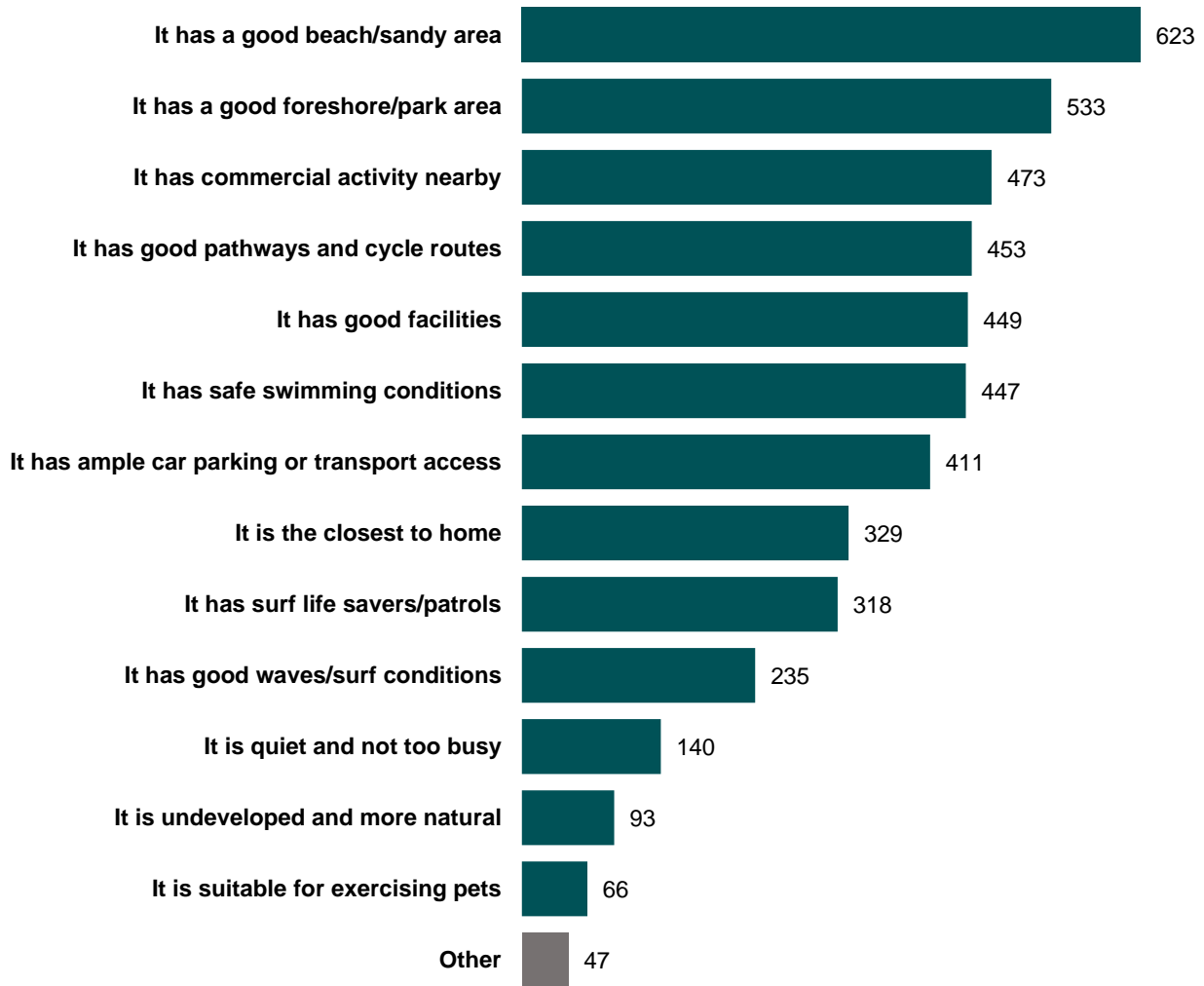
- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

The most popular reasons for choosing the Mullaloo coast is because it has a good beach/sandy area (76.1%), and it has a good foreshore/park area (65.1%). Other popular reasons include that it has commercial activity nearby (57.8%), and that it has good pathways and cycle routes (55.3%). Few respondents cited its suitability for exercising pets, or it being undeveloped and more natural as reasons for choosing the Mullaloo coast. Of those respondents who selected “other”, reasons cited include it being close to friends and family, lifesaving duties, good for exercising, good for swimming, surfing and paddling, and it being a beautiful beach with clear water. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 29.

<b>When you visit the Mullaloo coast, what are your main reasons for choosing this coastal area:</b>	<b>N*</b>	<b>%</b>
<b>It is the closest to home</b>	329	40.2%
<b>It has good facilities</b>	449	54.8%
<b>It has ample car parking or transport access</b>	411	50.2%
<b>It has surf life savers/patrols</b>	318	38.8%
<b>It has a good beach/sandy area</b>	623	76.1%
<b>It has safe swimming conditions</b>	447	54.6%
<b>It has good waves/surf conditions</b>	235	28.7%
<b>It has a good foreshore/park area</b>	533	65.1%
<b>It is suitable for exercising pets</b>	66	8.1%
<b>It has good pathways and cycle routes</b>	453	55.3%
<b>It has commercial activity nearby</b>	473	57.8%
<b>It is quiet and not too busy</b>	140	17.1%
<b>It is undeveloped and more natural</b>	93	11.4%
<b>Other</b>	47	5.7%
<b>No response</b>	52	6.3%
<b>Total responses (respondents who selected Mullaloo coast)</b>	<b>819</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.

**When you visit the Mullaloo coast, what are your main reasons for choosing this coastal area:**





**QUESTION:** “Please rank the following coastal spaces of Mullaloo in order of (1) most valued to (6) least valued.”

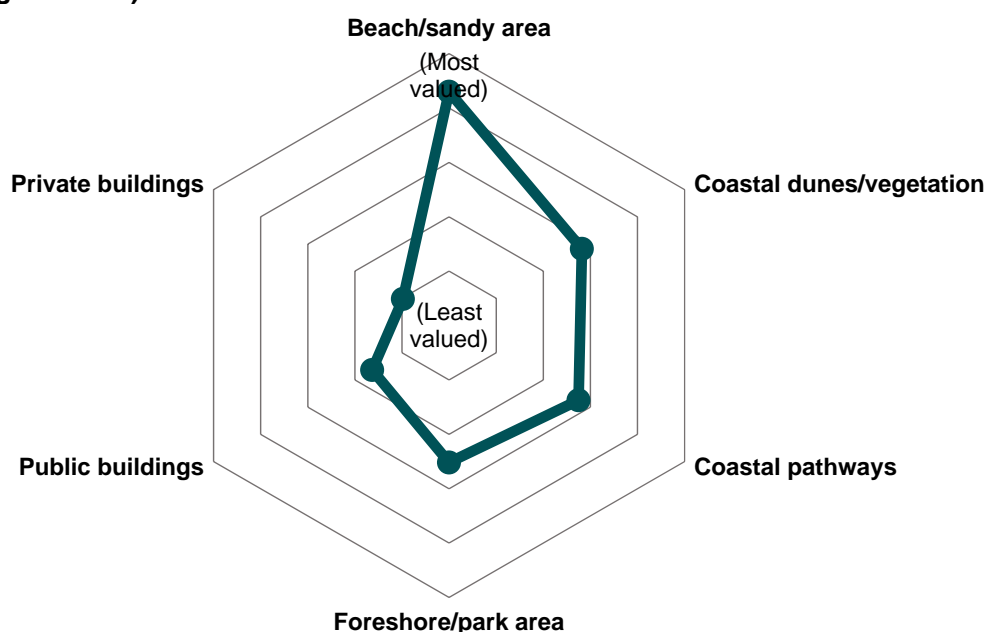
Respondents who selected “Mullaloo” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of the Mullaloo coast in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

703 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal space at Mullaloo to respondents is the beach sandy area (1.7). Least valued to respondents are private buildings and public buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of Mullaloo in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
<b>Beach/sandy area</b>	1.7
<b>Coastal dunes/vegetation</b>	3.2
<b>Coastal pathways (for walking/cycling)</b>	3.3
<b>Foreshore/park area (ie grassed area)</b>	3.5
<b>Public buildings (eg surf lifesaving clubs, toilets, changerooms)</b>	4.4
<b>Private buildings (eg residential housing, cafés, shops)</b>	5.0

**Please rank the following coastal spaces of Mullaloo in order of (1) most valued to (6) least valued (average scores):**



# PINNAROO POINT/KALLAROO

QUESTION: “When you visit the Pinnaroo Point/Kallaroo, what are your main reasons for choosing this coastal area?”

Respondents who selected “Pinnaroo Point/Kallaroo” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

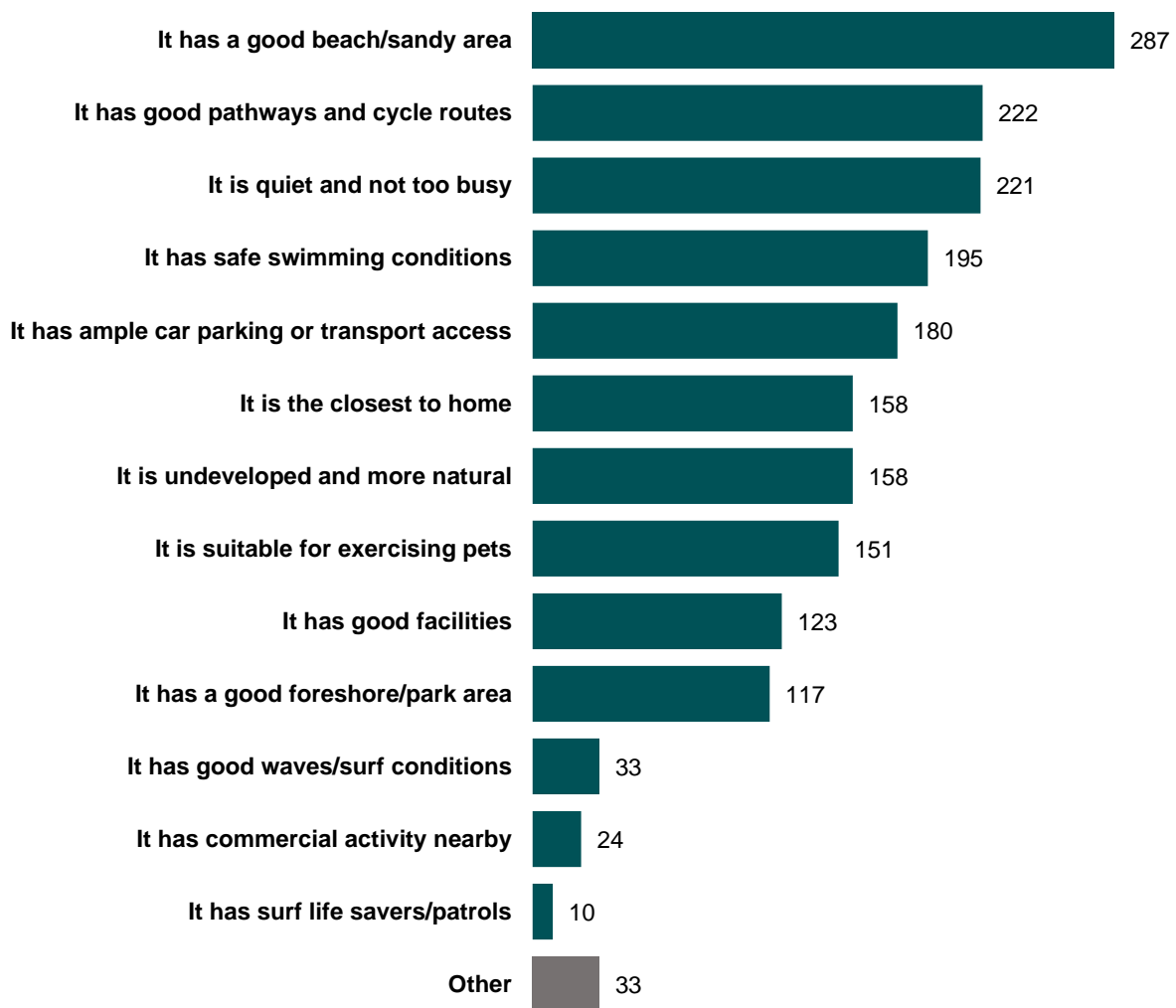
- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

The most popular reasons for choosing the Pinnaroo Point/Kallaroo coast is because it has a good beach/sandy area (60.7%), and it has good pathways and cycle routes (46.9%). Other popular reasons include that it is quiet and not too busy (46.7%), and that it has safe swimming conditions (41.2%). Few respondents selected surf lifesavers/patrols, or nearby commercial activity as reasons for choosing the Pinnaroo Point/Kallaroo coast. Of those respondents who selected “other”, reasons cited include it being suitable for exercising dogs, good for fishing, good for exercising, and good for surfing and paddling. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 30.

When you visit the Pinnaroo Point/Kallaroo coast, what are your main reasons for choosing this coastal area:	N*	%
It is the closest to home	158	33.4%
It has good facilities	123	26.0%
It has ample car parking or transport access	180	38.1%
It has surf life savers/patrols	10	2.1%
It has a good beach/sandy area	287	60.7%
It has safe swimming conditions	195	41.2%
It has good waves/surf conditions	33	7.0%
It has a good foreshore/park area	117	24.7%
It is suitable for exercising pets	151	31.9%
It has good pathways and cycle routes	222	46.9%
It has commercial activity nearby	24	5.1%
It is quiet and not too busy	221	46.7%
It is undeveloped and more natural	158	33.4%
Other	33	7.0%
No response	32	6.8%
<b>Total responses (respondents who selected Pinnaroo Point/Kallaroo coast)</b>	<b>473</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.

**When you visit the Pinnaroo Point/Kallaroo coast, what are your main reasons for choosing this coastal area:**



**QUESTION: “Please rank the following coastal spaces of Pinnaroo Point/ Kallaroo in order of (1) most valued to (6) least valued.”**

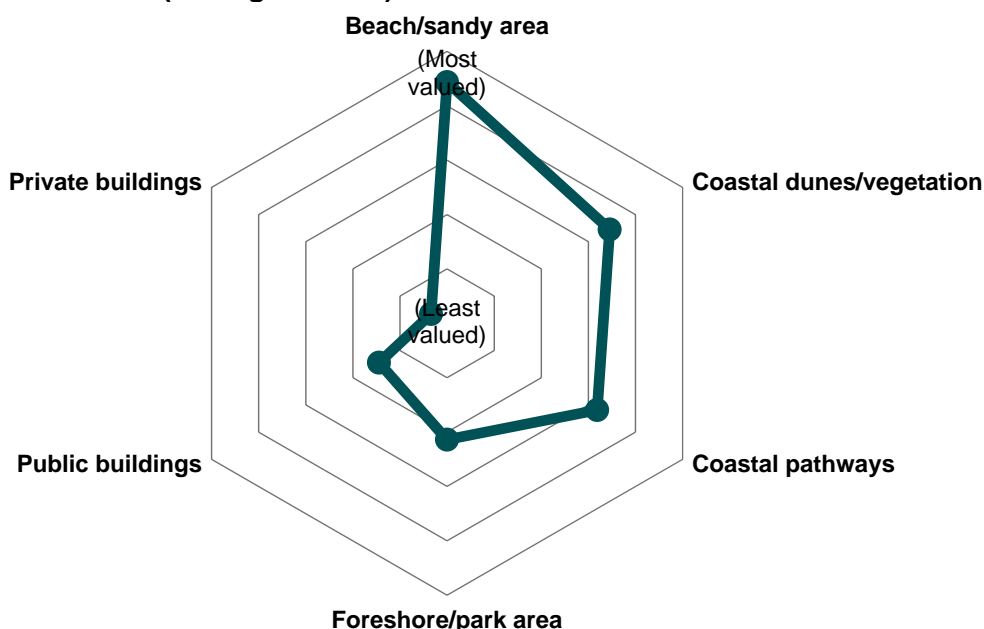
Respondents who selected “Pinnaroo Point/Kallaroo” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of the Pinnaroo Point/Kallaroo coast in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

395 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal space at Pinnaroo Point/Kallaroo to respondents is the beach/sandy area (1.6), followed by coastal dunes/vegetation (2.5) and coastal pathways (2.8). Least valued to respondents at Pinnaroo Point/Kallaroo are private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of Pinnaroo Point/ Kallaroo in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
<b>Beach/sandy area</b>	1.6
<b>Coastal dunes/vegetation</b>	2.5
<b>Coastal pathways (for walking/cycling)</b>	2.8
<b>Foreshore/park area (ie grassed area)</b>	3.9
<b>Public buildings (eg surf lifesaving clubs, toilets, changerooms)</b>	4.6
<b>Private buildings (eg residential housing, cafés, shops)</b>	5.7

**Please rank the following coastal spaces of Pinnaroo Point/ Kallaroo in order of (1) most valued to (6) least valued (average scores):**



# HILLARYS BEACH (WHITFORDS NODES)

QUESTION: “When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area?”

Respondents who selected “Hillarys Beach (Whitfords Nodes)” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing that location. The following options were provided:

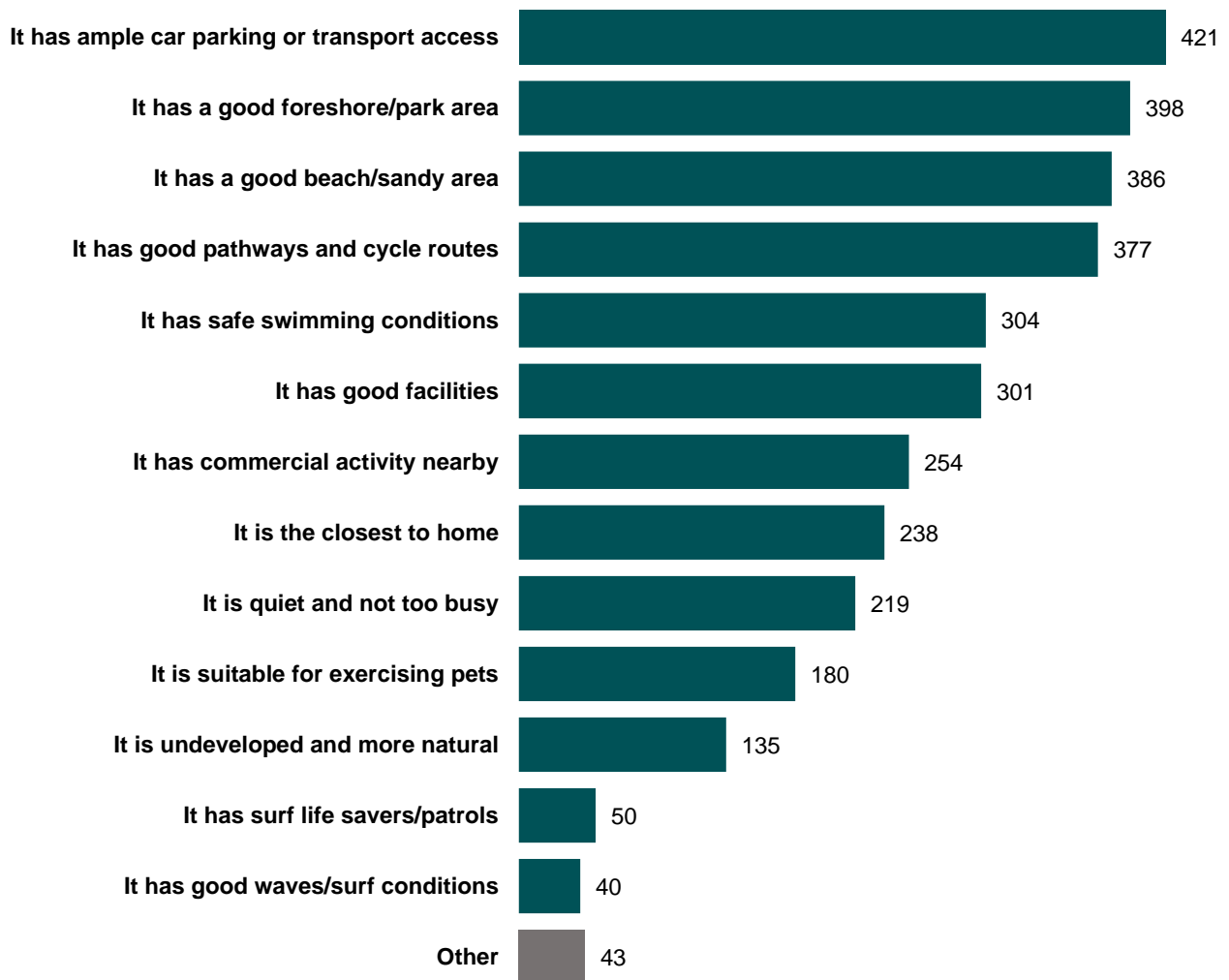
- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

The most popular reasons for choosing Hillarys Beach (Whitfords Nodes) is because it has ample car parking or transport access (56.0%), it has a good foreshore/park area (52.9%) and it has a good beach/sandy area (51.3%). Few respondents selected good wave/surf conditions, or surf lifesavers/patrols as reasons for choosing Hillarys Beach (Whitfords Nodes). Of those respondents who selected “other”, reasons cited include it being suitable for exercising dogs, good for birdwatching, good for boating, good for photography, and being good for exercise, walking, running and triathlons. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 31.

When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area:	N*	%
It is the closest to home	238	31.6%
It has good facilities	301	40.0%
It has ample car parking or transport access	421	56.0%
It has surf life savers/patrols	50	6.6%
It has a good beach/sandy area	386	51.3%
It has safe swimming conditions	304	40.4%
It has good waves/surf conditions	40	5.3%
It has a good foreshore/park area	398	52.9%
It is suitable for exercising pets	180	23.9%
It has good pathways and cycle routes	377	50.1%
It has commercial activity nearby	254	33.8%
It is quiet and not too busy	219	29.1%
It is undeveloped and more natural	135	18.0%
Other	43	5.7%
No response	57	7.6%
<b>Total responses (respondents who selected Hillarys Beach (Whitfords Nodes) coast)</b>	<b>752</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have than more than 1 reason.

**When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area:**



**QUESTION: “Please rank the following coastal spaces of Hillarys Beach (Whitfords Nodes) in order of (1) most valued to (6) least valued.”**

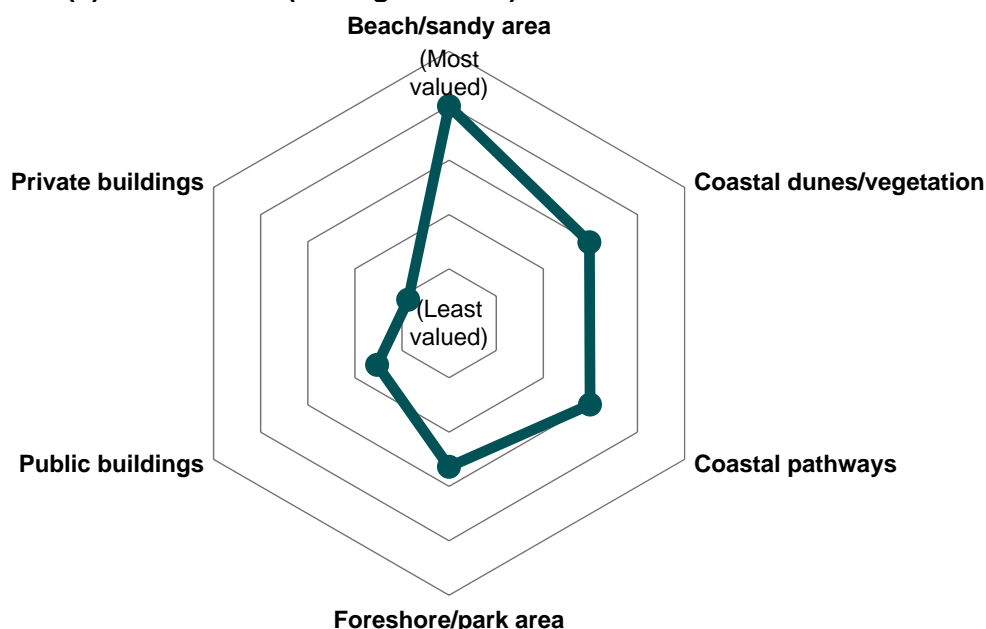
Respondents who selected “Hillarys Beach (Whitfords Nodes)” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of the Hillarys Beach (Whitfords Nodes) coast in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

624 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal space at Hillarys Beach (Whitfords Nodes) to respondents is the beach/sandy area (2.0). This is followed by coastal dunes/vegetation (3.0), and coastal pathways (3.0). Least valued to respondents at Hillarys Beach (Whitfords Nodes) are private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of Hillarys Beach (Whitfords Nodes) in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
<b>Beach/sandy area</b>	2.0
<b>Coastal dunes/vegetation</b>	3.0
<b>Coastal pathways (for walking/cycling)</b>	3.0
<b>Foreshore/park area (ie grassed area)</b>	3.4
<b>Public buildings (eg surf lifesaving clubs, toilets, changerooms)</b>	4.5
<b>Private buildings (eg residential housing, cafés, shops)</b>	5.1

**Please rank the following coastal spaces of Hillarys Beach (Whitfords Nodes) in order of (1) most valued to (6) least valued (average scores):**



# SORRENTO

QUESTION: “When you visit the Sorrento coast, what are your main reasons for choosing this coastal area?”

Respondents who selected “Sorrento” as a vulnerable coastal area that they most often visit were asked to indicate what their main reasons are for choosing this location. The following options were provided:

- It is the closest to home
- It has good facilities (ie toilets, showers, changerooms)
- It has ample car parking or transport access
- It has surf life savers/patrols
- It has a good beach/sandy area
- It has safe swimming conditions
- It has good waves/surf conditions
- It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- It is suitable for exercising pets
- It has good pathways and cycle routes
- It has commercial activity nearby (eg cafés, restaurants, bars, shops)
- It is quiet and not too busy
- It is undeveloped and more natural
- Other

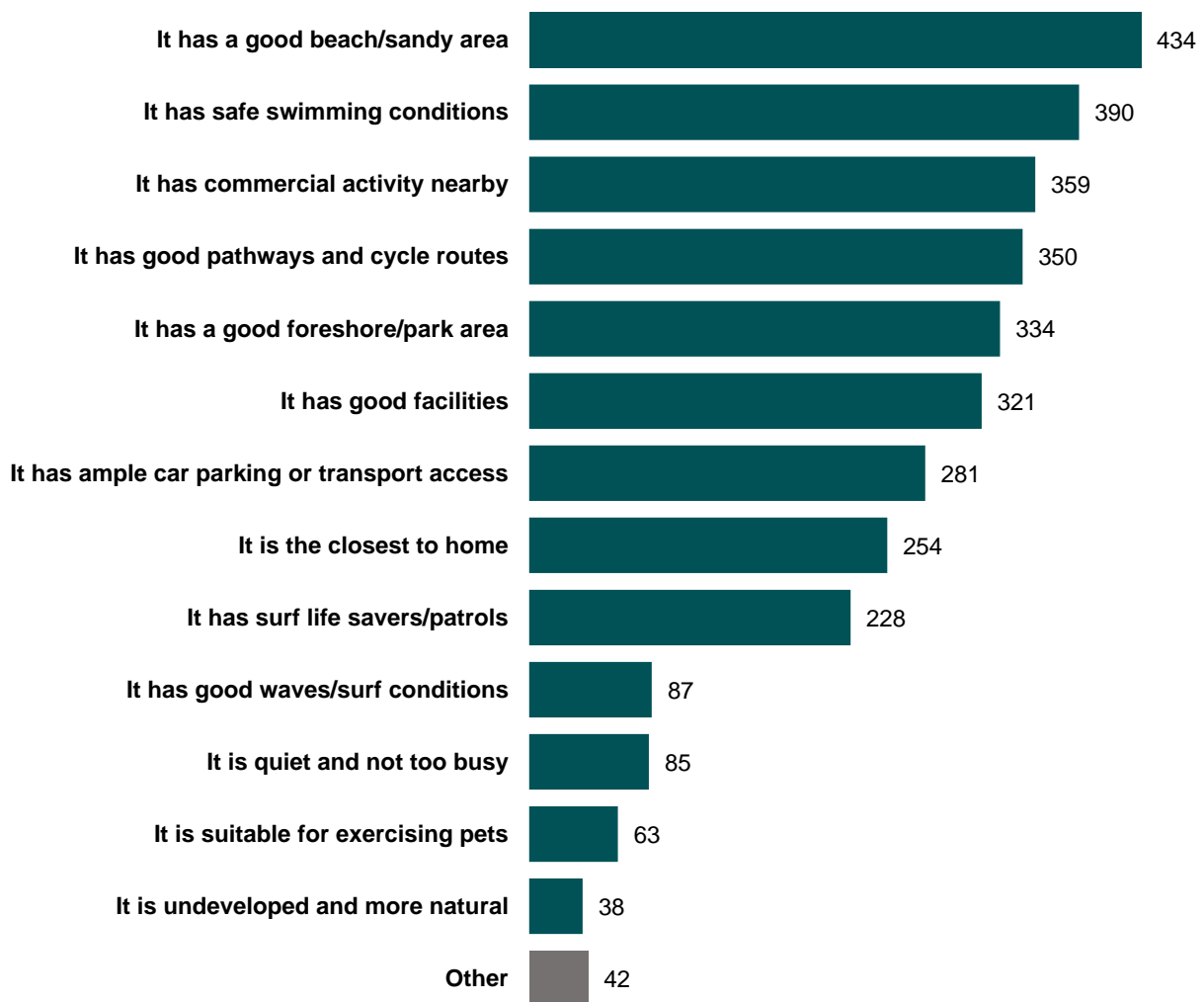
The most popular reasons for choosing Sorrento are because it has a good beach/sandy area (70.2%), and it has safe swimming conditions (63.1%). Other popular reasons include that it has commercial activity nearby (58.1%), that it has good pathways and cycle routes (42.3%), and that it has a good foreshore/park area (54.0%). Few respondents selected being undeveloped and more natural, or being quiet and not too busy as reasons for choosing Sorrento. Of those respondents who selected “other”, reasons cited include the shark enclosure, lifesaving duties, proximity to the Marina, suitability for families and children, and being good for exercise, walking, running and triathlons. This data is shown in the table and chart below and verbatim responses to “other” have been randomised and are provided at Appendix 32.

When you visit the Sorrento coast, what are your main reasons for choosing this coastal area:	N*	%
It is the closest to home	254	41.1%
It has good facilities	321	51.9%
It has ample car parking or transport access	281	45.5%
It has surf life savers/patrols	228	36.9%
It has a good beach/sandy area	434	70.2%
It has safe swimming conditions	390	63.1%
It has good waves/surf conditions	87	14.1%
It has a good foreshore/park area	334	54.0%
It is suitable for exercising pets	63	10.2%
It has good pathways and cycle routes	350	56.6%
It has commercial activity nearby	359	58.1%
It is quiet and not too busy	85	13.8%
It is undeveloped and more natural	38	6.1%
Other	42	6.8%
No response	42	6.8%
<b>Total responses (respondents who selected Sorrento coast)</b>	<b>618</b>	<b>100.0%</b>

\*Numbers may not add up to total, as respondents may have more than 1 reason.



**When you visit the Sorrento coast, what are your main reasons for choosing this coastal area:**



**QUESTION:** “Please rank the following coastal spaces of Sorrento in order of (1) most valued to (6) least valued.”

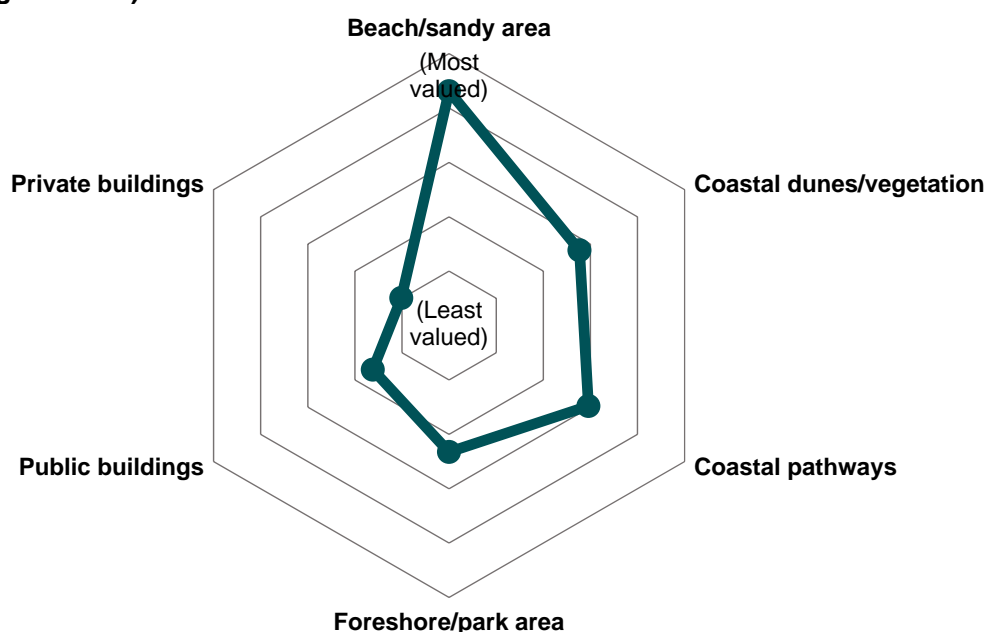
Respondents who selected “Sorrento” as a vulnerable coastal area that they most often visit were asked to rank 6 coastal spaces of the Sorrento coast in order of 1 — “most valued” to 6 — “least valued”; the options included the following:

- Beach/sandy area
- Coastal dunes/vegetation
- Coastal pathways (for walking/cycling)
- Foreshore/park area (ie grassed area)
- Public buildings (eg surf lifesaving clubs, toilets, changerooms)
- Private buildings (eg residential housing, cafés, shops)

519 respondents ranked these coastal spaces from 1 to 6. In analysing the results, an average ranking has been calculated for each. The most valued coastal space at Sorrento to respondents is the beach/sandy area (1.7), followed by coastal pathways (3.0). Least valued to respondents at Sorrento are private buildings. This data is shown in the table and chart below.

<b>Please rank the following coastal spaces of Sorrento in order of (1) most valued to (6) least valued (average scores):</b>	<b><math>\bar{x}</math></b>
<b>Beach/sandy area</b>	1.7
<b>Coastal dunes/vegetation</b>	3.2
<b>Coastal pathways (for walking/cycling)</b>	3.0
<b>Foreshore/park area (ie grassed area)</b>	3.7
<b>Public buildings (eg surf lifesaving clubs, toilets, changerooms)</b>	4.4
<b>Private buildings (eg residential housing, cafés, shops)</b>	5.0

**Please rank the following coastal spaces of Sorrento in order of (1) most valued to (6) least valued (average scores):**



# COASTAL ADAPTATION OPTIONS

QUESTION: “There are a number of different coastal adaptation options that the City may be able to implement at different coastal locations. In general, how supportive are you of the following adaptation options?”

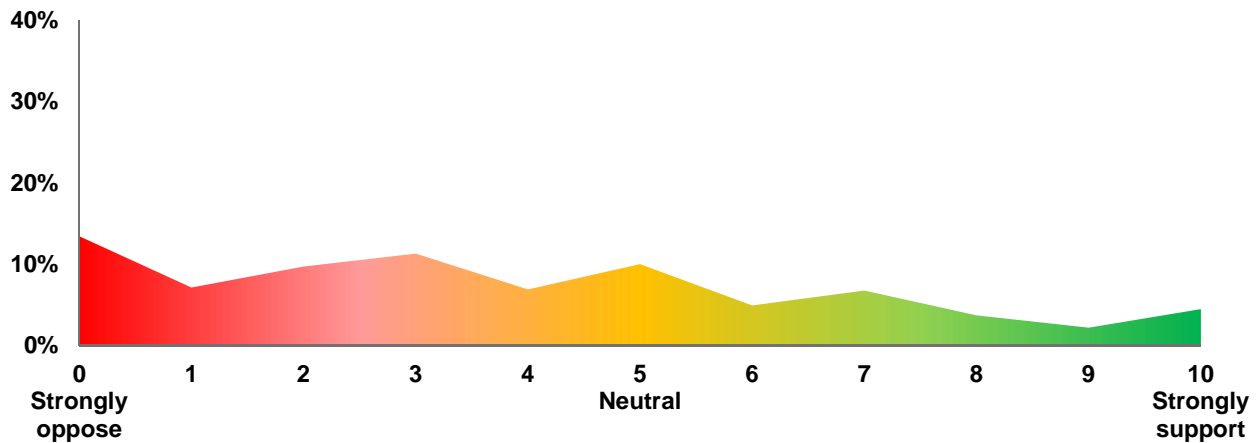
Respondents were asked to rank how supportive they are of a number of different coastal adaptation options on an 11-point scale from 0 — “strongly oppose” to 10 — “strongly support”. The options included the following:

- Option 1 — Protect facilities/infrastructure using hard structures at the expense of the sandy beach (eg sea walls)
- Option 2 — Protect the sandy beach with hard structures (eg groynes, breakwaters)
- Option 3 — Source and replace sand on beaches
- Option 4 — Re-vegetate and stabilise dunes
- Option 5 — Relocate infrastructure to less vulnerable areas when it is at risk (eg buildings, playgrounds, car parks)
- Option 6 — Remove (and do not replace) infrastructure when it is at risk (eg buildings, playgrounds, car parks)
- Option 7 — Prevent/limit further development in vulnerable areas
- Option 8 — Do nothing

In analysing these results, an average ranking has been calculated for each. The most strongly supported options were option 4 — re-vegetate and stabilise dunes (8.6), and option 7 — prevent/limit further development in vulnerable areas (8.0). Least supported were option 8 — do nothing, and option 1 — protect facilities/infrastructure using hard structures at the expense of the sandy beach. This data is shown in the table and chart below.

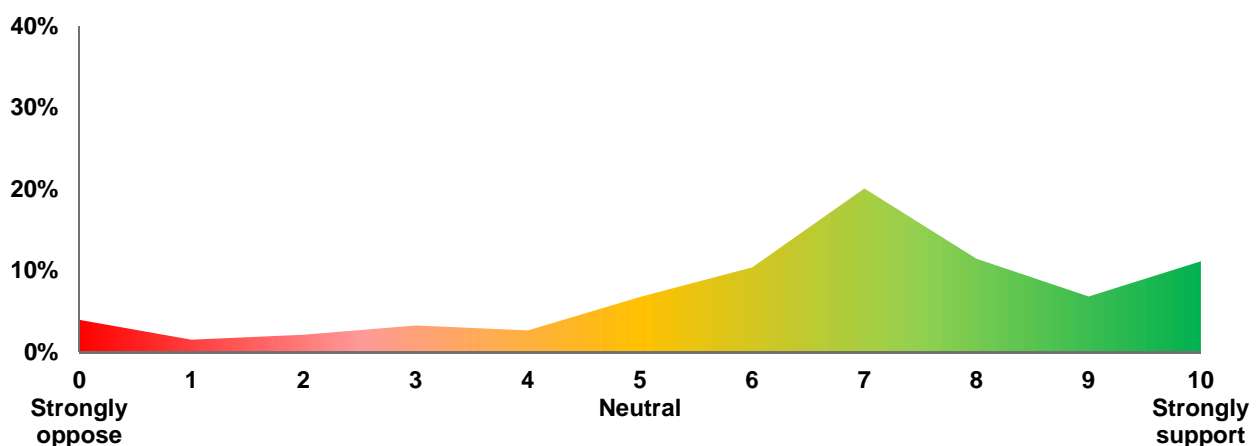
<b>Option 1 — Protect facilities/infrastructure using hard structures at the expense of the sandy beach (eg sea walls):</b>	<b>N</b>	<b>%</b>
<b>0 — Strongly oppose</b>	177	13.4%
<b>1</b>	94	7.1%
<b>2</b>	128	9.7%
<b>3</b>	149	11.3%
<b>4</b>	91	6.9%
<b>5 — Neutral</b>	132	10.0%
<b>6</b>	65	4.9%
<b>7</b>	89	6.8%
<b>8</b>	49	3.7%
<b>9</b>	29	2.2%
<b>10 — Strongly support</b>	59	4.5%
<b>No response</b>	256	19.4%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

**Option 1 — Protect facilities/infrastructure using hard structures at the expense of the sandy beach (eg sea walls):**



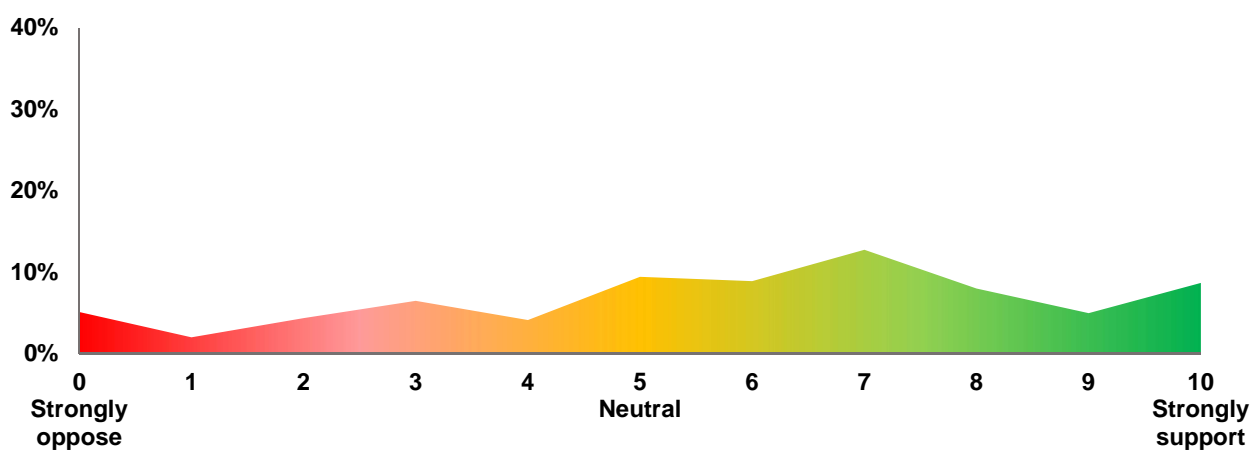
Option 2 — Protect the sandy beach with hard structures (eg groynes, breakwaters):		
	N	%
0 — Strongly oppose	52	3.9%
1	20	1.5%
2	28	2.1%
3	43	3.3%
4	35	2.7%
5 — Neutral	89	6.8%
6	137	10.4%
7	265	20.1%
8	151	11.5%
9	90	6.8%
10 — Strongly support	147	11.2%
No response	261	19.8%
Total responses	1,318	100.0%

**Option 2 — Protect the sandy beach with hard structures (eg groynes, breakwaters):**



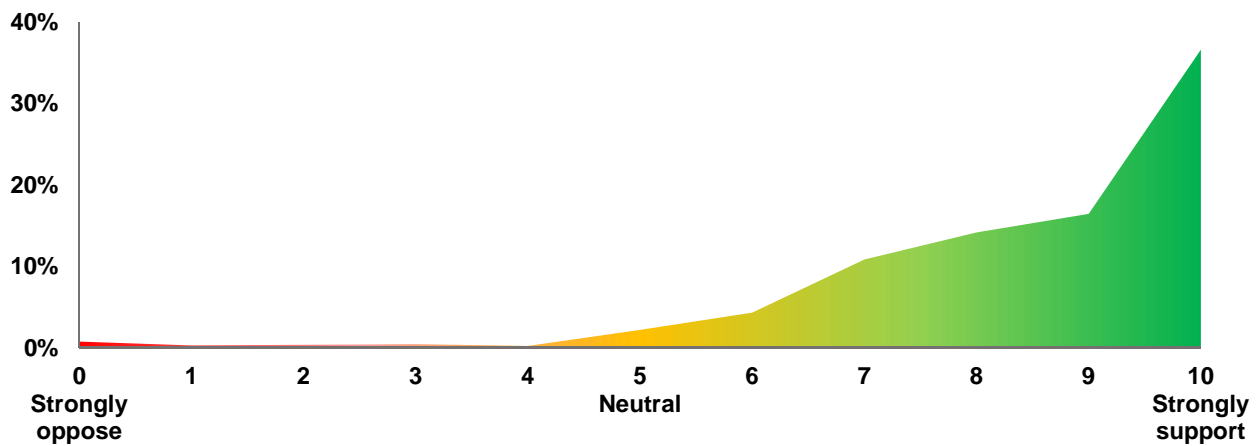
<b>Option 3 — Source and replace sand on beaches:</b>	<b>N</b>	<b>%</b>
<b>0 — Strongly oppose</b>	67	5.1%
1	26	2.0%
2	57	4.3%
3	85	6.4%
4	54	4.1%
<b>5 — Neutral</b>	124	9.4%
6	117	8.9%
7	168	12.7%
8	105	8.0%
9	65	4.9%
<b>10 — Strongly support</b>	114	8.6%
<i>No response</i>	336	25.5%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

**Option 3 — Source and replace sand on beaches:**



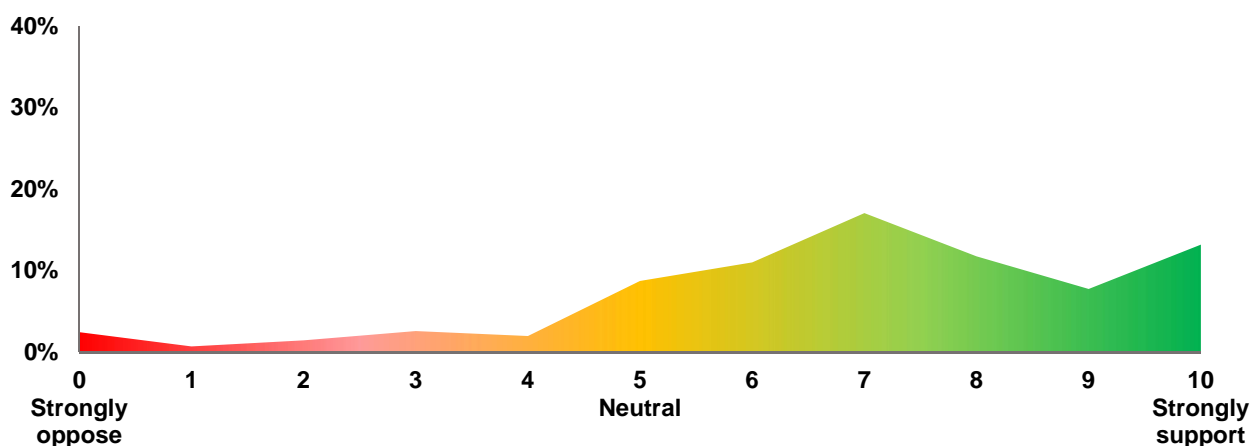
<b>Option 4 — Re-vegetate and stabilise dunes:</b>	<b>N</b>	<b>%</b>
<b>0 — Strongly oppose</b>	10	0.8%
1	4	0.3%
2	5	0.4%
3	6	0.5%
4	3	0.2%
<b>5 — Neutral</b>	29	2.2%
6	57	4.3%
7	143	10.8%
8	187	14.2%
9	217	16.5%
<b>10 — Strongly support</b>	483	36.6%
<i>No response</i>	174	13.2%
<b>Total responses (<math>\bar{x} = 8.6</math>)</b>	<b>1,318</b>	<b>100.0%</b>

#### Option 4 — Re-vegetate and stabilise dunes:



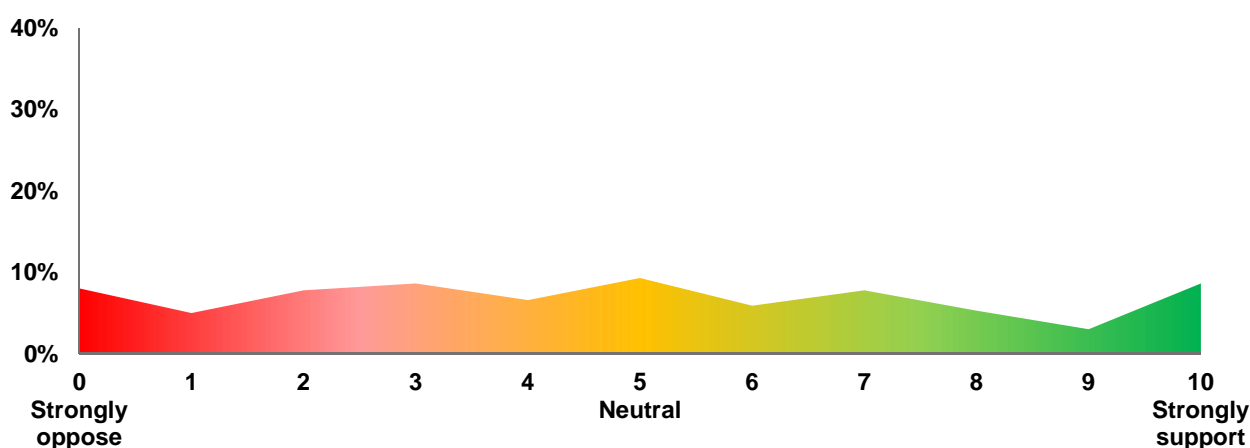
Option 5: Relocate infrastructure to less vulnerable areas when it is at risk (eg buildings, playgrounds, car parks):		
	N	%
0 — Strongly oppose	32	2.4%
1	9	0.7%
2	19	1.4%
3	34	2.6%
4	26	2.0%
5 — Neutral	115	8.7%
6	145	11.0%
7	225	17.1%
8	155	11.8%
9	102	7.7%
10 — Strongly support	174	13.2%
No response	282	21.4%
Total responses	1,318	100.0%

#### Option 5 — Relocate infrastructure to less vulnerable areas when it is at risk (eg buildings, playgrounds, car parks):



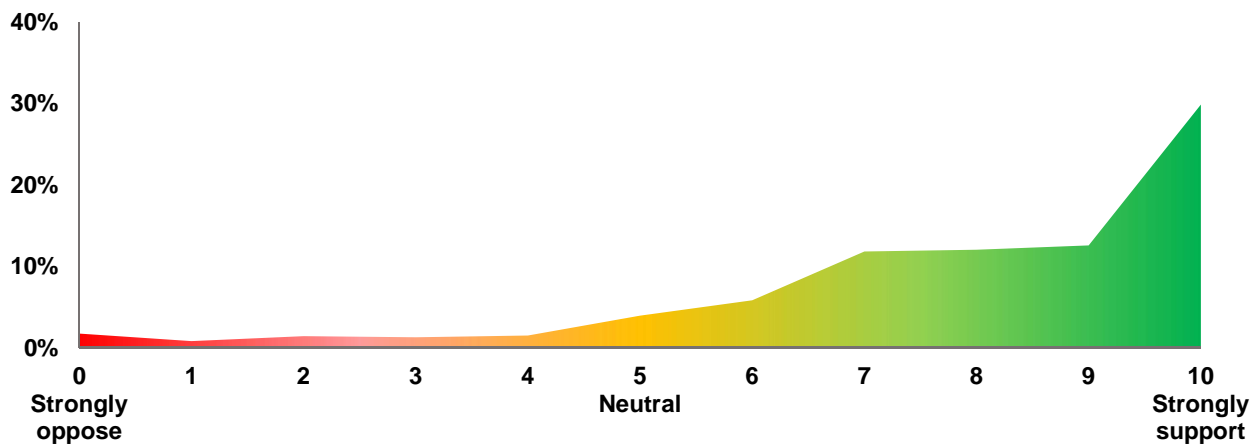
<b>Option 6 — Remove (and do not replace) infrastructure when it is at risk (eg buildings, playgrounds, car parks):</b>	<b>N</b>	<b>%</b>
<b>0 — Strongly oppose</b>	106	8.0%
<b>1</b>	66	5.0%
<b>2</b>	103	7.8%
<b>3</b>	114	8.6%
<b>4</b>	87	6.6%
<b>5 — Neutral</b>	123	9.3%
<b>6</b>	78	5.9%
<b>7</b>	103	7.8%
<b>8</b>	70	5.3%
<b>9</b>	40	3.0%
<b>10 — Strongly support</b>	114	8.6%
<b>No response</b>	314	23.8%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

**Option 6 — Remove (and do not replace) infrastructure when it is at risk (eg buildings, playgrounds, car parks):**



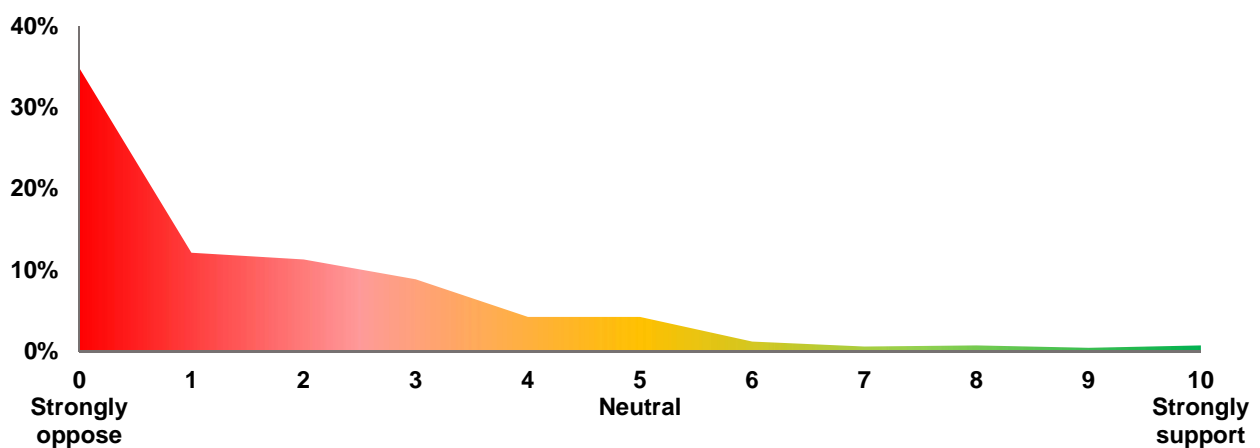
<b>Option 7 — Prevent/limit further development in vulnerable areas:</b>	<b>N</b>	<b>%</b>
<b>0 — Strongly oppose</b>	23	1.7%
<b>1</b>	11	0.8%
<b>2</b>	19	1.4%
<b>3</b>	17	1.3%
<b>4</b>	20	1.5%
<b>5 — Neutral</b>	52	3.9%
<b>6</b>	77	5.8%
<b>7</b>	156	11.8%
<b>8</b>	159	12.1%
<b>9</b>	166	12.6%
<b>10 — Strongly support</b>	394	29.9%
<b>No response</b>	224	17.0%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

### Option 7 — Prevent/limit further development in vulnerable areas:



Option 8 — Do nothing:		N	%
0 — Strongly oppose		459	34.8%
1		160	12.1%
2		149	11.3%
3		117	8.9%
4		56	4.2%
5 — Neutral		56	4.2%
6		16	1.2%
7		8	0.6%
8		10	0.8%
9		6	0.5%
10 — Strongly support		10	0.8%
No response		271	20.6%
Total responses		1,318	100.0%

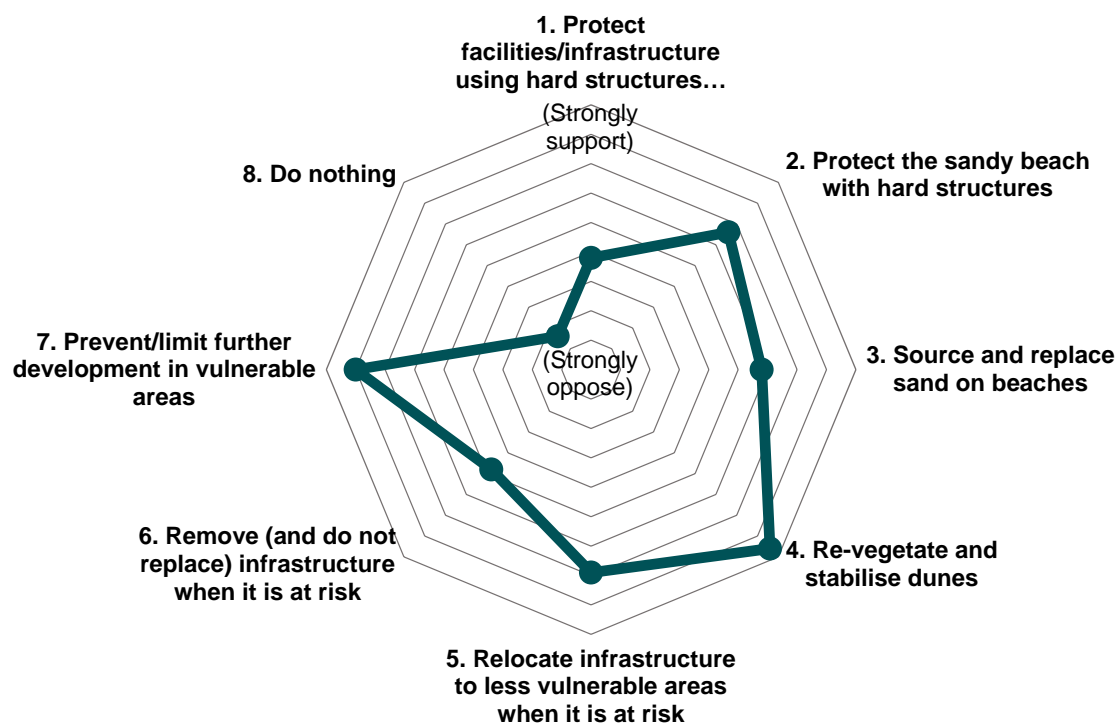
### Option 8 — Do nothing:





In general, how supportive are you of the following adaptation options (average scores):	$\bar{x}$
Option 1 — Protect facilities/infrastructure using hard structures at the expense of the sandy beach	3.8
Option 2 — Protect the sandy beach with hard structures	6.6
Option 3 — Source and replace sand on beaches	5.8
Option 4 — Re-vegetate and stabilise dunes	8.6
Option 5 — Relocate infrastructure to less vulnerable areas when it is at risk	6.9
Option 6 — Remove (and do not replace) infrastructure when it is at risk	4.8
Option 7 — Prevent/limit further development in vulnerable areas	8.0
Option 8 — Do nothing	1.6

In general, how supportive are you of the following adaptation options (average scores):



**QUESTION:** “Overall, when you think about the coastline, which of the following do you believe are the most important factors to consider when making decisions about coastal adaptation measures. By numbering or drag-and-drop, please rank the following in order of (1) most important to (7) least important.”

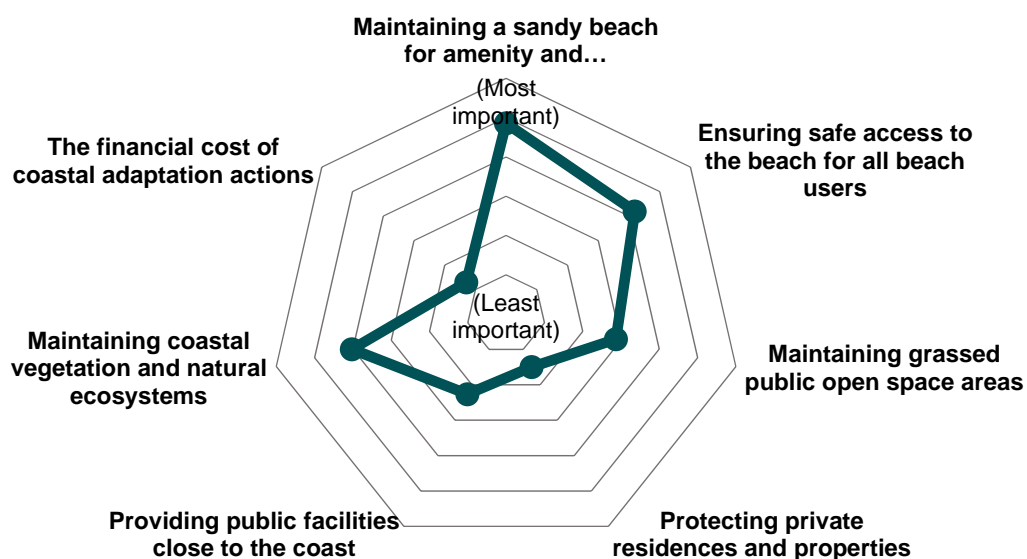
Respondents were asked to rank 7 factors to be considered when making decisions about coastal adaptation measures in order of 1 — “most important” to 7 — “least important”. The factors included the following:

- Maintaining a sandy beach for amenity and recreational use
- Ensuring safe access to the beach for all beach users
- Maintaining grassed public open space areas
- Protecting private residences and properties
- Providing public facilities close to the coast
- Maintaining coastal vegetation and natural ecosystems
- The financial cost of coastal adaptation actions

1,111 respondents ranked these factors from 1 to 7, an average ranking has been calculated for each. The most important factors to respondents are maintaining a sandy beach for amenity and recreational use (2.1), ensuring safe access to the beach for all beach users (2.8), and maintaining coastal vegetation and natural ecosystems (3.0). Least important to respondents are the financial costs of coastal adaptation actions (5.7) and protecting private homes and properties (5.5). This data is shown in the table and chart below.

<b>Please rank the following in order of (1) most important to (7) least important:</b>	<b><math>\bar{x}</math></b>
<b>Maintaining a sandy beach for amenity and recreational use</b>	2.1
<b>Ensuring safe access to the beach for all beach users</b>	2.8
<b>Maintaining grassed public open space areas</b>	4.1
<b>Protecting private residences and properties</b>	5.5
<b>Providing public facilities close to the coast</b>	4.7
<b>Maintaining coastal vegetation and natural ecosystems</b>	3.0
<b>The financial cost of coastal adaptation actions</b>	5.7

**Please rank the following in order of (1) most important to (7) least important:**



## FURTHER COMMENTS

**QUESTION: “Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline?”**

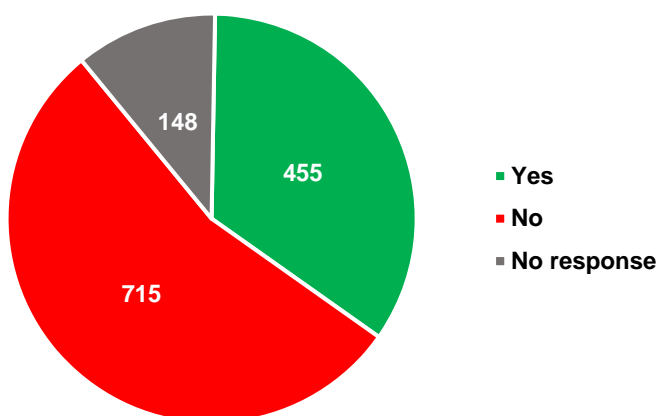
Respondents were asked if they have noticed any increased erosion along the City of Joondalup coastline. 1,170 respondents answered this question with 455 indicating “yes”. These respondents were asked to describe the location and level of erosion, and commonly-mentioned locations include the following:

- Burns Beach (particularly in the north and near the café)
- Iluka
- Mullaloo (particularly north and near the surf lifesaving club)
- Pinnaroo Point
- Hillarys Dog Beach and Hillarys Horse Beach
- Whitfords Nodes (particularly around the sand dunes)
- A number of locations outside the City of Joondalup (particularly Quinns Rocks and Watermans Bay)

This data is shown in the table and chart below and verbatim comments have been randomised and are provided at Appendix 33.

<b>Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline:</b>	<b>N</b>	<b>%</b>
<b>Yes</b>	455	34.5%
<b>No</b>	715	54.2%
<b>No response</b>	148	11.2%
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

**Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline:**



## QUESTION: “Do you have any further comments about the City of Joondalup coast?”

Respondents were asked if they have any further comments about the City of Joondalup coast. A total of 588 comments were provided; comments were varied, and common themes included the need to limit development and to protect and maintain the City’s coastline and its ecosystems. Additionally, respondents indicated a general desire to develop the coastline in an appropriate way, particularly with the addition of cafés. Strong support was also received for the City to provide more animal parks and beaches along the coast, particularly for dogs. These comments have been broadly grouped and summarised in the table below. Verbatim comments have been randomised and are provided at Appendix 34.

<b>Do you have any further comments about the City of Joondalup coast:</b>	<b>N*</b>	<b>%</b>
<b>Better/more beach facilities (eg surf clubs, playgroups, toilets, etc)</b>	15	1.1%
<b>Better car parking at beaches</b>	12	0.9%
<b>Better protection for coastal wildlife/nature/ecosystems</b>	42	3.2%
<b>More support and recognition of coastal environmental groups</b>	13	1.0%
<b>Better erosion prevention and dune protection</b>	37	2.8%
<b>More animal beaches/parks along the coast (particularly for dogs)</b>	51	3.9%
<b>Should prevent coastal development</b>	45	3.4%
<b>Should encourage coastal development (particularly cafés)</b>	55	4.2%
<b>Should prioritise development of Ocean Reef Marina</b>	20	1.5%
<b>Concern that marinas/structures impact on coastline and surf breaks</b>	26	2.0%
<b>Concern the City would fund protection of private coastal properties</b>	11	0.8%
<b>Concern for rule-breaking and antisocial behaviour along the coast</b>	21	1.6%
<b>Concern about litter control along the coast</b>	25	1.9%
<b>More protection and better maintenance of coastline (in general)</b>	82	6.2%
<b>Enjoy the coastline and support how it is managed (in general)</b>	105	8.0%
<b>Other comment (not categorised)</b>	152	11.7%
<b>No response</b>	730	55.2%
<b>Total comments</b>	<b>588</b>	<b>44.8%</b>
<b>Total responses</b>	<b>1,318</b>	<b>100.0%</b>

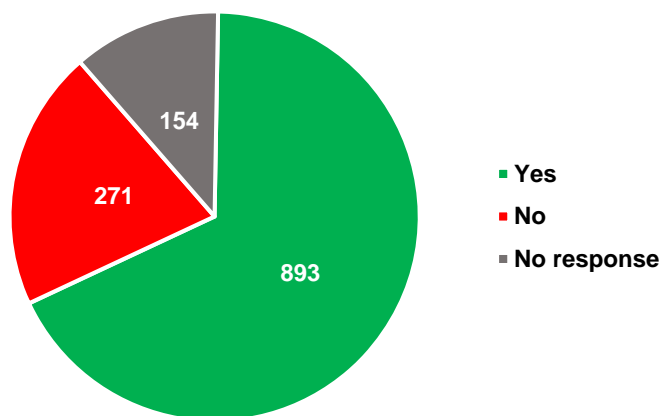
\*Numbers may not add up to total, as respondents may have addressed more than one subject.

QUESTION: “The City will be engaging with the community further to identify potential adaptation options for the City's coastline. Would you like to be informed of further opportunities to engage with the City about coastal adaptation? (Your name will be added to the Coastal Vulnerability Notification List)”

Respondents were asked if they would you like to be informed of further opportunities to engage with the City about coastal adaptation by having their name added to the Coastal Vulnerability Notification List. 1,014 respondents answered this question with 893 indicating “yes”. This data is shown in the table and chart below.

Would you like to be informed of further opportunities to engage with the City about coastal adaptation:	N	%
Yes	893	67.8%
No	271	20.6%
No response	154	11.7%
Total responses	1,318	100.0%

Would you like to be informed of further opportunities to engage with the City about coastal adaptation:



# APPENDIX 1 — Email to Community Engagement Network members

---

**From:** Consultation  
**Sent:** Thursday, 31 May 2018 12:31 PM  
**Subject:** Community Engagement — Coastal Survey

Dear Community Engagement Network Members,

**Do you value the coast, its beaches and foreshore areas?**

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's online [Coastal Survey](#) and you can go in the draw to win one of three \$100 gift vouchers. All feedback must be received by **Friday 29 June 2018**.

You can find out more about coastal vulnerability and the City's coastal adaptation planning [here](#).

If you would like any further information about the [Coastal Survey](#), please contact the City's Environmental Development team on **9400 4527** or via [coastal@joondalup.wa.gov.au](mailto:coastal@joondalup.wa.gov.au)

**Community Engagement Network**  
City of Joondalup



The information contained in this communication may be confidential or commercially sensitive. If you are not the intended recipient you must not copy this communication, disclose its contents to any other party, or take any action in reliance on it. Please delete and destroy all copies and immediately notify the sender on 9400 4000 or by reply email.



## APPENDIX 2 — Email to Coastal Vulnerability Stakeholder Notification List members

---

**From:** Consultation  
**Sent:** Friday, 20 July 2018 2:42 PM  
**Subject:** City of Joondalup Coastal Survey

Hello

As a member of the *Coastal Vulnerability Stakeholder Notification List* I am emailing to inform you that the City has today released a Coastal Survey to the community, please see details below. If you no longer wish to be included on this list please let me know by reply email.



### **Do you value the coast, its beaches and foreshore areas?**

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers. The online survey can be completed [here](#).

You can find out more about coastal vulnerability and the City's coastal adaptation planning [here](#). If you have any questions please email [coastal@joondalup.wa.gov.au](mailto:coastal@joondalup.wa.gov.au)

Kind Regards

[Redacted]  
Senior Environmental Project Officer  
City of Joondalup  
P/T: Mon-Thurs 8.30-2.45pm, Fri 8.30-4.30pm

Tel: 08 9400 4527

Fax: 08 9300 1383

Email: [Redacted]

Follow:



A Global City: Bold | Creative | Prosperous

The information contained in this communication may be confidential or commercially sensitive. If you are not the intended recipient you must not copy this communication, disclose its contents to any other party, or take any action in reliance on it. Please delete and destroy all copies and immediately notify the sender on 9400 4527 or by reply email.



BEFORE PRINTING THIS E-MAIL  
please consider the environment

## APPENDIX 3 — Email to community stakeholders

---

**From:** Consultation  
**Sent:** Monday, 30 July 2018 10:22 AM  
**Subject:** City of Joondalup Coastal Survey

Hello

The City of Joondalup is planning for future climate change impacts on the coast and is conducting a survey to determine how the community values and uses the City's coastline.

As a stakeholder of the City it would be appreciated if you could please share the below information and the link to the City's Coastal Survey with your networks.

If you would like flyers or posters promoting the Coastal Survey to display please email [coastal@joondalup.wa.gov.au](mailto:coastal@joondalup.wa.gov.au) or call 9400 4527.

Kind Regards



### **Do you value the coast, its beaches and foreshore areas?**


The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers. The online survey can be completed [here](#).

You can find out more about coastal vulnerability and the City's coastal adaptation planning [here](#).



# APPENDIX 4 — Online Comment Form (page 1)



Coastal Survey

Introduction

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. Your feedback will be used to inform adaptation options for the City's coastline.

All respondents will go into the draw to win one of three \$100 gift vouchers.

For further information, please contact the **Senior Environmental Project Officer** on **9400 4527** or email [coastal@joondalup.wa.gov.au](mailto:coastal@joondalup.wa.gov.au)

Next

Privacy & Cookie Policy

(page 2)



## Coastal Survey

### Your details

Please note that for your feedback to be validated, your contact details must be provided. This information will be treated as confidential and will not be published in any document or report on the outcomes of the engagement.

**Only one survey per person will be accepted.**

**\* Contact information:**

Name:	<input type="text"/>
Address:	<input type="text"/>
Suburb:	<input type="text"/>
Post Code:	<input type="text"/>
Phone:	<input type="text"/>

**What is your age?**

**How did you hear about this survey? (Please select as many as applicable)**

- ☐ Community newspaper
- ☐ Facebook
- ☐ Twitter
- ☐ City of Joondalup website
- ☐ Community Engagement Network email
- ☐ Coastal Vulnerability Stakeholder Notification List email
- ☐ City of Joondalup e-newsletter
- ☐ Signage along the coast / beach
- ☐ Flyer or poster at a City of Joondalup Library
- ☐ Flyer or poster at a City of Joondalup Customer Service Centre
- ☐ Friend / word-of-mouth
- ☐ Other (please describe)

The City has identified a number of [Coastal Hazard Areas](#) where coastal processes (such as storm erosion and sea level rise) may impact the City's coastline in the future, and have previously advised affected landowners. To the best of your knowledge, do you live in an identified Coastal Hazard Area?

- ☐ Yes
- ☐ No
- ☐ Unsure

Prev

Next



## Coastal Survey

### Visiting the coast

How often do you visit the coast? (This could include the beach, dunes, foreshore and park areas, coastal paths, adjacent facilities, etc.)

Summer (December–February)	<input type="text"/>
Autumn (March–May)	<input type="text"/>
Winter (June–August)	<input type="text"/>
Spring (September–November)	<input type="text"/>

When you visit the coast, do you *usually* participate in the following activities?

	Yes	No
Walking, running, sitting, relaxing (on the sand)	<input type="radio"/>	<input type="radio"/>
Walking, running, cycling (on the coastal path)	<input type="radio"/>	<input type="radio"/>
Exercising pets	<input type="radio"/>	<input type="radio"/>
Swimming, snorkelling, scuba diving	<input type="radio"/>	<input type="radio"/>
Surfing, boarding, rowing, paddling	<input type="radio"/>	<input type="radio"/>
Sailing, motor boating, jet skiing, water skiing	<input type="radio"/>	<input type="radio"/>
Fishing, crabbing, abalone	<input type="radio"/>	<input type="radio"/>
Picnicking, barbecuing, playground	<input type="radio"/>	<input type="radio"/>
Visiting cafes, restaurants, shops	<input type="radio"/>	<input type="radio"/>

Are there any other activities you enjoy on the coast?

In general, how important is being able to visit the coast to you?

Not important at all	<input type="radio"/>	Very important
----------------------	-----------------------	----------------

Prev

Next

(page 4)

## Coastal Survey

### Vulnerable coastal areas within the City

A number of coastal areas within the City of Joondalup are potentially vulnerable to future climate change impacts. The following map shows the vulnerable coastal areas within the City (coloured shading):



(continued)


**Which of these vulnerable coastal areas do you most often visit? (Please select as *many as applicable*)**

- ☐ North Burns Beach
- ☐ Iluka
- ☐ North of Ocean Reef Boat Harbour
- ☐ Mullaloo
- ☐ Pinnaroo Point/Kallaroo
- ☐ Hillarys Beach (Whitfords Nodes)
- ☐ Sorrento
- ☐ I do not visit any of these vulnerable coastal areas

Prev


Next

(page 5 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “North Burns Beach”)



Coastal Survey

North Burns Beach



When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area? (Please select *as many as applicable*)

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)



(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the North Burns Beach coast in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.


By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the North Burns Beach coast.

<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Beach/sandy area
<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Coastal dunes/vegetation
<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Coastal pathways (for walking/cycling)
<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Foreshore/park area (ie grassed area)
<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Public buildings (eg surf life saving clubs, toilets, changerooms)
<div><div></div><div></div><div></div></div>	<div><div></div><div></div></div> Private buildings (eg residential housing, cafés, shops)

Prev


Next

(page 6 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “Iluka”)



Coastal Survey

Iluka



When you visit the Iluka coast, what are your main reasons for choosing this coastal area? (Please select as *many as applicable*)

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)



(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the Iluka coast in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.


By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the Iluka coast.

1	2	3	4	5	6	Beach/sandy area
1	2	3	4	5	6	Coastal dunes/vegetation
1	2	3	4	5	6	Coastal pathways (for walking/cycling)
1	2	3	4	5	6	Foreshore/park area (ie grassed area)
1	2	3	4	5	6	Public buildings (eg surf life saving clubs, toilets, changerooms)
1	2	3	4	5	6	Private buildings (eg residential housing, cafés, shops)

Prev


Next

(page 7 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “North of Ocean Reef Boat Harbour”)



Coastal Survey

North of Ocean Reef Boat Harbour



When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area? (Please select *as many as applicable*)

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)

(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the coast north of Ocean Reef Boat Harbour in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.


By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the coast north of Ocean Reef Boat Harbour.

⋮	<input type="text"/>	Beach/sandy area
⋮	<input type="text"/>	Coastal dunes/vegetation
⋮	<input type="text"/>	Coastal pathways (for walking/cycling)
⋮	<input type="text"/>	Foreshore/park area (ie grassed area)
⋮	<input type="text"/>	Public buildings (eg surf life saving clubs, toilets, changerooms)
⋮	<input type="text"/>	Private buildings (eg residential housing, cafés, shops)

Prev


Next

(page 8 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “Mullaloo”)



## Coastal Survey

### Mullaloo



**When you visit the Mullaloo coast, what are your main reasons for choosing this coastal area? (Please select as *many* as applicable)**

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)

(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the Mullaloo coast in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.

By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the Mullaloo coast.

⋮	⬆	Beach/sandy area
⋮	⬆	Coastal dunes/vegetation
⋮	⬆	Coastal pathways (for walking/cycling)
⋮	⬆	Foreshore/park area (ie grassed area)
⋮	⬆	Public buildings (eg surf life saving clubs, toilets, changerooms)
⋮	⬆	Private buildings (eg residential housing, cafés, shops)

Prev

Next



(page 9 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “Pinnaroo Point/Kallaroo”)



## Coastal Survey

### Pinnaroo Point/Kallaroo



When you visit the Pinnaroo Point/Kallaroo coast, what are your main reasons for choosing this coastal area? (Please select as many as applicable)

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)

(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the Pinnaroo Point/Kallaroo coast in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.


By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the Pinnaroo Point/Kallaroo coast.

⋮	⬆	Beach/sandy area
⋮	⬆	Coastal dunes/vegetation
⋮	⬆	Coastal pathways (for walking/cycling)
⋮	⬆	Foreshore/park area (ie grassed area)
⋮	⬆	Public buildings (eg surf life saving clubs, toilets, changerooms)
⋮	⬆	Private buildings (eg residential housing, cafés, shops)

Prev


Next

(page 10 — respondents who answered “Which of these vulnerable coastal areas do you most often visit” with “Hillarys Beach (Whitfords Nodes)”



## Coastal Survey

### Hillarys Beach (Whitfords Nodes)



**When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area? (Please select as many as applicable)**

- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)



(continued)

Coastal processes (such as storm erosion and sea level rise) may impact Hillarys Beach (Whitfords Nodes) in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.

By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for Hillarys Beach (Whitfords Nodes).

...		Beach/sandy area
...		Coastal dunes/vegetation
...		Coastal pathways (for walking/cycling)
...		Foreshore/park area (ie grassed area)
...		Public buildings (eg surf life saving clubs, toilets, changerooms)
...		Private buildings (eg residential housing, cafés, shops)

Prev

Next



City of  
Joondalup

## Sorrento



- ☐ It is the closest to home
- ☐ It has good facilities (ie toilets, showers, changerooms)
- ☐ It has ample car parking or transport access
- ☐ It has surf life savers/patrols
- ☐ It has a good beach/sandy area
- ☐ It has safe swimming conditions
- ☐ It has good waves/surf conditions
- ☐ It has a good foreshore/park area (eg grassed area, picnic facilities, barbeques)
- ☐ It is suitable for exercising pets
- ☐ It has good pathways and cycle routes
- ☐ It has commercial activity nearby (eg cafes, restaurants, bars, shops)
- ☐ It is quiet and not too busy
- ☐ It is undeveloped and more natural
- ☐ Other (please describe)

<p> <math>\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}</math>  <math>\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}</math>  <math>\frac{1}{16} \times \frac{1}{16} = \frac{1}{256}</math>  <math>\frac{1}{256} \times \frac{1}{256} = \frac{1}{65536}</math>  <math>\frac{1}{65536} \times \frac{1}{65536} = \frac{1}{4294967296}</math> </p>	<p> <math>\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}</math>  <math>\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}</math>  <math>\frac{1}{16} \times \frac{1}{16} = \frac{1}{256}</math>  <math>\frac{1}{256} \times \frac{1}{256} = \frac{1}{65536}</math>  <math>\frac{1}{65536} \times \frac{1}{65536} = \frac{1}{4294967296}</math> </p>
--	--

(continued)

Coastal processes (such as storm erosion and sea level rise) may impact the Sorrento coast in the future. If this were to occur, the City is interested in learning which of the following the community values *most highly*.

By numbering or drag-and-drop, please rank the following in order of (1) most valued to (6) least valued for the Sorrento coast.

☰	☒	Beach/sandy area
☰	☒	Coastal dunes/vegetation
☰	☒	Coastal pathways (for walking/cycling)
☰	☒	Foreshore/park area (ie grassed area)
☰	☒	Public buildings (eg surf life saving clubs, toilets, changerooms)
☰	☒	Private buildings (eg residential housing, cafés, shops)

Prev

Next



## Coastal Survey

### Coastal adaptation options

There are a number of different coastal adaptation options that the City may be able to implement at different coastal locations. In general, how supportive are you of the following adaptation options?

Option 1: Protect facilities/infrastructure using hard structures at the expense of the sandy beach (eg sea walls)

Strongly oppose

Neutral

Strongly support



Option 2: Protect the sandy beach with hard structures (eg groynes, breakwaters)

Strongly oppose

Neutral

Strongly support



Option 3: Source and replace sand on beaches

Strongly oppose

Neutral

Strongly support



Option 4: Re-vegetate and stabilise dunes

Strongly oppose

Neutral

Strongly support



(continued)

Option 5: Relocate infrastructure to less vulnerable areas when it is at risk (eg buildings, playgrounds, car parks)

Strongly oppose

Neutral

Strongly support



Option 6: Remove (and do not replace) infrastructure when it is at risk (eg buildings, playgrounds, car parks)

Strongly oppose

Neutral

Strongly support



Option 7: Prevent/limit further development in vulnerable areas

Strongly oppose

Neutral

Strongly support



Option 8: Do nothing

Strongly oppose

Neutral

Strongly support



Overall, when you think about the coastline, which of the following do you believe are the *most important* factors to consider when making decisions about coastal adaptation measures.

By numbering or drag-and-drop, please rank the following in order of (1) most important to (7) least important.



Maintaining a sandy beach for amenity and recreational use



Ensuring safe access to the beach for all beach users



Maintaining grassed public open space areas



Protecting private residences and properties



Providing public facilities close to the coast (eg playgrounds, pathways, community buildings etc)



Maintaining coastal vegetation and natural ecosystems




The financial cost of coastal adaptation actions

Prev

Next

(page 13)



**Coastal Survey**

**Further comments**

Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline?

☐ No

☐ Yes (please describe the location and level of erosion)


Do you have any further comments about the City of Joondalup coast?

Prev

Next



(page 14)



Coastal Survey

Final

Your email address:

The City will be engaging with the community further to identify potential adaptation options for the City's coastline. Would you like to be informed of further opportunities to engage with the City about coastal adaptation? (Your name will be added to the Coastal Vulnerability Notification List)

☐ Yes

☐ No

**City of Joondalup Community Engagement Network:**

The Community Engagement Network is a network of community members interested in being consulted and engaged on an ongoing basis about future strategic initiatives in the City of Joondalup. Contact details are kept strictly confidential and members can opt-out at any time. If you are interested in joining the City of Joondalup Community Engagement Network, subscribe on the [City's website](#) or tick the box below.

Would you like to be informed via email when the outcomes of this survey have been uploaded to the City's website?

☐ Yes

☐ No

Would you like to join the City of Joondalup Community Engagement Network?

☐ Yes

☐ No

Prev

Next


(page 15)



Coastal Survey

Final

Thank you for taking the time to complete this survey.




Prev

Done



## APPENDIX 5 — Community Engagement webpage text (City website)

Home | Employment | Payments | Community Directory | [Contact Us](#)



Search

Welcome | Live | Explore | Develop | Govern

**Govern**

Code of Conduct

Committee Meetings

Community Engagement

- Community Engagement Network
- Installation of Cricket Practice Nets
- Planning application 242 Camberwarra Drive Craigie
- Planning application 55A Camberwarra Drive Craigie
- Planning application 3 Bracken Court Duncraig
- Planning application 2 Ruthven Place Duncraig
- Planning application Littorina Ave Heathridge
- Planning application 332 Cumberland Drive Hillarys
- Planning application 17B Dracen St Greenwood
- Coastal Survey**
- 6 Austin Way Padbury
- 62 Ellison Drive Padbury

Council Meetings

Council Elections

Delegated Authority

Employment

Freedom of Information

Register of Gifts and Contributions to Travel

Grants and Funding

Local Laws

Organisational Structure

Publications

Policies

Public Interest Disclosure

Sponsorship

Tenders

Your Mayor and Councillors

[Home](#) > [Govern](#) > [Community Engagement](#) > **Coastal Survey**

[Print](#) | [A+](#) | [A-](#)

### Coastal Survey

#### Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the online [Coastal Survey](#). All respondents will go into the draw to win one of three \$100.00 gift vouchers.

Further information on coastal vulnerability and the City's coastal adaptation planning activities can be found [here](#).

The [Coastal Survey](#) is open from **Thursday 31 May 2018** to **Friday 29 June 2018**.

Related Information

*These documents are available in alternate formats upon request. Please contact the City on 9400 4000.*

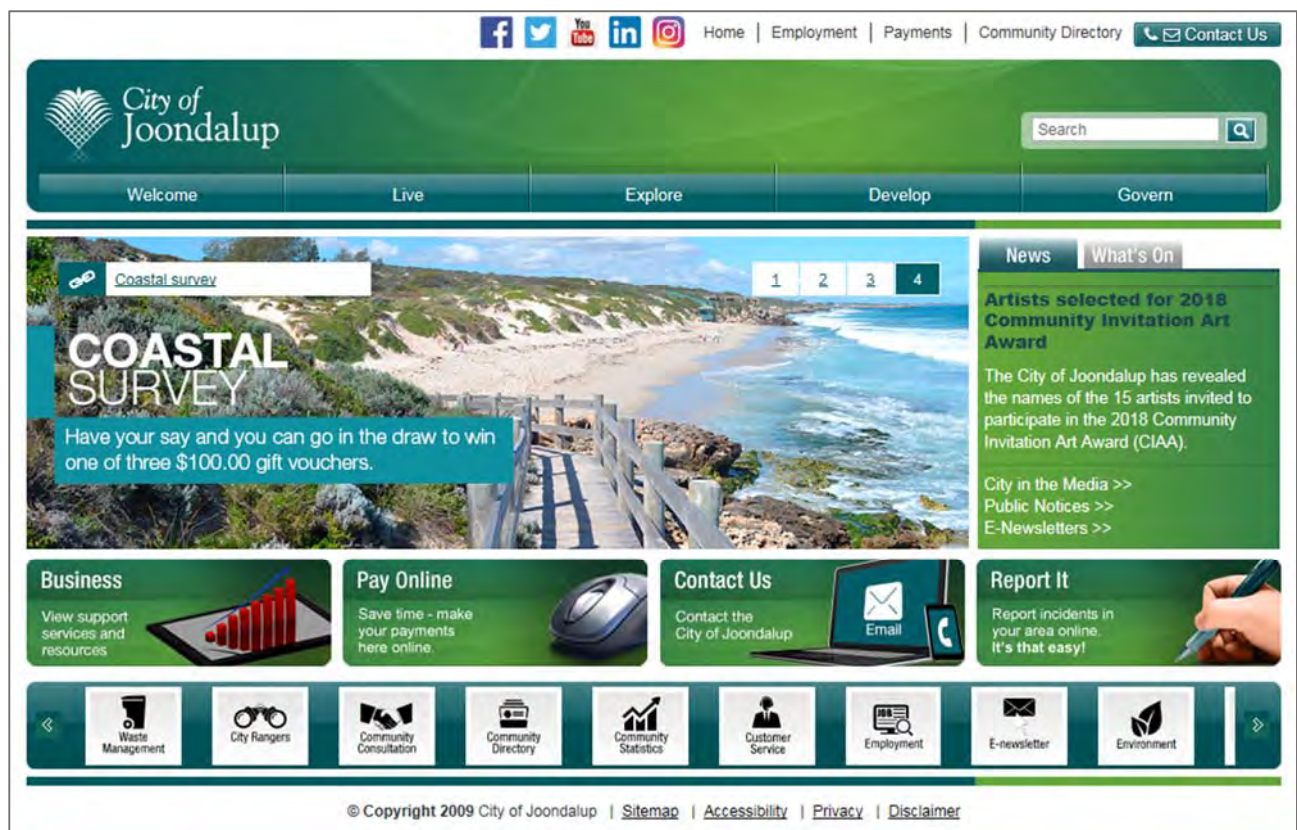
[Coastal Survey](#)

[Coastal Vulnerability Information](#)

© Copyright 2009 City of Joondalup | [Sitemap](#) | [Accessibility](#) | [Privacy](#) | [Disclaimer](#)

Last updated: 31/05/2018

## 86 | 180

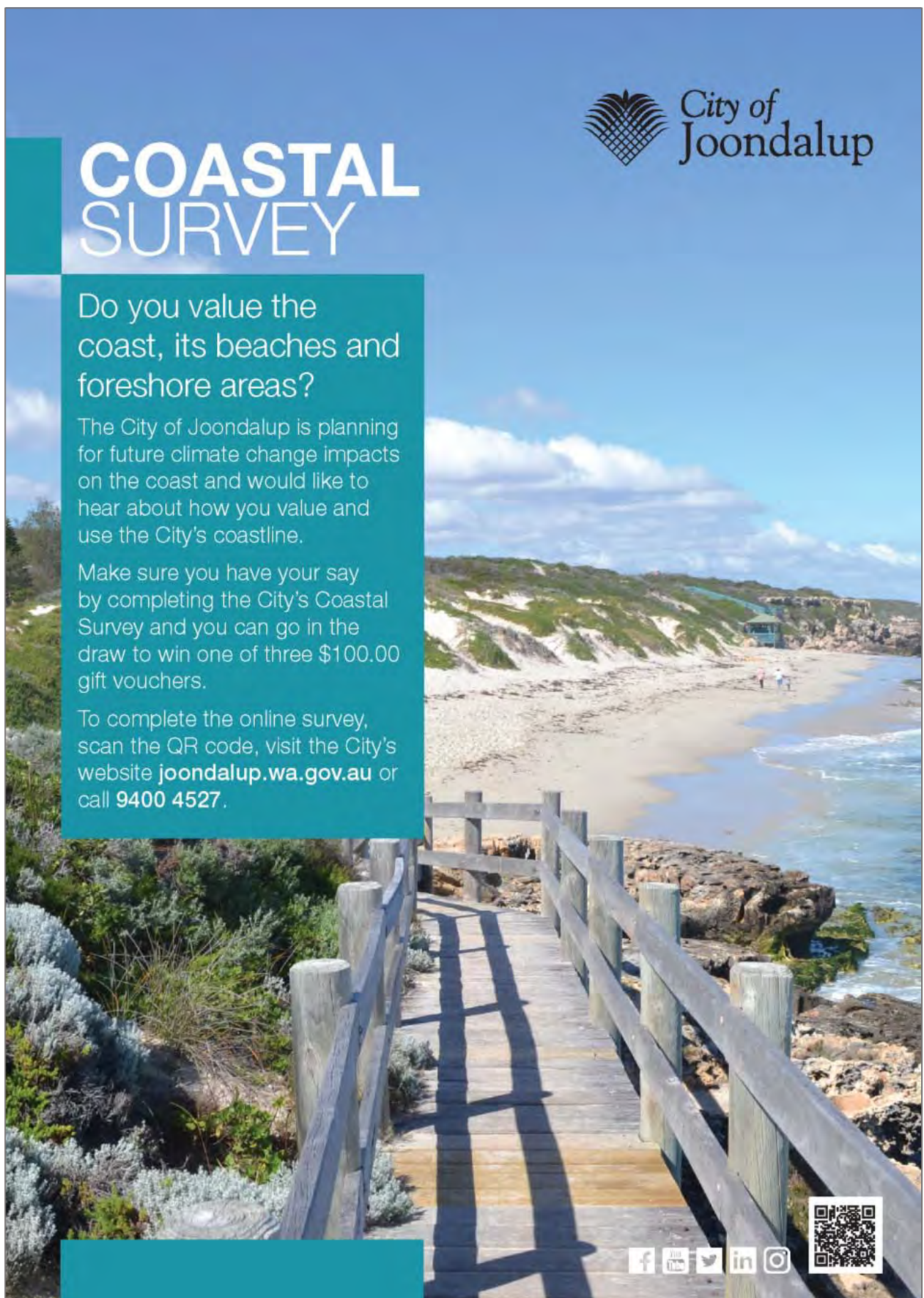


# APPENDIX 7 — Flyer design





## APPENDIX 8 — Poster design




**COASTAL SURVEY**







Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To complete the online survey, scan the QR code, visit the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or call **9400 4527**.

 **City of Joondalup**



## APPENDIX 9 — E-screen display design

The image is a vertical e-screen display design for a coastal survey. The background is a scenic photograph of a coastline with a sandy beach, green dunes, and blue waves under a cloudy sky. The title 'COASTAL SURVEY' is written in large, white, sans-serif capital letters on the left side, with 'COASTAL' stacked above 'SURVEY'. A teal-colored rectangular box on the right contains white text. At the bottom of this box, there are five social media icons: Facebook, YouTube, Twitter, LinkedIn, and Instagram.

# COASTAL SURVEY

Do you value the coast, its beaches and foreshore areas?

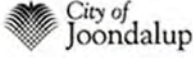

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To complete the survey, visit the City's website at [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or call **9400 4527**.

f YouTube Twitter LinkedIn Instagram

## APPENDIX 10 — *Environmental Events* e-newsletter (31 May 2018)




### Environmental Events

Environmental Events

31 May 2018

Call: 9400 4271


#### Coastal survey



Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. Make sure you have your say by completing the City's [Coastal Survey](#) and you can go in the draw to win one of three \$100.00 gift vouchers. The survey closes on 29 June 2018.

#### Winter sprinkler ban




The winter sprinkler ban runs from 1 June to 31 August each year and applies to all scheme and bore water users in Perth. Evaporation rates are low in winter and there is usually enough rainfall to sustain lawns and gardens. The winter sprinkler ban aims to conserve water for the drier months.

Set yourself a reminder to switch off your sprinklers through the Water Corporation website.

[Read more online](#)

#### Plastic bag ban



As of 1 July 2018, retailers are no longer able to provide customers with lightweight plastic bags. Some retailers may stop providing plastic bags earlier so check with your local shop. The plastic bag ban aims to stop the 670 million lightweight plastic bags used in WA each year from going to landfill or being littered and harming wildlife.

To get ready make sure you have enough reusable bags and keep them in your car or by the front door so you don't forget them. Try lining your bin with newspaper rather than plastic bags.

[Read more online](#)

(continued)

### ALBATROSS movie



**Friday 6 July 2018, 6.00pm - 9.00pm**  
Currambine Community Centre, 64 Delamere Ave,  
Currambine

Sea Shepherd Marine Debris Campaign Australia, Plastic Free July and North Earth Carers, with support from the City of Joondalup, invite you to an intimate screening of ALBATROSS by Chris Jordan. ALBATROSS is a powerful visual journey into the heart of a gut-wrenching environmental tragedy. Find out about the detrimental effects of plastic on these magnificent seabirds at the free screening with donations going to Sea Shepherd Australia.

[Register online](#)

### Loan environmental posters



You can now loan a City of Joondalup Native Plants poster and Birds of the City of Joondalup poster from the Joondalup Library. Both posters are vinyl and A1 size.

These informative posters could be useful at environmental events or for educational purposes to highlight local flora and fauna.

[Read more online](#)

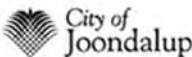

\$\$NAME\$\$  
[Manage my subscription](#)  
[Unsubscribe](#)

[Contact Us](#)  
[Visit joondalup.wa.gov.au](http://Visit.joondalup.wa.gov.au)





## APPENDIX 11 — *Environmental Events* e-newsletter (21 June 2018)




### Environmental Events

Environmental Events

June 2018

Call: 9400 4271

#### Coastal Survey




Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Have your say by completing the City's [Coastal Survey](#) and you can go in the draw to win one of three \$100.00 gift vouchers. The survey closes on Friday 29 June 2018.

#### Living with Less Plastic




**Saturday 30 June 2018, 1.00pm - 4.00pm**  
**Currambine Community Centre, 64 Delamere Ave, Currambine**

Learn how to reduce your single use plastic from the entertaining and knowledgeable Lindsay Miles.

This free Mindarie Regional Council workshop includes learning how to make your own shopping produce bags, soaps, deodorants, toothpaste, yoghurt, kombucha and cauliflower rice.

[Register online](#)

#### Plastic Bag Ban



As of 1 July 2018, retailers are no longer able to provide customers with lightweight plastic bags. Some retailers may stop providing plastic bags earlier so check with your local shop. The plastic bag ban aims to stop the 670 million lightweight plastic bags used in WA each year from going to landfill or being littered and harming wildlife.


To get ready make sure you have enough reusable bags and keep them in your car or by the front door so you don't forget them. Try lining your bin with newspaper rather than plastic bags.

[Read more online](#)



(continued)

### ALBATROSS Movie




**Friday 6 July 2018, 6.00pm - 9.00pm**  
Currambine Community Centre, 64 Delamere Ave,  
Currambine

Sea Shepherd Marine Debris Campaign Australia, Plastic Free July and North Earth Carers, with support from the City of Joondalup, invite you to an intimate screening of ALBATROSS by Chris Jordan. ALBATROSS is a powerful visual journey into the heart of a gut-wrenching environmental tragedy. Find out about the detrimental effects of plastic on these magnificent seabirds at the free screening with donations going to Sea Shepherd Australia.

[Register online](#)

### Waterwise Programs




Want to reduce water use in your school, business, office or development? Then why not consider participating in one of the Water Corporation's Waterwise Programs.

By participating in a Waterwise Program you will learn more about your water use, access resources and training to help reduce your water use and be recognised as a Waterwise school, business, office or development.

[Read more online](#)

### Sign up to eRates








**“WIN your rates paid for a year”**

Sign up to eRates and go into the draw.  
\*Terms and conditions apply.

**\$\$NAME\$\$**  
[Manage my subscription](#)  
[Unsubscribe](#)

[Contact Us](#)  
[Visit joondalup.wa.gov.au](http://Visit.joondalup.wa.gov.au)

# APPENDIX 12 — Joondalup Voice advertisement (Joondalup Weekender, 31 May 2018, page 11)

## joondalup voice

31 May 2018



### Mayor's Column — Hon. Albert Jacob JP



#### Advertising of proposed differential rates

Ratepayers can provide their feedback on the Joondalup Council proposal to apply differential rates for the 2018/19 Draft Budget.

A further report will be presented to Council inclusive of public submissions on the proposed differential rates before the 2018/19 Budget is adopted.

First introduced by the Council in the 2008/09 financial year, differential rating helps to maintain the distribution of the rates burden between residential, commercial and industrial properties.

Public submissions can be made until Monday 18 June 2018 in writing by post or email.

Further information is available on the City's website at [joondalup.wa.gov.au](http://joondalup.wa.gov.au)

#### Artists selected for 2018 Community Invitation Art Award

The City of Joondalup has revealed the names of 15 artists invited to participate in the prestigious 2018 Community Invitation Art Award (CIAA).

The CIAA is the City's premier visual arts event that celebrates the creative talents of professional Western Australian artists and the major role they have made - and continue to make to the State's contemporary visual arts scene.

The participating CIAA artists in 2018 are: Jennifer Cochrane, Sarah Elson, Caspar Fairhall, Emily Hornum, Eveline Kotai, Leonie Ngahua Mansbridge, Amanda Marsh, Ellen Norrish, Mark Parfitt, Andy Quilty, Trevor Richards, Susan Roux, Susannah Skinner, Sioux Tempestt and Gera Woltjer.

The winner of the CIAA acquisitive prize will receive \$7,000, while one artist will be commissioned to produce an artwork for the City of Joondalup

Inside-Out Billboard project. Other prizes totalling another \$8,000 will be awarded.

Further information can be found at [joondalup.wa.gov.au](http://joondalup.wa.gov.au)

#### Have your say on BMX, skate and outdoor recreation facilities

Next month Joondalup residents can have their say on the type of BMX, skate and outdoor recreation facilities and infrastructure they would like to see within the City.

A three-week public consultation period will allow members of the community to contribute their ideas towards the City's draft Joondalup BMX, Skate and Youth Outdoor Recreation Strategy.

Prior to that, two workshops will be held on Thursday 14 June at City of Joondalup Reception Centre, 4.00pm – 6.00pm (youth users) and 7.00pm – 9.00pm. The public consultation period runs Monday 11 June – Monday 2 July. An online comment form will be available at [joondalup.wa.gov.au](http://joondalup.wa.gov.au)

To RSVP for the workshops or for further information contact the Youth Services team on 9400 4225 or email [info@joondalup.wa.gov.au](mailto:info@joondalup.wa.gov.au)

#### Paying tribute to City's myriad volunteers

Congratulations to Ken Blackie, a founding member of the Whitford Volunteer Sea Rescue Group, who was last week named Volunteering WA – WA Volunteer of the Year.

The City celebrated National Volunteer Week (21 – 27 May) by hosting several events to recognise our many committed dedicated and community-minded champions.

Volunteers are the heart and soul of a healthy, vibrant and successful community like Joondalup with an impressive 19.5% of City residents volunteering their time in some capacity.

This is the equivalent of more than 20,000 City of Joondalup residents volunteering in some capacity and is almost 2% more than the greater Perth area and a 2.8% increase (from 16.7%) in 2011

### City of Joondalup COASTAL SURVEY

Do you value the coast, its beaches and foreshore areas? The City is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's Coastal Values Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To complete the online survey, scan the QR code, visit [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or call 9400 4527.

JOON

### Council Meeting Dates

**Briefing Session**  
Tuesday 12 June 2018, 6.30pm

**Council Meeting**  
Tuesday 26 June 2018, 7.00pm  
City of Joondalup Council Chamber  
Boas Avenue, Joondalup

### Bulk hard waste improvements

The City has modified the Bulk hard waste service. As of Wednesday 16 May 2018, you can now recycle more:

- 1 collection of up to four white goods
- 1 collection of up to six mattresses and
- 1 three cubic metre skip bin\* (or lounge suite) service

\*An additional bulk hard waste skip bin is available for a reduced City preferred rate. Book online through the City's website or by phoning Cleanaway on 9449 3363.

Booking the above services can be made at any time throughout the financial year. For mattresses and white goods the number of items will need to be specified at the time of booking.

For further information please phone the City's customer relations team on 9400 4255.



### Western Australia Day 2018 Operating Hours

#### Monday 4 June 2018

##### Customer Service Centres

Joondalup	Closed
Whitford	Closed

##### Leisure Centres

Craigie	7.00am – 6.00pm
Duncraig	Closed

##### Libraries

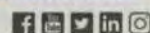
Joondalup	Closed
Woodvale	Closed
Whitford (including Community Facilities Booking Office)	Closed
Duncraig	Closed

No change to bin collections



Find. Connect. Live. is all about finding what's out there, connecting with something you're interested in and enjoying the benefits. You might like to join a community group, volunteer in one of 300 agencies and community groups, attend one of over 1,300 library and cultural events held annually or join in your local leisure centre activities. Pick up a 55+ Groups and Activities Guide from one of the City's libraries, customer service and leisure centres, visit the City's website or call 9400 4705 for more information.

Supported by Government of Western Australia




[joondalup.wa.gov.au](http://joondalup.wa.gov.au)

THE WEEKENDER, Thursday, May 31, 2018 11



## APPENDIX 13 — *Joondalup Voice* advertisement (City website)



Joondalup Voice Online


Joondalup Voice Online

Dear \$\$FIRSTNAME\$\$,

31 May 2018

Call: 9400 4705

Mayor's Column - Hon. Albert Jacob JP



**Advertising of proposed differential rates**  
Ratepayers can provide their feedback on the Joondalup Council proposal to apply differential rates for the 2018/19 Draft Budget.

A further report will be presented to Council inclusive of public submissions on the proposed differential rates before the 2018/19 Budget is adopted.

First introduced by the Council in the 2008/09 financial year, differential rating helps to maintain the distribution of the rates burden between residential, commercial and industrial properties.

Public submissions can be made until Monday 18 June 2018 in writing by post or [email](#).

Further information is available on the City's [website](#).

**Artists selected for 2018 Community Invitation Art Award**  
The City of Joondalup has revealed the names of 15 artists invited to participate in the prestigious 2018 Community Invitation Art Award (CIAA).

The CIAA is the City's premier visual arts event that celebrates the creative talents of professional Western Australian artists and the major role they have made - and continue to make to the State's contemporary visual arts scene.

The participating CIAA artists in 2018 are: Jennifer Cochrane, Sarah Elson, Caspar Fairhall, Emily Hornum, Eveline Kotai, Leonie Ngahuia Mansbridge, Amanda Marsh, Ellen Norrish, Mark Parfitt, Andy Quilty, Trevor Richards, Susan Roux, Susannah Skinner, Sioux Tempestt and Gera Woltjer.

The winner of the CIAA acquisitive prize will receive \$7,000, while one artist will be commissioned to produce an artwork for the City of Joondalup Inside-Out Billboard project. Other prizes totalling another \$8,000 will be awarded.

Further information can be found on the City's [website](#).

(continued)

#### Have your say on BMX, skate and outdoor recreation facilities

Next month Joondalup residents can have their say on the type of BMX, skate and outdoor recreation facilities and infrastructure they would like to see within the City.

A three-week public consultation period will allow members of the community to contribute their ideas towards the City's draft Joondalup BMX, Skate and Youth Outdoor Recreation Strategy.

Prior to that, two workshops will be held on Thursday 14 June at City of Joondalup Reception Centre, 4.00pm - 6.00pm (youth users) and 7.00pm - 9.00pm.

The public consultation period runs Monday 11 June - Monday 2 July. An online comment form will be available on the City's website.

To RSVP for the workshops or for further information contact the City on **9400 4225** or [email](#).

#### Paying tribute to City's myriad volunteers

Congratulations to Ken Blackie, a founding member of the Whitford Volunteer Sea Rescue Group, who was last week named Volunteering WA – WA Volunteer of the Year.

The City celebrated National Volunteer Week (21 – 27 May) by hosting several events to recognise our many committed dedicated and community-minded champions.

Volunteers are the heart and soul of a healthy, vibrant and successful community like Joondalup with an impressive 19.5% of City residents volunteering their time in some capacity.

This is the equivalent of more than 20,000 City of Joondalup residents volunteering in some capacity and is almost 2% more than the greater Perth area and a 2.8% increase (from 16.7%) in 2011.

### Bulk hard waste improvements

#### ► Bulk hard waste improvements



The City has modified the Bulk hard waste service. As of Wednesday 16 May 2018, you can now recycle more:

- 1 collection of up to four white goods
- 1 collection of up to six mattresses and
- 1 three cubic metre skip bin\* (or lounge suite) service.

\*An additional bulk hard waste skip bin is available for a reduced City preferred rate. Book online through the City's website or by phoning Cleanaway on **9449 3363**.

Booking the above services can be made at any time throughout the financial year. For mattresses and white goods the number of items will need to be specified at the time of booking.


For further information please phone the City's customer relations team on **9400 4255**.

[Read more online](#)



(continued)

### Western Australia Day 2018 Operating Hours



**Monday 4 June 2018**

**Customer Service Centres**  
Joondalup: Closed  
Whitford: Closed


**Leisure Centres**  
Craigie: 7.00am – 6.00pm  
Duncraig: Closed

**Libraries**  
Joondalup: Closed  
Woodvale: Closed  
Whitford (including Community Facilities Booking Office): Closed  
Duncraig: Closed

**No change to bin collections**

[Read more online](#)

### City of Joondalup Coastal Survey




Do you value the coast, its beaches and foreshore areas? The City is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline.

Make sure you have your say by completing the City's Coastal Values Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To enter, complete the survey [online](#) or call 9400 4527


### 55+ Find. Connect. Live



Find. Connect. Live. is all about finding what's out there, connecting with something you're interested in and enjoying the benefits. You might like to join a community group, volunteer in one of 300 agencies and community groups, attend one of over 1,300 library and cultural events held annually or join in your local leisure centre activities.

Pick up a 55+ Groups and Activities Guide from one of the City's libraries, customer service and leisure centres, visit the City's [website](#) or call 9400 4705 for further information.

### Council Meeting Dates



**Briefing Session**  
Tuesday 12 June 2018, 6.30pm


**Council Meeting**  
Tuesday 26 June 2018, 7.00pm

City of Joondalup Council Chamber  
Boas Avenue, Joondalup

[Read more online](#)

Manage my subscription  
Unsubscribe

Contact Us  
[Visit joondalup.wa.gov.au](#)





# APPENDIX 14 — Joondalup Voice article (Joondalup Weekender, 14 June 2018, page 11)

# joondalup voice

14 June 2018

---

## Councillor's Column — Kerry Hollywood

**Get cyber smart at business forum**

With cybercrime costing the Australian business community up to \$1 billion annually, and 43% of attacks levelled at small business, registering for this month's business forum on cyber security makes good business sense.

The forum, Joondalup Innovation Hub – The Cyber Security Capital of WA, will be held on Thursday 28 June at Joondalup Resort, Connolly.

Associate Professor Mike Johnstone – from the Edith Cowan University (ECU) School of Science and a member of the ECU Security Research Institute – is the keynote speaker.

The forum follows the recent announcement of \$140 million of funding invested by the Federal and State governments, industry, university and research participants into a Cyber Security Cooperative Research Centre (CRC) at ECU in Joondalup.

ECU has been recognised as a world leader in cyber security research and education, and the location of the WA Government's first Innovation Hub, which brings together ECU cyber security expertise, the Australian Security Growth Network, AustCyber and now the Cyber Security CRC.

Tickets are \$30.00. Those interested in attending can register online at [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or by calling 9400 4407.

**Have your say on our coastline**

There is still time for residents to fill in the City's Coastal Survey.

The results of the survey will allow the City to better understand how the community values and uses

our stunning coast, beaches and foreshore areas. Feedback will also be used to help identify potential adaptation options for vulnerable coastal areas.

The City will continue to engage and inform the local community and key stakeholders on the impact of coastal hazards, potential coastal adaptation options and development of a coastal hazard risk management adaptation plan.

The survey can be completed online at [joondalup.wa.gov.au](http://joondalup.wa.gov.au) until **Friday 29 June**. Everyone who participates will go into the draw to win one of three \$100.00 gift vouchers.

**NAIDOC Week celebrations**

The City will celebrate the invaluable contributions that Aboriginal and Torres Strait Islander women have made to the area with a culturally-rich program of events during NAIDOC week and throughout the month of July.

NAIDOC Week, 8-15 July, celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander people and is an opportunity to recognise the contributions that Indigenous Australians make to our country.

This year's theme, "Because of her, we can!" honours the essential part women have played as active and significant role models empowering past generations and paving the way for future generations to come.

Joondalup Art Gallery will host a spectacular exhibition of artworks curated by prominent Indigenous artist Sharyn Egan as part of the City of Joondalup's 2018 NAIDOC Week celebrations.

The City will also conduct a flag-raising ceremony outside its administration building on **Monday 9 July**. See [joondalup.wa.gov.au](http://joondalup.wa.gov.au) for NAIDOC Week event information.

### JOONDALUP BMX, SKATE AND YOUTH OUTDOOR RECREATION STRATEGY

The City of Joondalup is seeking community input to better understand its needs for the provision of BMX, skate and outdoor recreation facilities. The consultation aims to explore motivators and barriers for participation as well as seeking views on the size, type and location of facilities. To provide input, please complete the online Comment Form available via the Community Engagement section of the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au). Feedback closes: **Monday 2 July 2018**. For further information please contact the Youth Services Team on 9400 4225 or [info@joondalup.wa.gov.au](mailto:info@joondalup.wa.gov.au).

## 2018 COMMUNITY ART EXHIBITION

Sunday 10 June – Friday 22 June  
Lakeside Joondalup Shopping City

An annual exhibition celebrating the City's artistic community with over 170 exhibiting artists. For further information visit [joondalup.wa.gov.au](http://joondalup.wa.gov.au)

Little Power  
Bell's Rapids 2017

### Park Name Change Proposal — Blackthorn Park and Parin Park, Greenwood

The City of Joondalup is seeking community feedback on a proposal to change the following park names:

- "Blackthorn Park" to "Parrin Pioneer Park"
- "Parin Park" to "Ten Mile Peg Park"

To provide feedback on the proposed park name changes, please complete the Online Comment Form available via the Community Engagement section of the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au).

For further information, please contact the City's Infrastructure Services Customer Relations Team on 1300 369 972 or email [info@joondalup.wa.gov.au](mailto:info@joondalup.wa.gov.au)

## “WIN your rates paid for a year!”

Sign up to the City's eRates service to go in the draw – a paperless and convenient way to receive rate notices and instalment reminders. Prize capped at \$2,000. Additional terms and conditions apply, visit [joondalup.wa.gov.au](http://joondalup.wa.gov.au) for further information.

Draw closes **Monday 9 July 2018**.

### Park Name Change Proposal — Blackthorn Park and Parin Park, Greenwood

The City of Joondalup is seeking community feedback on a proposal to change the following park names:

- "Blackthorn Park" to "Parrin Pioneer Park"
- "Parin Park" to "Ten Mile Peg Park"

To provide feedback on the proposed park name changes, please complete the Online Comment Form available via the Community Engagement section of the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au).

For further information, please contact the City's Infrastructure Services Customer Relations Team on 1300 369 972 or email [info@joondalup.wa.gov.au](mailto:info@joondalup.wa.gov.au)



[joondalup.wa.gov.au](http://joondalup.wa.gov.au)

11 THE WEEKENDER, Thursday, June 14, 2018

107202

98 | 180

## APPENDIX 15 — *Joondalup Voice* article (City website)



**Joondalup Voice Online**


**Joondalup Voice Online**

15 June 2018

Dear \$\$FIRSTNAME\$\$,

**Call: 9400 4705**

**Councillor's Column - Kerry Hollywood**



**Get cyber smart at business forum**  
The forum, Joondalup Innovation Hub – The Cyber Security Capital of WA, will be held on Thursday 28 June at Joondalup Resort, Connolly. Tickets are \$30.00.

With cybercrime costing the Australian business community up to \$1 billion annually, and 43% of attacks levelled at small business, registering for this month's business forum on cyber security makes good business sense.

Associate Professor Mike Johnstone – from the Edith Cowan University (ECU) School of Science and a member of the ECU Security Research Institute – is the keynote speaker.

The forum follows the recent announcement of \$140 million of funding invested by the Federal and State governments, industry, university and research participants into a Cyber Security Cooperative Research Centre (CRC) at ECU in Joondalup.

ECU has been recognised as a world leader in cyber security research and education, and the location of the WA Government's first Innovation Hub, which brings together ECU cyber security expertise, the Australian Security Growth Network, AustCyber and now the Cyber Security CRC.

Those interested in attending can [register online](#) or by calling 9400 4407.

**Have your say on our coastline**  
There is still time for residents to fill in the City's Coastal Survey. The results of the survey will allow the City to better understand how the community values and uses our stunning coast, beaches and foreshore areas. Feedback will also be used to help identify potential adaptation options for vulnerable coastal areas.

The City will continue to engage and inform the local community and key stakeholders on the impact of coastal hazards, potential coastal adaptation options and development of a coastal hazard risk management adaptation plan.

The survey can be completed [online](#) until **Friday 29 June**. Everyone who participates will go into the draw to win one of three \$100.00 gift vouchers.



(continued)

#### NAIDOC Week celebrations

The City will celebrate the invaluable contributions that Aboriginal and Torres Strait Islander women have made to the area with a culturally-rich program of events during NAIDOC week and throughout the month of July.

[NAIDOC Week](#), 8-15 July, celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander people and is an opportunity to recognise the contributions that Indigenous Australians make to our country.

This year's theme, 'Because of her, we can!' honours the essential part women have played as active and significant role models empowering past generations and paving the way for future generations to come.

Joondalup Art Gallery will host a spectacular exhibition of artworks curated by prominent Indigenous artist Sharyn Egan as part of the City of Joondalup's 2018 NAIDOC Week celebrations.

The City will also conduct a flag-raising ceremony outside its administration building on **Monday 9 July**.

#### Joondalup BMX, Skate and Youth Outdoor Recreation Strategy



The City of Joondalup is seeking community input to better understand its needs for the provision of BMX, skate and outdoor recreation facilities. The consultation aims to explore motivators and barriers for participation as well as seeking views on the size, type and location of facilities.

To provide input, please complete the [online comment form](#).

Feedback closes: **Monday 2 July 2018**

For further information please contact the City on 9400 4225 or via [email](#)

#### 2018 Community Art Exhibition



**Sunday 10 June – Friday 22 June**  
Lakeside Joondalup Shopping City

An annual exhibition celebrating the City's artistic community with over 170 exhibiting artists.

Image: Liselle Powell, Bell's Rapids 2017.

[Read more online](#)

#### "WIN your rates paid for a year"



Sign up to the City's eRates service to go in the draw – a paperless and convenient way to receive rate notices and instalment reminders.


Prize capped at \$2,000. Additional terms and conditions apply, visit the City's [website](#) for further information.

Draw closes **Monday 9 July 2018**.



(continued)

### Park Name Change Proposal - Blackthorn Park and Parin Park, Greenwood




The City of Joondalup is seeking community feedback on a proposal to change the following park names:

- "Blackthorn Park" to "Parin Pioneer Park"
- "Parin Park" to "Ten Mile Peg Park"

To provide feedback on the proposed park name changes, please complete the online comment form available on the City's [website](#)

For further information, please contact the City on 1300 369 972 or [email](#)

### Sign up to eRates



**“WIN your rates paid for a year”**

Sign up to eRates and go into the draw.  
\*Terms and conditions apply.

\$\$NAME\$\$

[Manage my subscription](#)

[Unsubscribe](#)


[Contact Us](#)

[Visit joondalup.wa.gov.au](#)



## APPENDIX 16 — Media release (City website)

[Home](#) | [Employment](#) | [Payments](#) | [Community Directory](#) | [Contact Us](#)



Welcome | Live | Explore | Develop | Govern

### Welcome

- About Joondalup
- Business
- Contact Us
- City in the Media
- City News
  - City News Archive
- Customer Service
- Enewsletters
- History
- Joondalup Learning Precinct
- Prominent People
- Public Notices
- Ratepayer & Community Groups
- Sister City
- Videos

[Home](#) > [Welcome](#) > [City News](#)Print | A+ | A-

## City News

[All news](#)

### Valuing the City's Coast

31/05/2018 8:05:52 AM

The City of Joondalup is taking proactive steps to identify and prepare for potential future changes to its coastline from climate change, such as erosion and storm surges, and is seeking to engage with the local community on this important issue.

The City has today released a survey to better understand how the community values and uses the coast, beaches and foreshore areas.

The survey can be completed online at [joondalup.wa.gov.au](http://joondalup.wa.gov.au) until Friday 29 June.

Feedback will be used to help identify potential adaptation options for vulnerable coastal areas. Once these have been identified the City will undertake further engagement with the community and stakeholders. This will then form the basis of a Coastal Hazard Risk Management Adaptation Plan for the City.

Joondalup Mayor Albert Jacob said the City had been preparing and adapting to future impacts on the City's coast by modelling the risks to the City's coastline, informing property owners and the community of the potential risks, undertaking coastal monitoring and developing an overarching Coastal Infrastructure Adaptation Plan.

"The Coastal Survey is the next step in engaging with our community to ensure their views are included in the City's coastal adaptation planning," he said.


"The City's wonderful beaches and foreshore areas are enjoyed by many members of our community including residents, visitors and tourists and I encourage everyone to get online and complete the Coastal Survey to ensure their voice is heard.

"The City will continue to engage and inform the local community and key stakeholders on the impact of coastal hazards, potential coastal adaptation options and the development of a coastal hazard risk management adaptation plan, which will provide both short and long-term actions to adapt our beautiful coastline."

Visit the City's website at [joondalup.wa.gov.au](http://joondalup.wa.gov.au) to complete the online survey and you can go in the draw to win one of three \$100.00 gift vouchers.

#### Further background


- Coastal hazard risk management adaptation planning is a requirement of the Department of Planning's State Planning Policy 2.6: State Coastal Planning Policy (SPP 2.6) and will ensure that the City is prepared to adapt to coastal risk if and when it occurs.
- The development of a Coastal Hazard Risk Management Adaptation Plan is a key recommendation of the City's Coastal Infrastructure Adaptation Plan -endorsed by Council in May 2018. It builds on the work previously undertaken by the City to identify areas of the City's coastline that may become susceptible to coastal erosion within the next 100 years. Information on coastal hazard areas can be found on the City's website.
- While the risk of the modelled erosion occurring is considered relatively low and the majority of potential impacts are long term, the City is taking action to prepare for this and ensure that potential impacts on the coastline are minimised and managed appropriately.
- Activities include implementing a Coastal Monitoring Program to monitor shoreline movements, developing a Coastal Infrastructure Adaptation Plan to guide the City's overall approach to coastal vulnerability and implementing a Coastal Local Planning Policy to ensure planning and development along the coast complies with SPP 2.6. The City has also taken a proactive approach in informing key stakeholders, affected property owners and interested members of the community of the potential risks identified for the City's coastline over the next 100 years.



© Copyright 2009 City of Joondalup | [Sitemap](#) | [Accessibility](#) | [Privacy](#) | [Disclaimer](#)

Last updated: 22/08/2016

# APPENDIX 17 — Facebook advertisements (City, 31 May 2018 to 29 June 2018)




City of Joondalup

31 May at 10:18 · 🌐

The City of Joondalup is planning for the future climate change impacts on the coast and would like to hear from you. The City wants to know what the coast means to you and how you make the most of the City's beautiful beaches?

Make sure you have your say by completing the City's Coastal Survey. As an added bonus, by completing the survey you will go in the draw to win a \$100.00 voucher.



SURVEYMONKEY.COM


**City of Joondalup Coastal Survey**

Learn More

Like

Comment

Share




City of Joondalup

31 May at 10:19 · 🌐

The City of Joondalup is planning for the future climate change impacts on the coast and would like to hear from you. The City wants to know what the coast means to you and how you make the most of the City's beautiful beaches?

Make sure you have your say by completing the City's Coastal Survey. As an added bonus, by completing the survey you will go in the draw to win a \$100.00 voucher.



**Have your say and help the City of Joondalup plan for the future**

Learn More

304 Views

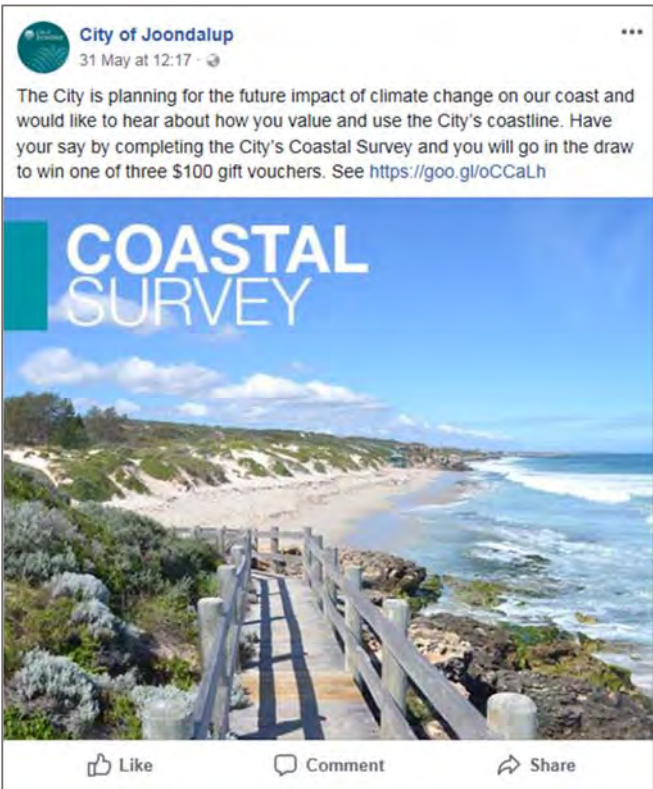
Like

Comment

Share



# APPENDIX 18 — Twitter and Facebook posts (City, 31 May 2018)



# APPENDIX 19 — Twitter and Facebook posts (City, 22 June 2018)



APPENDIX 20 — Banner signage design



# COASTAL SURVEY

Do you value the coast, its beaches and foreshore areas?

The City of Joondalup is planning for future climate change impacts on the coast and would like to hear about how you value and use the City's coastline. Make sure you have your say by completing the City's Coastal Survey and you can go in the draw to win one of three \$100.00 gift vouchers.

To complete the online survey, scan the QR code, visit the City's website [joondalup.wa.gov.au](http://joondalup.wa.gov.au) or call 9400 4527.





APPENDIX 21 — Banner signage locations





COASTAL

# Coastal change survey

ON THE  
COAST



THE City of Joondalup is taking steps to identify and prepare for potential future changes to its coastline from climate change such as erosion and storm surges.

It released a survey today to better understand how the community values and uses the coast, beaches and foreshore areas. Feedback will be used to identify potential adaptation options for vulnerable coastal areas.

Once these have been identified, the City will undertake further engagement with the community and stakeholders.

This will then form the



**The coastal survey will ensure the community's views are included in future plans.**

basis of a Coastal Hazard Risk Management Adaptation Plan for the City.

Mayor Albert Jacob said the City had been preparing and adapting to future impacts on the its coast by informing property owners and the community of the potential risks and undertaking coastal monitoring.

It is also developing an overarching Coastal Infrastructure Adaptation Plan, which the council unanimously endorsed at this month's meeting.

A council document said there were significant infrastructure assets along the coast including roads, public lighting, drainage, car parks, dual-use paths, playgrounds, parks, community buildings and areas of existing and planned residential development.


Mr Jacob said the survey was the next step in engaging with the community to "ensure their views are included in the City's coastal adaptation planning".

The survey can be completed at [www.joondalup.wa.gov.au](http://www.joondalup.wa.gov.au) until June 29.




APPENDIX 23 — News article (online *Joondalup Times*, 31 May 2018)

Joondalup  
**Times**  
Community



Australia's leading  
business training  
facilities




Book Now


Sydney, Melbourne, Brisbane, Perth




NEWS   SPORT   FOOD   LIFESTYLE   WHAT'S ON   REAL ESTATE   MOTORING   TRADES & SERVICES   **SELECT NEWSPAPER**

# City of Joondalup preparing for coastal erosion resulting from climate change

May 31st, 2018, 09:00AM | Written by Tyler Brown | Joondalup Times **NEWS**



 The coastal survey will ensure the community's views are included in future plans.




THE City of Joondalup is taking steps to identify and prepare for potential future changes to its coastline from climate change such as erosion and storm surges.

It released a survey today to better understand how the community values and uses the coast, beaches and foreshore areas. Feedback will be used to identify potential adaptation options for vulnerable coastal areas.

Once these have been identified, the City will undertake further engagement with the community and stakeholders.

PRIME MINISTER'S  
**One million steps**  
Heart Foundation Walking



JOIN TODAY

Supported by the  
Australian Government

107202

109 | 180

(continued)

This will then form the basis of a Coastal Hazard Risk Management Adaptation Plan for the City.

Mayor Albert Jacob said the City had been preparing and adapting to future impacts on the its coast by informing property owners and the community of the potential risks and undertaking coastal monitoring.

It is also developing an overarching Coastal Infrastructure Adaptation Plan, which the council unanimously endorsed at this month's meeting.

A council document said there were significant infrastructure assets along the coast including roads, public lighting, drainage, carparks, dual-use paths, playgrounds, parks, community buildings and areas of existing and planned residential development.



"Increasing erosion, inundation and sea level rise have the potential to impact on these natural and built assets and may alter the way these areas can be accessed and enjoyed in the future," it said.

Mr Jacob said the survey was the next step in engaging with the community to "ensure their views are included in the City's coastal adaptation planning".

## Top Stories



Slug pellet-baited cake found at popular Mullaloo dog park



Three Perth cafes named in Lonely Planet's Global Coffee Tour book



Wannanup police shooting victim identified as Hayden Paul Stacey



Barbershop Express says store does not discriminate against customers after claims it denied Mandurah woman a haircut



Otter-ly adorable: Perth Zoo's otter pups get first vet check up



Vehicle wrecked in Kwinana Freeway rollover

## Competitions



Win a Peel Thunder Football Club gold family membership & prize pack!

ENTER NOW

ALL COMPETITIONS

(continued)

"The City's wonderful beaches and foreshore areas are enjoyed by many members of our community including residents, visitors and tourists and I encourage everyone to get online and complete survey to ensure their voice is heard," he said.

The survey can be completed at [www.joondalup.wa.gov.au](http://www.joondalup.wa.gov.au) until June 29.

**MORE:** Witnesses detain man who allegedly attempted to flee crash

**MORE:** Housing Minister supports Denishar Woods' family's right to legal action over near-fatal electric shock

**MORE:** Otter-ly adorable: Perth Zoo's otter pups get first vet check up

**MORE:** Vehicle wrecked in Kwinana Freeway rollover

*Stay Connected*

FACEBOOK



TWITTER



PINTEREST



INSTAGRAM



GOOGLE+





# APPENDIX 24 — Twitter and Facebook posts (Joondalup–Wanneroo Times/Weekender, 31 May 2018)



## APPENDIX 25 — Verbatim responses

QUESTION: “Are there any other activities you enjoy on the coast?”

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):</b>
<i>Surf life saving</i>
<i>Just enjoying</i>
<i>Going to the pub and having a few drinks</i>
<i>Just sitting on the sand soaking up the sun!</i>
<i>Windsurfing</i>
<i>Just being there, interacting with people, looking at the beauty.</i>
<i>Photography, listening to music.</i>
<i>Scenery, wildlife, birds, dolphins, etc.</i>
<i>Taking the horses to the horse beach.</i>
<i>Walks and visiting restaurants/café's</i>
<i>Photography</i>
<i>Photography</i>
<i>Festivals, food trucks music at Nodes Park</i>
<i>Photography</i>
<i>Photography</i>
<i>Meeting friends there, both swimming and a coffee.</i>
<i>Predominantly cycling</i>
<i>Watching sunsets</i>
<i>Sightseeing</i>
<i>Photography</i>
<i>Skateboarding</i>
<i>Watching the sunset, having some time to think and watch.</i>
<i>Just enjoy the feeling of the fantastic coastline.</i>
<i>Frisbee</i>
<i>Celebrating birthdays</i>
<i>Photography</i>
<i>Just being there</i>
<i>Walking</i>
<i>Taking photos</i>
<i>I'm a member of [- - -] SLSC.</i>
<i>Driving, watching sea life, sunsets, evening meals on the beach in summer, Sorrento Quay.</i>
<i>Volunteering with Coastcare</i>
<i>Watching the waves, surfers and listening to the waves crashing on the beach. Life's a beach, it's the best!</i>
<i>Collecting rubbish from the beach</i>
<i>Watching the sunset with a drink</i>
<i>Photography</i>
<i>Fishing, viewing the ocean, watching surfers</i>
<i>Beach cleaning, taking grandkids to the beach</i>
<i>Walking partly in the water, i.e. paddling</i>
<i>Rubbish collection</i>
<i>Photography</i>

**Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):**

<i>Meditation, enjoying nature</i>
<i>Building sandcastles ;)</i>
<i>Waterplay for kids</i>
<i>Photography</i>
<i>Sandcastles, taking videos and pictures</i>
<i>Picking up rubbish watching birdlife</i>
<i>Concerts</i>
<i>Driving</i>
<i>Cricket</i>
<i>Bird watching, enjoying the sunsets</i>
<i>Watching storms and sunsets</i>
<i>Enjoying the natural environment</i>
<i>Socialising with friends and family</i>
<i>Mermaiding</i>
<i>Photography</i>
<i>Photography</i>
<i>Beach-combing</i>
<i>Cycling and walking — photography and painting</i>
<i>Driving on coastal roads</i>
<i>Identifying plants and birds. Seeing the habitat change through the seasons.</i>
<i>Ship &amp; craft spotting &amp; viewing RAAF/SAS exercises</i>
<i>Kitesurfing</i>
<i>Lookouts</i>
<i>The ability to relax and be surrounded by quality facilities.</i>
<i>Picking up rubbish with organised groups, or as an individual, or with a friend.</i>
<i>Bird watching; bush regeneration; marine mammals monitoring.</i>
<i>Picnics, BBQ</i>
<i>Games on sand (cricket, boules etc.)</i>
<i>Photography</i>
<i>Just gazing at the ocean</i>
<i>Visiting Rottnest, viewing the coastal scenery, from bicycle or car.</i>
<i>Kitesurfing</i>
<i>Birdwatching, Coastcare volunteering — planting, weeding, marine debris clean-ups, community education etc.</i>
<i>Watching sunsets</i>
<i>Birdwatching</i>
<i>Yacht club activities</i>
<i>Watching the view</i>
<i>Yoga</i>
<i>Checking emails and Skype with relatives or for business.</i>
<i>Anzac service at Ocean Reef Sea Scouts Club</i>
<i>Watching sunset</i>
<i>Photography</i>
<i>Walking along the coastal path, playing with grandchildren on the beach.</i>
<i>Photography</i>
<i>Rehabilitation of dunes by weeding and revegetation</i>
<i>Expressing coffee van yahava.</i>
<i>Bird and animal watching</i>
<i>Watching the sunset from my car in winter</i>
<i>Kitesurfing and stand-up paddling</i>

<b>Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):</b>
<i>Volunteer lifeguard at [- - -]</i>
<i>Photos</i>
<i>Surf lifesaving at SLS</i>
<i>Throwing frisbee and ball on beach</i>
<i>Walking along the pathways and enjoying the views.</i>
<i>Scenic drives</i>
<i>Observe vegetation</i>
<i>Just sitting</i>
<i>Driving</i>
<i>Surf club</i>
<i>The view</i>
<i>The coast itself is something to behold</i>
<i>Having grandchildren play or swim</i>
<i>Exercising in the parks</i>
<i>Bird watching</i>
<i>Birdwatching; meeting people</i>
<i>Nippers</i>
<i>Facilities at the coastal parks for barbeques and the fact that there are toilet facilities along the coastal path.</i>
<i>Rock pooling</i>
<i>I sit and watch the view</i>
<i>Photography</i>
<i>Just enjoying the view</i>
<i>Photography</i>
<i>Beach and park cricket</i>
<i>Horse riding</i>
<i>Birdwatching</i>
<i>Bike riding</i>
<i>Seeing horses on animal beach very much.</i>
<i>Watching the sunset is spectacular.</i>
<i>Taking the children to the coastal parks</i>
<i>Surf life saving</i>
<i>Enjoying the bush and wildlife and providing opportunities for my son to learn and appreciate them too.</i>
<i>Sitting on the sand and soaking up the moment</i>
<i>Watching my son surfing</i>
<i>Volunteer work weeding/planting</i>
<i>Admiring the view</i>
<i>Reading, bringing dinner</i>
<i>Sandcastles!</i>
<i>Surf club member at [- - -]</i>
<i>I live on the coast, so it is just being an integral part of the environment.</i>
<i>Birdwatching, flora and fauna, looking for dolphins, whales etc.</i>
<i>Sitting — talking with friends — enjoying the environment and views.</i>
<i>Photography</i>
<i>Photography, sketching, painting pictures</i>
<i>Watching the ocean and enjoying unspoilt nature and Bush Forever.</i>
<i>Living</i>
<i>Geo-caching and playing ingress.</i>
<i>Kitesurfing</i>

<b>Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):</b>
<i>Working as a volunteer with one of the coastal friends' groups — planting &amp; monitoring.</i>
<i>Beach cleaning</i>
<i>Photography</i>
<i>Painting</i>
<i>Just sitting and enjoying nature and all the people doing the same.</i>
<i>Photography, enjoying nature</i>
<i>Photography</i>
<i>Skateboarding</i>
<i>Watching the sunset, relaxing</i>
<i>Kite flying</i>
<i>Sightseeing marine life</i>
<i>Sitting in the car, enjoying the view from the car park.</i>
<i>Kitesurfing</i>
<i>Photography</i>
<i>Collecting rubbish</i>
<i>Watching the sunset</i>
<i>Surf lifesaving &amp; surf boats</i>
<i>Meditation</i>
<i>Photography</i>
<i>Everything about the coast is just magical, the beaches, the sunsets, the views...4 wheel driving to the beach, setting up, but can't anymore close to us...such a shame.</i>
<i>Participating in Sea Shepherd coastal clean-ups.</i>
<i>Just gazing at the sea from the front seat of my car.</i>
<i>Walking</i>
<i>Taking photos of the natural seascape</i>
<i>Family get togethers</i>
<i>Participating in Coastcare vegetation restoration and maintenance.</i>
<i>Jump off jetty, cleaning up the plastic.</i>
<i>Sightseeing with friends.</i>
<i>Bird watching, socialising and bringing overseas visitors to see our beautiful coastline, to view the sunsets from a vantage point.</i>
<i>Watching the sunset</i>
<i>Working, my job is based at 2 beach parks.</i>
<i>Sitting, relaxing, taking in the coastal and ocean views.</i>
<i>Photography</i>
<i>Watching sunsets</i>
<i>Bird watching</i>
<i>Walking my dog</i>
<i>Metal detecting on the beaches, which we also remove sharp objects at the same time.</i>
<i>Kitesurfing</i>
<i>Picking up litter, photography, attending planting/weeding days and bird and mammal watching.</i>
<i>Ukulele group at [- - -]</i>
<i>I love having time away from the madness of work and uni and being able to walk along the coast and pick up shells; gives me the best feeling, our coast is so important to me.</i>
<i>Sporting (other)</i>
<i>Catching up with friends</i>
<i>Wildlife interest and notification of sightings to relevant departments. Photography. Collecting rubbish from coastal and communal areas as a family. Meet friends.</i>
<i>Reading with a coffee</i>
<i>Kiteboarding</i>



**Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):**

*Finding relaxation and peace just looking at the ocean.*

*Photography*

*Watching storm surges break over the groyne.*

*Sitting in the rocks if there are any. Or at the ends of the groynes.*

*Motorcycle rides along the coast.*

*Watching sea life and weather.*

*Soaking in our beautiful sunsets*

*Photography of nature (landscapes and seascapes) and people (portraits).*

*Cleaning it up of human plastic rubbish!*

*Photography*

*Skating the path*

*It's sad that you haven't identified interacting with natural areas (nature observation, bird watching, flora photography, friends group activity etc) as one of the above categories. Also missing is cultural/spiritual purposes for Noongar people.*

*Member of [ - - ] SLSC*

*Informal beach sports*

*Watching the surf/waves*

*Kayaking*

*Surf lifesaving*

*The quietness of our local beach*

*Photography*

*Plogging (walking and picking up rubbish)*

*Coffee or meals along the coast*

*Rollerblading*

*Yoga on the beach*

*Yoga and surf club*

*Looking for bandicoots & other wildlife*

*Walking in the ocean along the beach*

*Windsurfing/kiting*

*Photography*

*Swimming with the dogs*

*Kitesurfing*

*Watching the sunset*

*Driving up the coast on a nice morning with a coffee*

*Collecting rubbish*

*Walking and love to sit in cafés on the coast*

*Camping/overnight fishing/4 wheel driving where still accessible*

*Four-wheel driving*

*Ocean Reef Sea Sport Club*

*Volunteering Coastcare*

*Walking along the beach from Mullaloo to Ocean Reef*

*Just being*

*Watching sunsets*

*Watching the sunset*

*Surf lifesaving nippers*

*4WD*

*Photographing the rare birds of WA*

*Kitesurfing*

*Exercising in park areas*

*Watching the kitesurfers from my patio*

<b>Verbatim responses — Are there any other activities you enjoy on the coast? (N = 275):</b>
<i>Serving my customers from my food truck at the beach</i>
<i>Birdwatching</i>
<i>Kitesurfing</i>
<i>Mermaiding</i>
<i>The horse beach</i>
<i>SLSA</i>
<i>Picking up the rubbish off Sorrento Beach</i>
<i>Dining out</i>
<i>Surfing</i>
<i>I have listed them, but just love the coast, have to get down to the coast often. Luckily, I live close and can walk.</i>
<i>Windsurfing</i>
<i>Sunsets??</i>
<i>Walking swimming exercising</i>
<i>Drinking beer</i>
<i>Just being there</i>
<i>Looking for shells</i>
<i>Would love to have a local café, restaurant or shops on the coast</i>
<i>Photography</i>
<i>Good exercise venue</i>
<i>Meeting friends at the informal, daily, year-round group next to changerooms area at Marmion.</i>
<i>Plein air painting and drawing</i>
<i>Playing beach volleyball</i>
<i>Yoga on the sand</i>
<i>Watching wildlife</i>
<i>Meeting family members and sitting on the beach and just talking</i>
<i>Sports</i>
<i>Yoga</i>
<i>Just being</i>
<i>Socialising while watching sunsets. Building sandcastles and looking for treasures with grandchildren.</i>
<i>Bird watching</i>
<i>Open water swimming</i>
<i>Taking small grandchildren paddling and on picnics. Showing them stuff on the beach; digging/building in the sand.</i>
<i>Catching up with friends at coffee van.</i>
<i>Beach clean-ups</i>
<i>I am a [- - -], so I enjoy showing my kids the local animal life — birds, animals on the rocks, sand &amp; shallow waters.</i>
<i>Passive recreation, such as breathing the sea air, looking for dolphins, whales, birds, bird watching.</i>
<i>Enjoying the view!</i>
<i>Being involved at Mullaloo Surf Lifesaving Club</i>
<i>Flying my drone</i>
<i>Riding the horses into the water.</i>
<i>Reading under the shade of trees by the coast is a great way to keep cool.</i>
<i>Enjoying the view</i>
<i>People watching</i>

## APPENDIX 26 — Verbatim responses

QUESTION: “When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — When you visit the North Burns Beach coast, what are your main reasons for choosing this coastal area — “other” (N = 29)</b>
<i>It has wheelchair access to walk the dog and a pet friendly café.</i>
<i>It is a great snorkelling spot.</i>
<i>It is friendly, you see some of the same faces and new ones. There are different languages, but most acknowledge each other. A sense of community.</i>
<i>It is beautiful.</i>
<i>Good place to photograph birds</i>
<i>Good structure for fish (goodbye fishing).</i>
<i>Good walking beach</i>
<i>It is good for birdwatching, especially white-winged fairy wrens.</i>
<i>Close to friends</i>
<i>Beauty</i>
<i>Coastal path is good for walking</i>
<i>Family relatives live here</i>
<i>We love the coastal path walk because it follows the coast and has good water views for birdwatching and marine life.</i>
<i>It is at the end of the cycle track</i>
<i>Photography. It is an excellent location for landscape/seascape photography. Popular with many photographers.</i>
<i>Good coastal walking path</i>
<i>Is next to my aunties' house.</i>
<i>It is the closest long stretch of sandy beach to home and is very important to us.</i>
<i>Walking along the beach to Mindarie. Looking forward to the pedestrian pathway being extended and an additional café/restaurant being located on the foreshore proposal.</i>
<i>The rocky southern portion makes for an interesting hike; the steps at the north end are good exercise.</i>
<i>It was a good spot years ago before the zone was changed, and development started!!</i>
<i>Good snorkelling</i>
<i>My friend lives there.</i>
<i>I work at [- - -] as a [- - -].</i>
<i>Parking area has shade, you can walk along the path or read under the trees, only problem, it's very close to play area and car park, it is a shame there aren't more areas where the seniors can relax, they often need areas for their chairs. Although it's great to see children having fun, it can be noisy for reading.</i>
<i>Café</i>
<i>I watch the sunset.</i>
<i>Friends live nearby</i>
<i>Just a great spot to visit</i>

## APPENDIX 27 — Verbatim responses

QUESTION: “When you visit Iluka, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

Verbatim responses — When you visit Iluka, what are your main reasons for choosing this coastal area — “other” (N = 25)
<i>The hilly section between Iluka and Burns is good exercise. The views are spectacular!</i>
<i>Volunteer [- - -]</i>
<i>It is good area to relax on my exercise route</i>
<i>Photography — this is an excellent location for portraits.</i>
<i>Beach, dunes &amp; rock cleaning.</i>
<i>Good, safe toddler play area.</i>
<i>Interesting marine life live on the sand/rocks here.</i>
<i>To observe native animals</i>
<i>To assist with rehabilitation</i>
<i>Enjoy using the new look-out platform to take advantage of the views.</i>
<i>I paint there quite often.</i>
<i>I help do conservation here.</i>
<i>Good toilets</i>
<i>Family visit</i>
<i>It's a good place to see wildlife and birds.</i>
<i>Close to family</i>
<i>It has loads of wildlife and some interesting bays and the path goes all the way to Burns Beach.</i>
<i>Good for photographing birds</i>
<i>Flora and fauna</i>
<i>Great shells</i>
<i>Nature — quendas</i>
<i>Unfortunately, many pet owners leave the residue of their dog in a plastic bag left hanging on the fence or pathway sadly! Better off given this circumstance to leave the dog waste on the side of the path, at least it will eventually disperse, plastic won't. No bins on pathways for disposal, only at Burns Beach café area and Foreshore Park, Iluka.</i>
<i>Love the rocks and landscape and rough sea.</i>
<i>Iluka food van on weekends is a great addition.</i>
<i>Love to have access to beach for pets.</i>

## APPENDIX 28 — Verbatim responses

QUESTION: “When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — When you visit the coast north of Ocean Reef Boat Harbour, what are your main reasons for choosing this coastal area — “other” (N = 28)</b>
<i>Birdwatching</i>
<i>Beautiful coast, unspoilt by commercial business.</i>
<i>Ospreys can often be seen fishing here at the boat ramps.</i>
<i>The main draw to here is fishing and the beautiful beachside pathway.</i>
<i>Walking, cycling</i>
<i>It is beautiful, glassy waters and white sandy clean beaches.</i>
<i>Great views; the hill up to the picnic table is good exercise.</i>
<i>Just love the coast as it is for what I do.</i>
<i>I go fishing off the rocks.</i>
<i>Walking</i>
<i>Boat ramp</i>
<i>I'd visit it a lot more if the Marina got done.</i>
<i>Good parking for fishing and canoeing.</i>
<i>We're members of the [- - -] &amp; regularly visit there &amp; use its facilities. We also regularly use the boat launching facilities.</i>
<i>Boat ramp</i>
<i>Boat ramp</i>
<i>Fishing</i>
<i>Different areas of the coastline offer different aspects.</i>
<i>Good fishing</i>
<i>A good walk from my house, should be a designated dog area at one of the beaches though, even if just out of season early mornings/evening.</i>
<i>Good for fishing</i>
<i>Part of a good walk towards Burns Beach and the café...as it is the nearest café to walk to from Ocean Reef.</i>
<i>It's a great place to start the walk from Ocean Reef to Burns Beach, with a beautiful view of the beach, with lovely coves along the way. Please don't get rid of them! They are a hidden gem!</i>
<i>We usually park here and then walk or cycle along the coast.</i>
<i>Abalone fishing</i>
<i>Good for photographing birds</i>
<i>Still waiting for Marina to be built</i>
<i>Good for spotting birds and wildlife, also really rugged and beautiful cliffs.</i>



## APPENDIX 29 — Verbatim responses

QUESTION: “When you visit Mullaloo, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — When you visit Mullaloo, what are your main reasons for choosing this coastal area — “other” (N = 42)</b>
<i>I can walk there</i>
<i>It has coffee van and community gathers there.</i>
<i>Allows kitesurfing</i>
<i>It is beautiful</i>
<i>The water is shallower for further out than other Perth beaches which means you can swim there without being as concerned about sharks.</i>
<i>SLSWA carnivals and training</i>
<i>I live [- - -].</i>
<i>Close to my sisters where I stay every year.</i>
<i>Best beach in the city.</i>
<i>Swim each day with friends, then have a coffee at Boardies. Ex-member of surf club so like to keep in touch.</i>
<i>The best beach in Perth.</i>
<i>Swim lessons</i>
<i>Lovely during the week when not too busy</i>
<i>I have come to this beach before I even lived in the area and was in the surf club as a child.</i>
<i>We enjoy the beach but also the surrounding trees, native bushland, quenda sightings and bird watching.</i>
<i>I enjoy participating in planting and weeding activities with the local Coastcare group. Good place to see quendas and native plants/bush tucker.</i>
<i>Great paddling conditions</i>
<i>It is a good exercise venue</i>
<i>It has playgrounds</i>
<i>More well-known beach</i>
<i>It has a great café. Swell.</i>
<i>In summer it's the most beautiful beach to go with white sand and crystal blue water.</i>
<i>Do exercise classes</i>
<i>Volunteer lifeguard at Mullaloo</i>
<i>Over-crowded now, unfortunately and parking now restricted.</i>
<i>The northern end of this beach is flat, which makes for outstanding walking at low tide.</i>
<i>I am concerned there is insufficient parking at Pinnaroo and Whitfords Beach.</i>
<i>I live there</i>
<i>Top beach</i>
<i>Good sized pergola seating areas suitable for family events.</i>
<i>It has lovely views. It feels a bit remote with the long stretch of beach and the grass in the dunes.</i>

**Verbatim responses — When you visit Mullaloo, what are your main reasons for choosing this coastal area — “other” (N = 42)**

*Time in nature. Pre-natural ecosystem not fake concrete paths & whales' tails. Give me dugites & trapdoor or endemic dancing spiders over more car parks any day of the week. What we need to survive is a whole lot different than our wants & desires to live in a sterile environment devoid of any of the things needed to actually sustain life. Eg biodiversity & healthy ecosystems with a good balance of species. What I'd like to see less of is human encroachment into more natural ecosystems & undeveloped areas where we have not even fully discovered the endemic species our advanced civilisation has annihilated to date! I'd call for someone with foresight & vision toward the long-term sustainability of this civilisation for the sake of the right of all species to continue to exist together on this planet & to do that, we need to urgently defend what's left of Earth's biomass' shared resources. All life has a right to share in the resources left. Not just the top 1% of 1 species thanks to a system designed by & for the smallest number of people with the most plastic squirrelled away behind the biggest gates. Even the biggest walls & fortresses fall under the ravages of time. Only a small number of people are qualified to think about what's important here. So, go back to the facts & scientific research & have the [ . . . ] to go out there & fight for what the science is screaming at you; that is critically urgent to provide your people of your species what they most need for long-term survival. It's not rocket science & the scientific consensus has been in for nearly 2 decades, so just get on with it & start protecting this planet from the ignorance of the hoards, cos we are acting like an ignorant plague of pests in spite of facts & evidence & free education. Because of capitalism. Need to grow up as a species & stop this short-sighted greed & solipsism that's infected the minds of the most dangerously overpopulated species on Earth. We have plenty of services & resources. Just too many humans. Education to tertiary level causes lower birth rate because women choose to have less children later in life. So reduce the BR naturally without forcing a human rights issue and focus on fully funding tertiary education for all girls & women (at least, but preferably XX & XY humans) to solve the problem of overpopulation & sustainability/equitable sharing out of the limited resources Earth has left.*

*I exercise there (weather depending) once a week with friends.*

*It was our local beach and, even though we have moved to [ . . . ], we still love that beach!*

*It has good downwind ocean paddling conditions with easy access to launch and finish.*

*History — been swimming at Mulla's for [ . . . ] years.*

*Good swimming conditions*

*It has everything and is one of the most stunning beaches I have ever seen.*

*Easy for a disabled person to enjoy nature safely.*

*It's clean*

*WA's best beach. Clear waters white sand, never seen better.*

*Good for photographing birds*

## APPENDIX 30 — Verbatim responses

QUESTION: “When you visit Pinnaroo Point/Kallaroo, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — When you visit Pinnaroo Point/Kallaroo, what are your main reasons for choosing this coastal area — “other” (N = 33)</b>
<i>Dog beach</i>
<i>Ski area</i>
<i>Great paddling conditions</i>
<i>Dog beach</i>
<i>Kitesurfing</i>
<i>It's the only dog beach in the City of Joondalup.</i>
<i>Kitesurfing</i>
<i>Good kayaking area</i>
<i>Best dog beach of all!</i>
<i>Having a beach to exercise my pet and to be able to enjoy the beach without having to leave her at home is highly important to me.</i>
<i>Good for paddling</i>
<i>Windsurfing</i>
<i>Sport, swimming, running</i>
<i>Not the closest, but close enough to provide variety.</i>
<i>Boating area</i>
<i>Fishing is permitted</i>
<i>Love watching the horses at the animal exercise beach.</i>
<i>Running up "twin peaks". The limestone peaks at Hillarys Nodes.</i>
<i>Good fishing</i>
<i>Best place to meet up with friends</i>
<i>Meet friends and start run along costal paths, followed by coffee.</i>
<i>We go fishing</i>
<i>Future home at [- - -].</i>
<i>Patrolling for Sorrento SLSC</i>
<i>The cycleway does need upgrading, and at more attention to clearing sand off the paths after storms as it can become quite dangerous.</i>
<i>Windsurfing...etc.</i>
<i>Family nearby</i>
<i>Great animal exercise beach</i>
<i>Visit when parking is unavailable at Sorrento</i>
<i>Best for fishing</i>
<i>Kitesurfing allowed</i>
<i>Fishing</i>
<i>Boating off the point as our family has done since [- - -].</i>

## APPENDIX 31 — Verbatim responses

QUESTION: “When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

Verbatim responses — When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area — “other” (N = 42)
<i>Boating area</i>
<i>Great place for a family picnic and day at the beach.</i>
<i>Don't go too often there not my area</i>
<i>It is the only horse beach in the north.</i>
<i>Although built-up, the beach dunes are good for bird photography.</i>
<i>Great views from the lookouts.</i>
<i>To compete in triathlons</i>
<i>I can walk and enjoy without the need for a car.</i>
<i>Park run</i>
<i>Good flat and hard beach sand for walking and running on the hot days.</i>
<i>Sailing at HYC</i>
<i>I use the beach after fitness activities in the park.</i>
<i>Triathlon</i>
<i>In Feb–Mar, it's sometimes possible to walk from Hillarys groyne to Ocean Reef groyne. That is a truly wonderful beach walk! I like dogs, so walking along the dog beach adds to the fun.</i>
<i>Playground areas for children</i>
<i>It has a playground</i>
<i>It is excellent for photography</i>
<i>Boating and recreation</i>
<i>Watching ospreys, sailing boats.</i>
<i>Good for fishing</i>
<i>Great big park and BBQ area</i>
<i>One of the most beautiful beaches on the coast for families and shouldn't be extended to include more dog areas.</i>
<i>It's my closest dog beach. Great during the week, but weekends and holiday periods, it's a nightmare! Not enough parking, so overcrowded and smelly!! Needs to be extended, or another dog beach somewhere between Whitford Nodes and Waterman's Beach. So many empty beaches that would be lovely to walk my dog along and have a swim!</i>
<i>Bird watching (wrens), lookouts along the track to take in fantastic views over sand dunes and ocean. Coastal vegetation intact and native, sights, scents and animals, reptiles, insects, birds etc.</i>
<i>Unfortunately, it is pets on lead here, but I do go here also because it is further from busy streets and it feels protected/nice/different because of the trees.</i>
<i>Parkrun</i>
<i>Great animal exercise beach nearby</i>
<i>Great atmosphere</i>
<i>Park for family friends</i>
<i>It has good conditions for kayaking.</i>
<i>The Nodes provides a good, quiet, elevated running course.</i>
<i>It is the only dog beach in the Joondalup area, next dog beach is 20 km further north.</i>
<i>AQWA is close by.</i>

**Verbatim responses — When you visit Hillarys Beach (Whitfords Nodes), what are your main reasons for choosing this coastal area — “other” (N = 42)**

<i>It has parkrun</i>
<i>Close to family</i>
<i>Very short walk to the beach</i>
<i>Family get-together</i>
<i>Triathlons</i>
<i>Fantastic spot, love going here.</i>
<i>Running up the "twin peaks", limestone hills at the Nodes.</i>
<i>Work as a [. . .] there.</i>
<i>Patrolling and training Sorrento SLSC.</i>



## APPENDIX 32 — Verbatim responses

QUESTION: “When you visit Sorrento, what are your main reasons for choosing this coastal area — “other””

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — When you visit Sorrento, what are your main reasons for choosing this coastal area — “other” (N = 42)</b>
<i>It has a great surf club</i>
<i>Shark net</i>
<i>Member of Sorrento SLSC</i>
<i>Group training leaves from Sorrento</i>
<i>Sailing at HYC</i>
<i>North Coast Triathlon Club meeting point</i>
<i>Excellent walk from Sorrento to Trigg excellent love it</i>
<i>Shark net</i>
<i>Shark proof net</i>
<i>Shark net</i>
<i>This is the safest swimming area and, after all the shark attacks along our coast, we usually swim here at least three times a week in summer.</i>
<i>Shark net is good</i>
<i>And it's close to Voyage Café.</i>
<i>Natural and well-maintained dunes and native dune vegetation. Birds.</i>
<i>The view is beautiful, especially the sunsets</i>
<i>Fishing</i>
<i>Member at Sorrento Surf Club</i>
<i>Playground for meeting with young families.</i>
<i>Swimming safely in the net.</i>
<i>Value the coastal heath and rocky cliffs, lovely to look at while walking, swimming.</i>
<i>Shark safety net</i>
<i>Again, it is a favourite painting venue and Wanneroo Joondalup Art Society hold exhibitions at Sorrento Surf Lifesaving Club.</i>
<i>Shark net</i>
<i>Shark net for long ocean swims.</i>
<i>Its where my tri club does a lot of training out of and where we often meet for swim training.</i>
<i>Snorkelling</i>
<i>Beautiful scenery</i>
<i>Kids involved with Sorrento SL</i>
<i>I belong to the MAAC</i>
<i>Fishing</i>
<i>Shark net</i>
<i>Boating area</i>
<i>Close to Marina and Hillarys Yacht Club</i>
<i>Shark free enclosure</i>
<i>Great for all the family</i>
<i>Shark net is main reason</i>
<i>No tall buildings</i>
<i>Too busy</i>

**Verbatim responses — When you visit Sorrento, what are your main reasons for choosing this coastal area — “other” (N = 42)**

*Little food kiosk in the lifesaving building*

*Attend surf club*

*The foreshore vegetation is returning to its former natural state.*

*It has a shark barrier*

## APPENDIX 33 — Verbatim responses

QUESTION: “Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion)”

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>Yes, in some areas.</i>
<i>Iluka foreshore, North Burns Beach. At both there are a much higher number of exposed rocks.</i>
<i>At the moment, seasonal loss of sand from the beach north of the groyne at Hillarys seems to be getting worse.</i>
<i>Cliff at Mozzies — high tides washed some of the cliff away, it has made the surf better so would say leave nature alone.</i>
<i>We have [- - -] lived in Burns Beach for [- - -], so have not been here long enough to comment properly; but have experienced a couple of storms where the tides seem to be higher than usual, probably causing increased erosion.</i>
<i>Minor — south Mullaloo</i>
<i>Erosion at Whitfords Nodes beach seems to worsen every year.</i>
<i>North of Hillarys Yacht Club is taking a battering.</i>
<i>Whitfords' beaches</i>
<i>Pinnaroo Point up to and along coast to Mullaloo — lots of erosion of the dunes and sand due to storms, very sad to see it gone.</i>
<i>Mullaloo Beach...erosion near fences on the beach.</i>
<i>Burns Beach</i>
<i>Burns Beach to Mindarie</i>
<i>Hillarys Dog Beach — especially during the winter, loses a lot of the beach to the sea. The area to step down from the path to the beach becomes dangerous (not only for humans, but also for dogs and horses).</i>
<i>Erosion is seasonal and climate change needs to be addressed at local levels.</i>
<i>Quinns, Mindarie</i>
<i>Mullaloo beach access opposite Korella Street</i>
<i>In [- - -] years of living across the road only a couple of limestone cliff edges collapsed in winter storms.</i>
<i>North of the Hillarys Boat Harbour</i>
<i>The usual places, e.g. beach near Watermans. It is still early winter and so it is at its worst.</i>
<i>Burns Beach</i>
<i>Each year winter storm activity seems to cut further into the dune system at Pinnaroo Point.</i>
<i>Our most frequented beach is South Burns Beach (at the end of Burns Beach Road), not mentioned here, but over the years I've definitely noticed erosion there.</i>
<i>Dog Beach</i>
<i>Marmion Angling and Aquatic Club</i>
<i>Iluka foreshore</i>
<i>Watermans Bay and Metams Pool</i>
<i>The past two autumn/winters seem to have caused a noticeable reduction to the sand hills.</i>
<i>Between Whitfords Nodes and Mullaloo — the Hillarys Dog Beach area in particular over the last few years.</i>

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>Burns Beach</i>
<i>Burns Beach</i>
<i>Burns Beach — coast seems to be eroding rapidly.</i>
<i>We have commented on the erosion of the beach in the swimming area and thought that is due to climate change.</i>
<i>The last storm took a lot of sand. Hopefully it will return.</i>
<i>Hillarys Beach area</i>
<i>Marmion Angling Club erosion around the beach and the building.</i>
<i>Dog Beach at Whitfords Nodes</i>
<i>Dunes and access path south of Mullaloo SLSC frequently eroded each winter. High water mark now much further east than it was 20 years ago in this section of coastline.</i>
<i>Decreased beach width after storms, wave undercut dunes at other locations (City of Stirling, Wanneroo), loss of coastal vegetation.</i>
<i>At Pinnaroo Point</i>
<i>Burns Beach north of café after recent storm</i>
<i>Sorrento Beach, just south of Surf Club.</i>
<i>Over the past 20 years there has been significant reduction on the beach area, especially at the Hillarys Dog Beach.</i>
<i>General erosion during the last 15 years. Rock formations in Iluka have decayed.</i>
<i>Iluka/Beaumaris Beach in the most recent storms</i>
<i>Some minor erosion north of the groyne at Burns Beach after the recent storms.</i>
<i>Particularly north of the marina (Nodes) the beach has been degraded over a number of years. Fences destroyed, sand removed, dunes eaten into and paths having to be re-done to enable access to the beach. Other beaches that I have visited have not had that level of erosion.</i>
<i>At Mullaloo Beach the sand area appears to be decreasing.</i>
<i>Iluka coastline below the wooden ramp seems to be eroding quite quickly.</i>
<i>North of Hillarys Boat Harbour/Whitfords Nodes (southern end).</i>
<i>Pinnaroo Point (northwards) during the late May/early June winter storms. Storm surge ingressed into the coastal vegetation. Fortunately, the impacts were mitigated to an extent by the root structures of the remnant vegetation.</i>
<i>At Hillarys Nodes, the beach is always quite narrow but in winter it is washed away.</i>
<i>Small amounts of erosion just south of Sorrento. Not too bad compared to further south (North Beach) where there is significant erosion.</i>
<i>Ocean Reef south of Iluka</i>
<i>When I was a child I used to swim at the beaches south of the Ocean Reef Marina, now that is impossible unless the tide is very low.</i>
<i>Watermans Bay (opposite Bay 33) where there is sandbagging in place to prevent further erosion of coastal paths and roadways.</i>
<i>Just south of the Marmion Angling and Aquatic Club, the sandy beach is reduced and the water comes right up to the rocks at times (mainly summertime)</i>
<i>South of the 3rd groyne eroded, north of the groyne extended.</i>
<i>The Whitfords Dog Beach seems to get smaller every time I go there.</i>
<i>Mullaloo looked quite different a couple of months ago.</i>
<i>Iluka Beach hut foundations are totally exposed. Beach access on the southern stairs is no longer are accessible.</i>
<i>Occasionally we have noticed erosion at Sorrento Beach and Pinnaroo Point.</i>
<i>Hillary Dog Beach, North Mullaloo</i>
<i>Not sure if it's just seasonal/tidal fluctuations?</i>
<i>People accessing dunes despite signs to say stay out.</i>

**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

<i>Dog Beach dunes being eroded</i>
<i>Quinns</i>
<i>Just in passing along most of the beaches.</i>
<i>Significant pileup of sand along groynes indicates lots of sand is being transported, Pinnaroo Point less of a point than it used to be.</i>
<i>North Burns Beach fairly heavy after some storms.</i>
<i>Iluka Beach had severe erosion last winter. Some sand returned with the tides and change of season, but I'm unsure if it was back to normal by summer.</i>
<i>Burns Beach</i>
<i>I think the Hillarys Dog Beach was wider (had more sand) 10 years ago.</i>
<i>Whitfords Nodes Beach and the Hillarys Dog Beach</i>
<i>The whole coastline</i>
<i>North of Burns Beach Café, it is unfortunate that vehicles use the dunes for off-roading and some vehicles also drive (and get bogged) on the beach where they are not supposed to be. Where planting appears to be done, it seems to be wind damaged or trampled. In some sections, the beach has changed quite noticeably due to winter tides. Beaches north of Ocean Reef are small, difficult to access; unfortunately some people have made their own short cuts which adds to erosion.</i>
<i>North Burns Beach has become "rockier" over the last 10 years or so.</i>
<i>After high tides and storms, you can see very clearly the movement of the beach.</i>
<i>Burns Beach storm damage</i>
<i>Whitford Nodes Beach has lost a lot of dune and sand due to tidal erosion.</i>
<i>Sand erosion along the coast in winter. It isn't coming back in the summer as it once did. It seems to be sitting off the coast.</i>
<i>Dog Beach</i>
<i>Thanks for fixing Iluka steps to beach frequently, just rubbish and litter in bushes that is not reachable for public to remove.</i>
<i>Along the whole coast strip near Mullaloo up to the north side of Hillarys Boat Harbour, but it's due to the time of year as I see this every winter.</i>
<i>Marmion</i>
<i>Only in winter when the tide comes in due to storms. Whitfords/Nodes seems to be very unkept and has a lot of old bitumen in the sand at the most southern point. The walkways are eroded and fences don't stay in place.</i>
<i>Burns Beach opposite public toilets used to have much more sand.</i>
<i>Burns Beach</i>
<i>I have lived in Iluka [- -] years, the beach erodes in winter and replenishes itself; we should be mindful not to interfere with this process too much.</i>
<i>Recent storms have had an adverse effect.</i>
<i>Between Burns Beach and Mindarie</i>
<i>Watermans Bay</i>
<i>Ocean Reef next to Marina — smaller beach area</i>
<i>Hillarys Dog Beach</i>
<i>Medium</i>
<i>The Hillarys Dog Beach</i>
<i>Watermans Beach — the beach is getting smaller and steeper</i>
<i>North Beach, Quinns</i>
<i>Mullaloo Beach often more eroded at certain times of year.</i>
<i>North of Burns Beach...</i>



**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

*The Dog Beach. I couldn't believe the damage to the dunes after the first storm this year, looked worse than last year at the end of winter.*

*Mullaloo Point*

*At the section north of the Boat Harbour the beach has become narrower.*

*On the contrary, there is accretion.*

*Not in my local area, but from news reports further north of Ocean Reef Marina.*

*Notice Mullaloo Beach sand is often affected by storms. Quinns Rock dunes are eroding fast.*

*Seasonal changes to beaches, dunes & loss of protective fencing.*

*Yes, from time to time, especially around the doggy beach area/dunes along near Flinders Avenue area.*

*Cliffs falling on coastal walk*

*Whitfords Beach over the years lost fencing in storms and dune erosion.*

*Dog Beach, Pinnaroo Point*

*Erosion of the beach and dune area immediately north of the Hillarys Marina complex has been ongoing as is evident currently and has been increasing since the construction of the Marina seawalls.*

*Hillarys Dog Beach, particularly in winter months.*

*Whitfords Nodes and Hillarys Beach Park*

*Whitfords beach sand and dunes washed away due to heavy storms*

*All beaches, as they are always changing.*

*Not in areas mentioned already*

*Whitfords Nodes*

*I've lived in the area for a long time and have noticed a lot of change to the beaches, particularly erosion at North Beach area and loss of sandy beach at Sorrento following construction of Hillary Boat Harbour.*

*The recent storm 24th/25th May noticeably undercut the dunes between the parking area on Northshore Drive near St Ives Loop and south of Mullaloo Surf Life Saving Club more so than winter last year as I remember. It is my local walk.*

*Burns Beach has had increased sand erosion occur recently; I used to be able to sit on the sand and be head height with a certain rock feature but as of last week all the sand is gone and I would now sit at the bottom of the rock. It would be about 2 or 3 feet in height difference.*

*Pinnaroo Point and north of Hillarys Marina (dog exercise area) has seen substantial dune erosion from the recent storms and removal of coastal dune sand and vegetation.*

*Loss of sand at beach access at Burns Beach, becoming dangerous.*

*I'm saying "yes" because, although I've not had a close look since the heavy winds & rain of the past week, I've seen the heavy surf and would be surprised if there's not a lot of erosion, as I know there is up at Lancelin.*

*Whitfords Beach*

*Quinns Rock, Burns Beach*

*Whitfords Dog Beach has eroded significantly so there is a small beach and a big drop off into the ocean.*

*Hillarys Beach cycleway is very dangerous at times with the amount of sand build up which is not cleaned up enough.*

*At Watermans Bay*

*During storms — North of Burns Beach*

*Periodic storm damage, particularly just north of Hillarys Boat Harbour.*

*Triangles at Sorrento Beach. The sand looks low and you can tell the tractor has been around again.*

*North of Hillarys Boat Harbour. Sand dunes being washed into the ocean over many years. As recently as May this year.*

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>Weather always washes beach away at Dog Beach.</i>
<i>Burns Beach sand washed away exposing rocks and beach getting narrower.</i>
<i>Sand movement South of Sorrento SLSC</i>
<i>Another 3 m of sand dune has been lost to the storm 26–17 May 2018 at the designated Hillarys Dog Beach exposing dune restriction fencing and beach access paths. By not watering the grassed area between Whitfords Avenue to Northshore Avenue in the summer/autumn months, there has been clear erosion of the soil due to the grass that has died this summer/autumn 2017/18 season. The infrastructure (sprinkler system) is in place for the described grassed dune area but has not been used/operational since the west end of Whitfords Avenue Main Roads work has been completed. It is assumed the existing reticulation system requires maintenance or tie-in repair due to the Main Roads department damage.</i>
<i>Along the Dog Beach — regular erosion in storms and high tides.</i>
<i>The coastline everywhere is changing rapidly due to rising sea levels.</i>
<i>North of Hillarys Boat Harbour, Pinnaroo Point</i>
<i>Burns Beach and more so further north — Quinns Beach and south (not in Joondalup — Mettams and Floreat.</i>
<i>Marmion Angling and Aquatic Club beach appears to have a reduced beach area, compared with how I remember it to be when growing up in Sorrento.</i>
<i>Whitfords Beach</i>
<i>Width of beaches decreasing at Whitfords.</i>
<i>Near Burns Beach where it is less developed</i>
<i>North of the Hillarys Marina</i>
<i>I have noticed seasonal changes only where the beach width at the Dog Beach reduces and increases at different times of the year.</i>
<i>Along the Dog Beach and at Watermans Bay</i>
<i>Burns Beach area has worsened with erosion.</i>
<i>Quinns Beach and Iluka, but mostly Whitfords Dog Beach.</i>
<i>I have noticed a build-up on sand south of Hillarys Boat Harbour and the machines having to remove it.</i>
<i>Dog Beach</i>
<i>This is a hard question to say yes or no as the landscape changes so dramatically because of differing weather. One section near the Marmion Angling Club has no beach today and then next week the beach is back — how can anyone control that?</i>
<i>Whitfords Nodes (Friday—Saturday, 25—26 May storm)</i>
<i>Narrowing of beaches</i>
<i>Burns Beach. (Or maybe it's Iluka Beach.) The legs on which the pergola/picnic area stands are now exposed, and the cement bases are showing. The wooden steps leading up to the deck do not reach the ground and we have to climb onto rocks to reach the bottom of the steps!!</i>
<i>Just recently after the storm at the top of the beach down by Jack Kikeros Hall.</i>
<i>Whitford Nodes — Animal Beach</i>
<i>MAAC club area</i>
<i>Burns Beach groyne</i>
<i>The dunes at Pinnaroo are almost gone near the point. Each year there is less protection and less sand.</i>
<i>Caused by mechanical means by digging out the sand/sand dunes so the natural defence is undermined. This happens north of Mullaloo Surf Club — and you can clearly see the difference south of the Surf Club where no under-mining has occurred. The recent storms highlight the importance to leave sand dunes alone.</i>
<i>Burns Beach near community building, have watched it erode for 45 years, believe it should have been dealt with years ago, the groyne has not helped it.</i>

**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

<i>Yes, natural winter erosion up to the dunes.</i>
<i>Whitfords Beach about 10 metres last year and erosion at a lesser rate, but still erosion over the previous 10 years.</i>
<i>Burns Beach, Whitfords Dog Beach</i>
<i>Noticeable at Iluka Foreshore, Ocean Reef and at Flinders Avenue intersection with West Coast Avenue.</i>
<i>Whitford Nodes and north of Pinnaroo Point</i>
<i>Beach just south of Marmion Angling Club seems to be worse in the last couple of winters than previously.</i>
<i>Burns Beach area</i>
<i>At Mullaloo Beach slightly north of club house. The sand gets eroded every few months. The Shire then pays a fortune to hire an excavator to shift the sand and then 2 weeks later it is back to where it was before. What a waste of money.</i>
<i>Burns Beach, I have been in the area for [- -] years and have noticed that Burns Beach is now presenting many rocks rather than sand.</i>
<i>Whitfords Nodes</i>
<i>Not clearly noticeable</i>
<i>North Burns Beach</i>
<i>Burns Beach to Mindarie</i>
<i>It is clear around the Hillarys Marina and Ocean Reef Marina that these structures are impacting negatively on the adjacent shore lines. The erosion is clearly obvious along Sorrento/Trigg where the dunes are non-existent.</i>
<i>It is dependent on season.</i>
<i>North Hillarys Marina and Mullaloo Beach</i>
<i>North of the breakwater at Burns Beach...near the café...the sand has disappeared after the recent storms leaving a rocky place instead of a lovely sheltered sandy spot.</i>
<i>Mullaloo &amp; Burns Beach</i>
<i>Not in City area — but at Quinns Beach lots of coastal erosion.</i>
<i>Loss/erosion of sandy dunes &amp; vegetation great in most areas. Reduction of sandy beach area.</i>
<i>Whitford Nodes has eroded to the fence line, leaving a dangerous concrete plank obscured above pathway.</i>
<i>Watermans</i>
<i>Whitfords Nodes, Dog Beach area, fences washed away.</i>
<i>Erosion along Dog Beach is visibly noticeable after winter months.</i>
<i>MAAC club and south of this area. In the last few weeks in particular.</i>
<i>After last weeks' storms, quite a bit was over the paths as I ride from Hillarys to Burns.</i>
<i>Pinnaroo Point beach is a third of what it was 10 years ago.</i>
<i>Marmion to right of angling club, some boulders of limestone fallen in past five years.</i>
<i>A little at Whitford Nodes. Waves have come up to the sandhills some. Caused by the storm a couple of weeks ago it seems.</i>
<i>Whitfords Dog Beach is always losing its entry ways due to storms.</i>
<i>North end of Burns Beach</i>
<i>Hillarys and Marmion Beaches</i>
<i>Watermans Bay and near the Marmion Angling Club — large amounts of erosion at the beach areas.</i>
<i>The level of erosion does fluctuate at Sorrento Beach, but the winter water edge seems to be increasing leaving less beach. Dune restoration has made huge gains over the past 10 or so years. Particularly in the degree of windblown sand.</i>
<i>Iluka beach after 28 May 2018 storm.</i>

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>Around Whitford Nodes/Dog Beach Hillarys</i>
<i>My impression is that there has been loss at Burns Beach and Mullaloo</i>
<i>Whitfords Dog Beach</i>
<i>A small amount north of Burns Beach, north of the groyne.</i>
<i>South of the third groyne at Sorrento Beach near stairs to Robin Avenue</i>
<i>North of Burns Beach</i>
<i>Hillarys Beach dunes</i>
<i>Hillarys Beach</i>
<i>Not in the Mullaloo Beach precinct — I haven't really noticed in the other areas.</i>
<i>I haven't been down since the last storm but I'm sure there would be erosion.</i>
<i>You can see it from the pathway through the dunes at Mullaloo heading toward Ocean Reef Boat Harbour.</i>
<i>Pinnaroo Point no longer has a sand bar and hardly rates as a point any longer.</i>
<i>Iluka Burns Beach</i>
<i>Very noticeable over the last few years especially during winter storms.</i>
<i>Hillarys Dog Beach</i>
<i>Whitfords Beach area following storms</i>
<i>North of Hillarys Marina. North of Mullaloo Surf Club seasonally.</i>
<i>North of the Hillarys Marina</i>
<i>Any beach either side of a groyne or marina rock wall is irreparably damaged. Stop building out into the ocean and disrupting the natural flow of the current. The build-up of weed on the beach is revolting. The rubbish left at these sites is disgusting. The discarded fishing line hooks and sinkers are dangerous.</i>
<i>Pinnaroo, less sandy beach area for use.</i>
<i>Along the Dog Beach</i>
<i>I moved to Burns Beach [ - - ] ago and love it but have been disappointed with how difficult it is to swim at the beach due to the rocks and lack of sand, as I visited a few times in the early 2000s and remember the beach being more sandy — but maybe I just visited on lucky days back then so can't be sure what "normal" was or is.</i>
<i>Whitfords Nodes. Pinnaroo Point. Dog Beach.</i>
<i>Burns and Pinnaroo Point Dog Beach, mainly after storms.</i>
<i>In winter at Pinnaroo Point and the vegetation. This changes back in summer at the point</i>
<i>Quins Rock Beach area, particularly higher level of erosion than other locations applicable to this survey and quite severe level during storms.</i>
<i>Hillarys North break wall to Whitfords/Pinnaroo Point</i>
<i>Every year it gets worse</i>
<i>Hillarys, Pinnaroo, Kallaroo, Mullaloo — all beaches recently eroded badly.</i>
<i>If anything, it has improved.</i>
<i>Iluka Beach access paths</i>
<i>Erosion at Marmion Beach near Lennard Street</i>
<i>Pinnaroo has shrunk every year since the Marina was built and will continue to do so due to the interruption of coastal sediment migration from S to N. Where will it stop is the only question.</i>
<i>Around Pinnaroo Point, especially high tides.</i>
<i>After the recent storms, Burns Beach has lost a lot of the sand and a load of rocks are covering the beach to the right of the groyne.</i>
<i>Marmion beach in front of MAAC and new MAAC car park. However also noticed high levels of accretion immediately south of southern rock wall of Hillarys Boat Harbour.</i>
<i>The Whitford Nodes Dog Beach from around April often has no sand left so impossible to walk pets. This could be a seasonal problem.</i>

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>The shape of the beach at Mullaloo has changed over time and appears to be more prone to erosion in the winter storms. The area in front of the MLSC does seem to be affected by erosion more than it used to be.</i>
<i>During winter, around north Mullaloo.</i>
<i>Mullaloo Beach — mild</i>
<i>Noticed that 50% of Iluka Beach was eroded after the latest stormy weather. May/June 2018.</i>
<i>North of Ocean Reef Marina — medium, Whitfords Dog Beach — significant.</i>
<i>Mullaloo Beach in winter time</i>
<i>All along the coast</i>
<i>Along Burns Beach little pergolas on beach sealed-off. Also, Mullaloo north of Surf Club.</i>
<i>Pinnaroo Point dune erosion</i>
<i>Ocean side of Whitford Nodes. In winter, hardly any beach left.</i>
<i>Burns Beach, depending on the season of course.</i>
<i>It's most apparent south of the Key West Car Park.</i>
<i>Winter erosion only so far this year.</i>
<i>Ocean Reef Marina to Quinns Beach</i>
<i>Northern side of Hillarys Marina.</i>
<i>Quinns Beaches, not City of Joondalup I know.</i>
<i>North Burns Beach eroded into the dunes with the last storm.</i>
<i>Out towards Iluka and Burns Beach.</i>
<i>Quinns Rock (sorry that's Wanneroo!)</i>
<i>Along the cycle path in Iluka some evidence of erosion is clear from the viewpoint of being above the dunes.</i>
<i>Shifting sands though it may be seasonal. Fewer sandy areas.</i>
<i>Stopped using Whitfords Nodes because the beach is too narrow, the drop-off so high and the water's edge has exposed seaweed roots and is very coarse.</i>
<i>The Dog Exercise Beach appears to be getting smaller each time I visit (Hillarys).</i>
<i>Yes, but to some extent it seems to be replaced during the summer.</i>
<i>All the beach from the Marina north to Pinnaroo...The problem was caused by the construction of the Marina and further exacerbated with the extension of the south wall.</i>
<i>Around Marmion Angling Club. Lennards Pool.</i>
<i>Burns Beach</i>
<i>Dune erosion at all areas, particularly Iluka, following recent storms. Beach sand however seems to get replenished.</i>
<i>Footpath goes after stormy weather. Council has been repairing promptly.</i>
<i>Whitford Nodes: last two years have seen front dunes recessed by at least 3 m, fencing washed away, dunes left with steep eroded faces 6 m+ high and unprotected by vegetation. More sand has seemed to accumulate on beaches north of Whitfords Nodes Dog Beach and Mullaloo.</i>
<i>Whitfords Nodes, Hillarys</i>
<i>I've been going to Burns Beach for [ - - ] years and the sandy area is definitely decreasing although this is dependent on the time of year. The same is true for some spots in Iluka.</i>
<i>Burns Beach adjacent to Jack Kikeros Hall</i>
<i>Mettams Pool — many more exposed rocks</i>
<i>The erosion is seasonal and occurs more after storms.</i>
<i>Particularly after storms. Considerably less sandy beach now at Sorrento compared to [ - - ] years ago when I arrived in [ - - ].</i>
<i>I have noticed changes in the distribution of sand along Mullaloo Beach, but I am unable to say if it's permanent or erosion.</i>
<i>Iluka</i>



**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

<i>Along Sorrento Coast after a storm there seems to be less beach.</i>
<i>Between Dog Beach and Hillarys North</i>
<i>At Watermans Beach, a lot of erosion. Beach is much smaller and further down than it used to be.</i>
<i>Sorrento. Highly variable depending on the timeframe you're looking at. Generally speaking a [no further detail provided]</i>
<i>Burns Beach left of café notice and number of people climbing over protected area and using that area for fishing, and swimming, which must damage the vegetation and increase erosion there.</i>
<i>Burns Beach</i>
<i>Sorrento — loss of beach/increase in seaweed collection.</i>
<i>On the Beach near the Jacks Community Hall</i>
<i>At the Dog Beach at Hillarys — the beach seems to be eroding at a rapid rate.</i>
<i>Dune erosion at the Hillary Dog Beach. Also, beach gradient seems to have become steeper at Mullaloo.</i>
<i>Periodically after storms, the stretch of sand between Mullaloo North Point and West View Boulevard is affected. I am concerned however that the active removal of sand away from the fence line (by presumably Council) using bulldozers along the Mullaloo Beach is assisting in the erosion along that stretch of beach. Dune stabilisation should be considered, and if the dunes are building up along that stretch, I feel the sand should be left where it is to assist dune stabilisation and to protect the coastline, rather than being dug up and redistributed to expose the fence line. The fence is there to protect the dunes, yet it seems the bulldozer action is doing the contrary.</i>
<i>Whitfords Dog Beach, really bad erosion, especially during winter storms.</i>
<i>Basically, from Hillarys Marina up beyond Quinns, we have noticed more erosion.</i>
<i>1 Marmion Beach, in front of Angling Club and new car park. 2 In front of change-rooms and grassed area. Washing away of original old building/wall, over last couple of years. 3 Three or four years ago, a big slab of limestone broke off and toppled over to the south of that ramp that leads down onto the beach.</i>
<i>Yes, after winter storms I quite often walk down to have a look at how much of the Nodes Beach has been washed away.</i>
<i>Beach at bottom of Raleigh Road</i>
<i>Hillarys Dog Beach seems to erode quite badly.</i>
<i>At Dog Beach, but only severe after recent storm.</i>
<i>Usually during winter with the higher tides, the beaches lose a lot of sand &amp; become very rocky in sections; but the beach I notice it the most, is when I walk my dogs along the Dog Beach at Pinnaroo Point.</i>
<i>Dog Beach</i>
<i>Near Hillarys Boat Harbour</i>
<i>The most common areas of erosion I notice are the loss of sandy beach areas and damaged dune systems.</i>
<i>Hillarys Dog Beach is almost totally lost at high tide in winter and beach seems very eroded.</i>
<i>The area closest to Ocean Reef Road on Mullaloo Beach; some winters, the beach is nearly completely washed away; signs have been washed away and not replaced.</i>
<i>North Mullaloo Beach. I have observed that the limestone cliffs have been falling onto the sand over the past few years. Pinnaroo Point also seems to be getting less "pointy".</i>
<i>Between Swanson Way and the Mullaloo Beach Lookout. High level of erosion.</i>
<i>Erosion at Hillarys Dog Beach. Fences have been washed away.</i>
<i>Pinnaroo Point</i>
<i>Whitfords Dog Beach — increased erosion</i>

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>I have noticed that the sea levels seem to have increased this year when compared to when I first started visiting the beach at Whitfords five years ago.</i>
<i>As a resident in Sorrento since [- -] and prior to the installation of groynes in that area there was major beach erosion. There is still a certain amount of seasonal erosion taking place along that particular stretch of the coastline.</i>
<i>Burns Beach: I have noticed smaller sandy areas in certain parts.</i>
<i>Iluka and Burns Beach (moderate)</i>
<i>Just the normal winter erosion on beaches.</i>
<i>Little Island Beach has almost disappeared, and with it, the seals who used it as a layover.</i>
<i>Along the coast from Ocean Reef North there are many eroded areas, but the sand seems to erode in winter and return in spring — it would need research to find out if there is less each spring or not.</i>
<i>Quinns</i>
<i>Tides seem to be higher. Appears water levels rising. Rocks more prominent. Not as much sand as there was some years ago.</i>
<i>North Burns Beach and Whitfords Dog Beach (Pinnaroo/Kallaroo)</i>
<i>But changes each year</i>
<i>Burns Beach, medium after storms</i>
<i>Watermans Bay Beach, beach under new MAAC car park</i>
<i>Recent storm has caused significant erosion and damage of the Dog Beach.</i>
<i>All along the coast but only due to winter storm activity. Watermans to Sorrento hard hit currently.</i>
<i>Not really “increased” just the somewhat normal seasonal cycle. This “season” has had a bit more erosion than the last couple.</i>
<i>Whitfords Animal Exercise Beach</i>
<i>At moment, not sure about exact location but a bit along that coast.</i>
<i>Olympic Beach to Pinnaroo Point.</i>
<i>Depends on time of year and impact of weather, ie cyclones and extreme wind and tide.</i>
<i>Some sand dunes collapsing</i>
<i>Right along the coast</i>
<i>Burns Beach is very worrying for both beach access and security of nearby homes.</i>
<i>Whitfords Beach</i>
<i>Particularly around groynes at Sorrento. These should never have been built as they disturb the natural wave action and sand movement.</i>
<i>Whitfords Beach and Whitfords Nodes. High level of erosion into dunes.</i>
<i>I have seen it at North Beach, although I think this is out of COJ?</i>
<i>Various place — it comes and goes. The limestone substructure seems most at risk, as when it goes, it's gone.</i>
<i>Just south of Pinnaroo Point, the Dog Beach has eroded by about 2 m, in early June 2018...</i>
<i>Watermans Beach</i>
<i>Access points/beach sand area erosion especially at Whitfords Nodes area during winter months.</i>
<i>Iluka Beach, may be seasonal, but there seems to be less sand covering outcropping limestone. North Burns Beach again not many easily accessible swimming areas.</i>
<i>Base of dunes North Mullaloo</i>
<i>Whitfords Beach when walking dogs after strong winds</i>
<i>Erosion due to recent storm.</i>
<i>Recent storm activity has taken sand away for a long stretch of coastline from Mullaloo Point to Pinnaroo Point. This happens every winter.</i>

**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

<i>Depends on the time of year, Iluka, North Burns and Mullaloo all change at certain times of the year due to tides, storms etc.</i>
<i>Iluka Beach is full of rock. Not enjoyable to walk along or sit and relax. Need more sand.</i>
<i>Whitfords Nodes Dog Beach</i>
<i>Varies over the years but there has been substantial loss of beach sand at some beaches at times, and in general there does not seem to be same amount of beach from Mullaloo to Burns Beach as there was 25 years ago when first started using these areas.</i>
<i>Sometimes in winter, we cannot walk across the beach in some places at Mullaloo Beach as the sea reaches the dunes.</i>
<i>Car park in front, next to Marmion Angling Club west side</i>
<i>Marmion</i>
<i>Recent storms have affected beaches and forced some closures.</i>
<i>I walk at Burns Beach a lot. North Burns Beach is washed away every storm. I notice that they put rocks there to prevent this very often.</i>
<i>Watermans Bay</i>
<i>Small beach pockets are less covered in sand, more rocks especially around Iluka and Burns Beach.</i>
<i>At Ocean Reef Marina, particularly when there is a large swell and/or high tide.</i>
<i>Close to pathways the vegetation is decreasing</i>
<i>With severe storms getting bigger — erosion of dunes is occurring.</i>
<i>Whitfords Dog Beach from north or Hillarys to Pinnaroo Pont. North of Ocean Reef Marina to Burns Beach.</i>
<i>Whitfords Nodes</i>
<i>Some obvious redistribution of the sand (ie piled-up high in some areas and cut-out/eroded in others at Sorrento Beach (southern end).</i>
<i>Watermans Bay eaten away again at the moment.</i>
<i>Every winter there is a large sand erosion at the Hillarys Beach (north of the Marina) at least a couple of metres in a bad storm.</i>
<i>After storms</i>
<i>Burns Beach sand erosion — minor.</i>
<i>Winter seas — Watermans area</i>
<i>Especially after a storm...I don't have a location in mind.</i>
<i>Observation only. Over time we have increasingly seen the destruction; however, specific areas are in the areas identified by City of Joondalup.</i>
<i>Whitfords Nodes — large swells eroding sand dunes, destroying fences, so children now play on dunes, increasing erosion.</i>
<i>Most beaches have less sand areas than they used to.</i>
<i>The Whitfords Dog Beach</i>
<i>Erosion near the MAAC beach</i>
<i>Winter storm</i>
<i>Quinn Rocks, Two Rocks</i>
<i>When storm damage to sand, weed builds up at Mullaloo beach, Burns Beach and north of Burns Beach.</i>
<i>Hillarys Marina to Pinnaroo Point.</i>
<i>Mullaloo Beach, South of Surf Club. High sand dunes are eroding, becoming steeper.</i>
<i>Mullaloo Beach — the winter ledges cut into the sand and appear after smaller storms and further up the beach. The width of the beach is decreasing.</i>
<i>The beaches have less sand there and the waves are sitting on the dunes. You are able to notice that the water levels are rising within the area.</i>

<b>Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):</b>
<i>Recent storms resulted in erosion of all sandy beaches, the worst I saw was at Whitfords Nodes where dunes were breached, and fencing washed into the ocean.</i>
<i>Everywhere north of Sorrento.</i>
<i>It appears there is not much sand left at Burns Beach.</i>
<i>Whitfords Nodes on the sand dunes.</i>
<i>Over the past 20 years.</i>
<i>Exposed limestone all down the coast, dune erosion.</i>
<i>Whitfords Nodes Beach &amp; Marmion Angling Club beaches have had more erosion than normal.</i>
<i>Happens every winter and returns in summer — it's a natural event.</i>
<i>North of Hillarys Boat Harbour</i>
<i>Hillarys Dog Beach</i>
<i>Watermans Bay — have observed over a number of years that there has been very little change to the beach area. The sand is carried out in the winter to return again in the summer with very little change from year to year. However, there has been changes in the fauna.</i>
<i>Whitfords Beach/Dog Exercise Beach &amp; access paths near Ern Halliday Camp.</i>
<i>Around Whitfords Dog Beach</i>
<i>North Beach</i>
<i>Along Whitfords beach and Pinnaroo Point</i>
<i>Quinns Beach</i>
<i>Whitfords Nodes sand deposition along path north of Dog Beach, loss of foredunes faces during last storm.</i>
<i>Beach sand seems to be decreasing every year. Dunes seem to be doing well though with the plantation programs.</i>
<i>Pinnaroo Beach</i>
<i>North of Hillarys Boat Harbour seems to be going inwards a bit...</i>
<i>Mullaloo Beach and Iluka Foreshore after recent storms</i>
<i>Mullaloo North</i>
<i>At Hillarys Dog Beach</i>
<i>Marmion Beach</i>
<i>General beach/sandy dune erosion following storms along Kallaroo/Pinnaroo Beaches. Mullaloo Beach and Mullaloo North Point appear to stabilise through the seasons, despite wash-away of fences along this stretch.</i>
<i>Quinns — but this is being or has been addressed.</i>
<i>The extent of sand in North Burns Beach fluctuates during extreme weather events. However, loss of sand appears to naturally recover over time.</i>
<i>Hillarys Marina, north to Mullaloo. High tides and storms quickly erode sand builds up. Ski take-off and landing zone signs at Pinnaroo put in 2 years ago are now 2 metres closer to sand dune edge as a result of erosion.</i>
<i>Sorrento Beach</i>
<i>Weather dependent; during the winter, some of the coast is very scoured out. All beaches seem to have less sand depth these days.</i>
<i>After the recent storm there was a lot of sand washed away and rocks showing.</i>
<i>Watermans to Sorrento.</i>
<i>North of Hillarys Marina</i>
<i>Mullaloo Beach</i>
<i>Lived here 50 years. There's always been winter erosion comes back to normal in summer.</i>
<i>Most winters after big storms, but mostly the erosion was short-lived, and the dunes come back during other seasons.</i>
<i>Sorrento, near angling car park.</i>

**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

<i>Really, I need to be more observant.</i>
<i>Following last winter storm all the coast was affected.</i>
<i>The Hillarys Dog Beach loses sand up to the dunes in winter storms.</i>
<i>Storm damage, north of Hillarys at Doggy Beach towards Pinnaroo Point.</i>
<i>The method of interfering with the dune system with planting re-growth has increased the area size of the dunes that are encroaching on the width of the beach. This re-growth stops natural sand movement. The beach area on Mullaloo has shrunk in width between the dunes and the ocean. In time, there will be limited beach and natural erosion caused during winter storms. With higher sea levels, in the course of time, there will be no beach. When you look at Scarborough that at one-time matched Bondi in NSW in sand beach area, there is only a fraction of beach left. This winter, Scarborough saw the ocean lapping the (re-generated, so-called natural grass and bush areas) dunes. Dune growth through multiple fence lines provided by the City of Joondalup over the years to assist beach grass and bush growth has impounded on the natural sand flow and left us with limited beach. I have spent over [ - - ] years living and surfing Mullaloo and I am appalled at the actions of the Council who have, in fact, caused damage, thinking they were doing the right thing.</i>
<i>Burns Beach area</i>
<i>Dog Beach</i>
<i>Whitfords Beach posts and sand dunes were falling out and sand dunes washed away.</i>
<i>Burns Beach</i>
<i>Mullaloo and Pinnaroo Point/Hillarys</i>
<i>Burns Beach eroded over decades</i>
<i>1) Appears to be more evidence of storm surge extending into the dune area; 2) Deeper water run-off channels to the ocean from North Marmion down the embankment; 3) More loss of sand erosion from south Sorrento Beach (north of the southernmost groyne) following storms.</i>
<i>North of Mullaloo</i>
<i>I see the seasonal changes as the sand eroded during winter and returns in summer, but not sure how much of that is assisted by the City, or sand brought in?</i>
<i>Only during stormy weather. Seems to be more washed-up seaweed on beaches in recent years, which is unpleasant.</i>
<i>Every year after winter there is erosion at Hillarys Beach</i>
<i>Northern end of Mullaloo and also near Burns Beach.</i>
<i>At the Hillarys Dog Beach, actual depth of beach has reduced substantially over the past 10 years.</i>
<i>Erosion past the fence line.</i>
<i>Pinnaroo Point south — Whitfords Nodes to Hillarys Boat Harbour. Major sand build-up at Mullaloo north to Ocean Reef Marina.</i>
<i>On occasions, the erosion has taken out the fence protecting the dunes and the pathway where it leads onto the beach.</i>
<i>Sorrento — sand erosion and sand drift after Marina was built.</i>
<i>Beach access pathways and on Nodes erosion is severe and there are numerous blow outs.</i>
<i>Overdevelopment and private use (houses) of coastal areas with not enough coastal dunes and natural vegetation — roads and houses too close to ocean.</i>
<i>Nodes</i>
<i>Burns Beach — the rocks from the groyne have washed up on the beach reducing the shore space.</i>
<i>Ocean Reef Boat Harbour area and north.</i>
<i>Quinns Beach has moved around heaps.</i>
<i>Not officially monitored but observed over last 29 years.</i>
<i>Northern Beach entry. The sand has not covered the rocks for a few years.</i>



**Verbatim responses — Have you noticed any increased erosion (loss of beach sand) along the City of Joondalup coastline? — Yes (please describe the location and level of erosion) (N = 450):**

*North Mullaloo near the rocks, medium erosion.*

*The Nodes paths just north of the Sorrento Marina right up to about 600 metres north of Pinnaroo Point.*

*There are always variations, the sand comes and goes in different areas.*

*Iluka Beach (reef much more visible)*

*After storms, erosion at Pinnaroo atop and Whitfords Nodes.*

*Don't remember any specific times, but after storms, Nodes or Pinnaroo can get damaged.*

*Animal Exercise Beach, but this is a yearly natural change according to season and storm.*

*General loss over 20-year period.*

*Burns Beach*

## APPENDIX 34 — Verbatim responses

QUESTION: “Do you have any further comments about the City of Joondalup coast?”

Note: Words that may identify respondents or contain offensive language have been removed and replaced with square brackets, ie [- - -]. Minor alterations have been to spelling/grammar to enhance readability.

<b>Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):</b>
<i>We are very lucky to live near this coast!!!</i>
<i>Most dog owners are great; however, the dog mess and smell on the path is off-putting at Hillarys. If the Council created a volunteer task force that meets on a rota basis every week to clear up after others, it might send a message to those absolute [- - -] that don't pick up but also engenders community spirit and helps remind us how lucky we are. I'd be a part of it.</i>
<i>Kudos to the City's beach patrols and beach maintenance people. I am often down there early in summer, but very rarely beat the folks who rake the sand and ditch the garbage. I have tremendous respect for the work they do. The improvements the City of Joondalup has made to roads and parking in the area (e.g. the stretch between Mullaloo Beach and Ocean Reef Road) has been worthwhile. Any chance of decent toilets at Key West? I was born and raised in New York, where Jones Beach is often heralded by my former countrymen as what a beach should be. Then I tell them about our beaches, all free and open to the public, no local ratepayer stickers required to use the car parks, areas set aside for windsurfing and dog exercise, good fishing and, best of all, great walking on beach or path, and they go quiet. It seems City of Joondalup is prioritising the maintenance, expansion and improvement of our coast. I'm happy about that.</i>
<i>Maybe look at building a jetty from Mullaloo Beach, Something similar to Huttington Beach or Santa Monica. Great for recreation and tourism.</i>
<i>I believe all our coast of WA is gradually going into the sea, but I'm glad the City of Joondalup is taking the initiative and taking notice and actually doing something. Well done.</i>
<i>It is some of the best...keep protecting.</i>
<i>Free playgrounds like Scarborough has developed are a great idea.</i>
<i>I'd like to see further effort into artificial reefs and breakwaters offshore to limit wave impact on coastline.</i>
<i>it is a wonderful natural amenity and the City of Joondalup does a great job in facilitating the community's enjoyment of it.</i>
<i>Needs to protect the dunes and beaches more from the 4x4s they destroy the natural habitat more. Complete the coastal path from Burns Beach to Mindarie and provide barriers to prevent erosion and damage from vehicles.</i>
<i>Love to help protect our beaches.</i>
<i>I think it is one of the main reasons we live in City of Joondalup. Good on you for forward planning. I think it is important to preserve a wild coast with dunes, flora and fauna for future generations. When life gets on top of you, you go to the beach! It blows away the blues.</i>
<i>Recreational value before private interests.</i>
<i>More funding of the “friends of” foreshore volunteering groups, they have done enormous work to fight erosion and ensure that native plant species thrive.</i>
<i>There is a lot of litter in the coastal vegetation. Volunteers are doing a great job weeding and replanting along the coastal strip.</i>
<i>Mullaloo Beach is beautiful. But I see a lot of rubbish along the dunes.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Currently there are only three coast care groups looking after only approximately 9 km of Joondalup's 17 km of coastal reserve. The City should be encouraging the start-up of other groups to cover the remaining 8 km. These groups could assist with revegetation/stabilisation of the dunes. There needs to be a greater awareness by the public of the importance of the coastal foreshore reserves not only in relation to potential erosion but also to biodiversity. Invertebrate surveys at Iluka have revealed at least 450 species of insects are present many of which are responsible for the pollination of coastal plants. There are also at least 20 reptiles, over 100 plant species and 50 bird species. The City does virtually nothing to bring coastal biodiversity to the attention of the public.*

*I think the City of Joondalup does a great job maintaining the pathways, controlling access to beach via pathways, revegetating wherever possible, keeping the coastal parks clean, ie toilets, rubbish bins, the rangers with parking etc. I wish the City of Joondalup would charge parking fees for use of beach car parks to help maintain our coastal areas. Whenever I travel to another shire, such as the City of Subiaco, Vincent, Perth, Nedlands etc., I have to pay to go there and use the facilities — why can't it be reciprocal?*

*I would like to see some development of Pinnaroo Point...café, restaurant, possibly accommodation, community facilities — as there is nothing between Hillarys Boat Harbour to Mullaloo. This could be used by local residents, tourists and the general public. Hillarys Boat Harbour and Mullaloo are extremely busy and overcrowded, particularly during the warmer months, and the development of Pinnaroo Point is an ideal location to help improve the facilities within the area.*

*It will be great to introduce outdoor exercise equipment along various spots on the coast.*

*City of Joondalup does constant sand clearing and shifting. This is an expensive exercise I'm sure. Perhaps the access paths need to be winding and almost parallel to the beach line to reduce sand build up on the majority of the path thereby reducing the amount to be cleared. This path entry change may also reduce the amount of sand blown up on to the grassed area between the surf club and the Marina.*

*Our coast is beautiful and natural at the moment, I hope there aren't any more plans to build infrastructure around it.*

*It's a beautiful coast! Thank you for seeking to preserve it in its natural state.*

*I love it!*

*Control those sharks!*

*Need upgraded facilities at Burns Beach (improved/upgraded café, coffee shop and toilets), plus additional car parking. The weekends down there are crazy!*

*Strongly support the Dog Beach area and would like to see more facilities, such as cafés up and down the coastal paths.*

*Only one Animal Exercise Beach. As a City of Joondalup ratepayer, I find myself visiting Quinns Beach more frequently than Hillarys. Huge, unutilised area between Burns Beach and Mindarie.*

*I think you are doing a great job. Thank you.*

*Sand bagging at Watermans Bay in City of Stirling seems to have been quite effective for late stage erosion.*

*Over the last 25 years I have walked along the beach during storms and summer periods. Have seen deep rocks exposed at North Mullaloo, almost always replaced by summer with sand and tides. I do not agree with the mining of sand along Mullaloo Beach where the Council are digging up the beach along the fence line and depositing it at water's edge. I think that the dunes should be allowed to grow, and new fences put in when necessary. I would like to see more access to little picnic huts along the path from Mullaloo Beach towards Ocean Reef Boat Harbour, perhaps some boardwalk areas to allow access to the dune top for a nice view of the ocean and sunsets.*

*We have some great volunteer groups — just checking they are acknowledged.*

*Plant in the dunes to help...stop spraying poison on our parks. Killing vegetation is further adding to erosion. Toxic chemicals are dangerous to humans and pets...and can be smelt. Not pleasant.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Most significant questions to ask are: what are the anticipated effects from the environmental effects of climate change which is fact now; and what can the City do to ameliorate and protect our way of life — for all the population, not just the rich and famous.*

*The areas of the coast I use are well maintained and well serviced.*

*It is much better than south of river.*

*We must act now to protect it and the natural vegetation. And we should start looking at changing our climate policies to fight against climate change that affects our coastline.*

*It's one of life's simple and most rewarding pleasures, to have access to the Coast. I take my family there and build sandcastles all year round. I have 'mental health' time to myself. I collect rubbish when I walk. It's where we can feel connected to nature. Which is so very important in the world today. I fully support the actions that have the environment as their biggest concern. Thanks for asking our opinion.*

*Extremely disappointing to see no mitigation strategies taken to prevent the substantial dune erosion near Pinnaroo; I understand it is difficult for the Council to patrol and police beaches with people entering the dunes once the fences have been washed away/damaged by the storms. No signage or temporary fencing was used. Witnessed a lot of people and their dogs running up and down the dunes further degrading them. Would be nice to see at least educational signs or warning signs about entering dunes to protect the vegetation.*

*At least one more Dog Beach would be great, Pinnaroo Point gets too crowded and parking can be difficult. No high rises along the coast but more cafés. Keep parking free.*

*Keep the beaches for everyone. Develop by going up to provide access for more people. Have multi storey car parks.*

*Thank you for keeping the natural dunes and vegetation well maintained. Although originally I was not happy about putting grassed areas between Sorrento Beach and Hillarys Marina, the City has done this sensitively and has revegetated the dunes well. Please do something about the rabbits in the dunes at Sorrento — saw a big one the other day. Also, a huge ginger cat in the dunes near the surf club. People who live near the coast should have to contain their pet cats to their own property as they will hunt in the coastal dunes and prevent birds such as wrens nesting in the scrub. Cats also kill bobtail lizards and other reptiles. They are very destructive to the natural environment and biodiversity of the coastal dune system.*

*Post speed limits for cyclists on dual pathways.*

*The cost of retaining our environment is expensive but buildings & private residences can always be rebuilt/replaced. Not so when we lose land through erosion.*

*I believe these areas should remain open and free for public use — not locked away for private groups or residents.*

*Continue to stabilise dunes — so far good work. Paths have been beautifully upgraded too. Iluka lookout is fantastic initiative. Start seriously fining the people that continue to climb over wire fences and break dune vegetation.*

*Expand the Dog Beach area. Ban kite surfing.*

*More animal exercise beaches please!!!! Instead of cramming us dog lovers into a tiny, overused, smelly, excessively busy, miniscule stretch of beach at Hillarys, and more car bays! Thanks.*

*Access, particularly in summer during evenings and early mornings. Just because the sun has gone down — doesn't mean we shouldn't still be able to utilise our beautiful coastline. We have some of the best beaches and coastline in the world. I have been to Rio, to Miami, to Barcelona: our beaches are as good, if not better. But other countries are geared up to use them better and for far more hours...*

*Thank you for a great job, would love to request access for Pers to Northern Beach Iluka area.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*The coastline is an asset to the City of Joondalup and Western Australia. We should do everything possible to maintain our beautiful beaches and, if anything make them more accessible and user friendly, not to develop solutions that will restrict that in the future. This is the very reason why we build close to the beach. To be able to enjoy all that it has to offer and the excellent infrastructure that is currently in place. However, projects like the Ocean Reef harbour development are greatly supported, as while it takes away what is there, it replaces it with something far more functional.*

*I chose to live in Burns Beach because I love the coastline, despite having family south of the river, therefore I strongly support protecting it as much as possible for our enjoyment and that of future generations.*

*I see no need to exclude dogs from small, little used beaches.*

*Keep it natural and build/improve facilities where people most frequent.*

*Leave it as natural as possible.*

*Many measures just shift the problem of erosion. They also affect the quality of the surf and thus enjoyment by younger people. This is an important consideration as surfing and similar activities are an important aspect of young people's development.*

*The recently built car park at Marmion would seem to be at risk of damage from coastal process because it is so close to the waters' edge. I would like to see better pedestrian access and kayak launching access from the Marmion Beach car park. The boat ramp next to Marmion Angling Club has a steep drop off which makes it hard for families and others to get down to the beach.*

*Northern side beach of Hillarys Marina (opposite the boat lifting facilities) needs rocks cut out to allow safer access to beach area.*

*Very difficult problem. I hope technology will play a part in reducing the beach erosion by building offshore structures.*

*I think we need to do what we can to prevent damage to dunes — eg revegetate, keep kids/dogs off dunes, create paths to beach for people to access, plan ahead for new areas, stop removing all the trees/plants for new development and buildings etc.*

*I love how you have used the recycled plastic furniture and pathways. Well done. Anything you can do to protect our ecosystem and environment is a winner!*

*We love the pedestrian and cycle path along the coast :)*

*The coastal strip is highly valued and used in many ways by many people in every season. Even on very windy days, the surf skiers are there in big numbers. In summer, on hot days, at the weekend, Mullaloo Beach is crowded. The friends' groups are responsible for the stabilisation and huge improvement of the coastal areas they have been working on for 18 years. More friends' groups are needed for the areas not covered by these three groups. More Council on ground staff are needed to work with and support these groups so that the whole coastal area is covered. When marinas and groynes are built, the movement of sand is altered even more. Movement of sand by natural processes is accelerated by human intervention. Keeping our beaches and coastal dunes is a top priority. Wanneroo spends \$ millions trying to retain their beaches. Stirling has had big expenses in retaining the coastal road at Waterman Bay and probably elsewhere. It is good that Joondalup is considering this problem seriously and will make wise decisions.*

*I've cycled from Kallaroo to Fremantle and the City of Joondalup has the best facilities by far. The health of vegetation contributes to that.*

*Seasonal variations cause changes in beach conditions.*

*Hurry up and get the Ocean Reef Marina started, it's been going on since I have lived here 30 years plus.*

*I think it is amazing. The fact that we can walk for miles on our beautiful coastline is a blessing. I would be so sad if I could not do this. I love the fact that the walkway from Mindarie to Burns Beach is in the pipeline...what an amazing gift to have this coming. It is such a good stress relief and there are soooooo many families who use these paths. Thank you...*

*Love it — superb paths, great place to exercise and enjoy the views and the sea air.*

*It's beautiful, thank you for caring about it and I hope it stays beautiful.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Unfortunately, nature has been around a lot longer than we have, and we cannot contain it as we want. Every year there are cycles of erosion and placement and displacement of sand, it is ever changing. It doesn't matter what we do, nature will control. The only thing the shire can do anything about the future situation, is not to allow buildings too close to the natural water level.*

*I think a sea wall should be installed to protect the sand dunes and make a nice tourist walking path as part of the sea wall to showcase our great WA coast. It is such an undervalued asset that we have on our door step.*

*Not really, just that I know people that would die to have a beach where they live, that is as good as we have for exercising our pets and ourselves.*

*I have been living at Mullaloo Beach for approximately [- - -] years, in the last approximately 5 years, the City of Joondalup has been slowly destroying the front sand dune in an attempt to keep a fence between the beach and dunes. You dig away the sand and dump it in the ocean; where this precious dune sand goes, no one knows. It has slowly changed the beach as well. If the so-called environmental officials turned their heads left from the surf club, they would discover how the front dune should look strong as a well vegetated dune that will protect the environment behind it. What we have the other way is a badly damaged dune, and when we get a severe storm, dune erosion will happen, and City of Joondalup will conveniently blame climate change. The fence was put in the wrong place and poorly designed; it needed to be higher and single strand wire to allow the sand to pass through. The cost to constantly dig away the dune is a total waste of ratepayers' money. The surf has been poor since the sand has been dumped. I'm out of room, I could go on.*

*As the Perth population increases and we introduce higher density living in Joondalup there will be more pressure on Sorrento Beach because of its great beaches, cafés and public amenities. We need to consider the overall development of the beach area to cater for more pedestrians, cyclists and users of public and private amenities.*

*Keep the beaches as natural as possible. Absolutely limit any building on the beach including the proposed Marina.*

*Do more to prevent people going over fences, walking on dunes, and increase ranger patrols and fines.*

*I am happy to absorb an increase in rates/taxes to ensure the coastline is rectified and protected for future generations.*

*Moved from [- - -]. Most beautiful beaches in the world — we need to protect them so future generations can enjoy them as much as we do.*

*Love the facilities already provided at Sorrento, our local beach. But!!!!!! Please do something for the Surf Club. A new facility with a public restaurant would be wonderful!!*

*As the population gets older, walkways will be more important than ever.*

*Improve verges with ground cover wood chip to stabilise.*

*Develop more path, boardwalks along the coast extending north past northern Burns Beach to Mindarie and beyond. This will encourage greater community access and exercise. Thanks.*

*Please develop the Ocean Reef Boat Harbour.*

*Would like to see more seating, aged friendly planning for the beachfront, cleaning of key tourist beaches, such as Sorrento Café at Sorrento Beach, extended Dog Beach all way down to Whitfords Nodes Park.*

*Recently, I was a part of a tree planting group, planting along the dunes in-between the mentioned location. I understand with the winter storms they can hound the dunes naturally; however, one of the sand dunes was massively eroded. It looked like it had a big chuck taken from it. If you need any more information, please feel free to contact my mobile [- - -].*

*The Joondalup coastline is of the best in the world, every effort should be made to keep it this way.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*There are masses of fence damage along the coastal path around Ocean Reef which may be adding to the erosion of areas near the path. There is evidence of graffiti on the path itself, either by burning or paint. Many women do not feel safe on long stretches of the coastal path on their own. Motor bikers have been seen using the path at high speed which is highly dangerous to all other users. It would be wonderful to have more restaurants and cafés along the coast off Ocean Reef as it badly needs rejuvenating. We all look forward to the start of the Ocean Reef Marina, it will add many of the features that people want. May I add that one of the lovely features in Scarborough's development is a grassy hill where people have a slightly higher view of the sunset...it would be a nice feature at the Marina. There is a vantage point on the Ocean Reef path which looks down towards Mullaloo Beach. This area could be upgraded with better seating and a much bigger shade area with a sign about whales, Rottnest Island in the distance and what can be seen from the point. At the moment this area is under-used, and graffiti is a problem. I always thought it would be a great walking access point for steps down to the other end of Mullaloo Beach and might stop some of the unauthorised paths that have been made down to the beach in the vicinity.*

*Don't fight nature, adapt & adjust, which may mean certain of the smaller beaches north of Mullaloo may need to be left to nature to alternate between having sand and not during the seasons & tides.*

*I think we overreact on climate change.*

*Could the parks that the toilets are in somehow be policed more to stop unwanted anti-social behaviour.*

*Greater education that encourages limiting the use of plastics and single use items (including balloons) along the coastline. The littering is awful, especially from children's birthday parties. We always pick up a huge amount of items in the grassed recreation areas, as well as on the beach. We also need to protect the coastal vegetation to mitigate against further erosion and encourage natural ecosystems to develop in these locations; whilst I love the recreation aspects, environment comes first over human usage.*

*Please provide more bins along the coastline, particularly in Sorrento. The amount of litter is unacceptable, but with no bins I can see why. Thank you.*

*Continually smoothing out the sand (with heavy machinery) all year round is a waste of money. I understand it is hard to balance erosion risk and sandy beach areas, but the only people down the beach during winter are surfers (if there are even any waves). So, I don't think this needs to be done in winter, except after big storms when it is actually necessary. I feel it is done too often, and it interferes with the sand movement, so the waves are far worse for surfing etc. 10/15 years ago it was never done, and the waves were much better, and a lot more people were taking advantage of it, rather than now, having to leave this local area and going to Scarborough/Trigg instead.*

*It is what makes our Council so unique and attracts people both residents and tourists to the area. As such, it should be given significant priority in the Council's plans and budgets.*

*I would love a car-free boulevard. That would increase safety and provide the opportunity for pedestrians and cyclists to enjoy views of the sea on separate paths without exhaust fumes.*

*Only bought my property due to the nearby beach. Protecting it is critical. Sea walls not acceptable solution. Groynes, breakwaters can add to the amenity.*

*Do not add structures to the beachfront that will inhibit the use of the ocean for things such as kitesurfing, windsurfing, surfing, paddle craft etc. There are not too many beaches available where you can safely undertake these activities without affecting other water users or without groynes or marinas in the way. I also live near Pinnaroo because of easy access to these beaches. The inclusion of businesses such as kite schools at Pinnaroo has been excellent. They have provided shelters there and this has created a great community of people who I would otherwise not had the opportunity to engage with. The ongoing support for surf lifesaving at Sorrento and Mullaloo is also appreciated (as well as the café facilities there). It gives our family the opportunity to give back to, and participate in, the community and makes beach use safer and more enjoyable. Please continue to support these activities.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

<i>Need more dog beaches.</i>
<i>Avoid public and private buildings and hard infrastructure, eg roads within 100 m of the water edge.</i>
<i>The potential for an ocean pool at Burns Beach was recently raised by the local member, Mark Folkard. This is a very good idea that would create a suitable swimming recreational area at Burns Beach. The current rocky beach is unsafe and virtually unusable. The ocean pool would have multiple community benefits. I recognise this survey is slanted towards environmental impact rather than recreation but worth noting and further community consultation.</i>
<i>You need to look after it because it is an important part of the environment and we want future generations to come to enjoy it too.</i>
<i>Do not put our rates up to fund beach erosion problems. It's up to the City of Joondalup &amp; residents who live there to fund these problems. If they live there, then they can afford to maintain the area. That's why I don't live there.</i>
<i>I believe it is possible to have more cafés or amenities within the dune vegetation if it is planned correctly and fits in with the environmental landscape. Perhaps designed not only for enjoyment, but also to help reduce erosion.</i>
<i>Well-maintained and a joy to be able to access. There are however some individuals who abuse this privilege and they are impacting the environment. It would be good to see more ranger presence to prevent this in the future, and also a good idea to make vulnerable areas of the dunes less accessible.</i>
<i>The shark net at Sorrento has allowed my tri club and swim group to swim from November to May in safety. Absolutely love it. Hope that it will be maintained for years to come.</i>
<i>I love it! It is beautiful. The facilities that have been provided in terms of pathways and grassed areas are wonderful. They are also beautifully maintained. I love that the natural vegetation and dunes are maintained and valued, as I think they should be treasured. I think we should aim to enjoy the coast in harmony with nature not work against her. Only one negative — changerooms and toilets at all these beaches are never nice, nor clean!</i>
<i>Humans should stop constantly trying to fight nature and learn to live in harmony with nature. Artificial solutions often have unintended consequences, and are costly.</i>
<i>I understand about the sensitivity of the reef system; however, please make a safe &amp; sustainable swimming beach at Burns Beach. With an increasing population in the area there is demand for a proper beach where people can actually get into the water and have a swim. There are lots of submerged rocks which makes it virtually impossible to get in the water in a safe manner.</i>
<i>At this rate of erosion, it will be at the cycle path and parking area within the next 15 years. Replanting vegetation seems the best and most cost-effective option to at least slow the erosion.</i>
<i>We are so lucky to have this beautiful coastline — I am happy to help look after it!</i>
<i>The coastline within the City of Joondalup is absolutely amazing and should be preserved. Not many places in the world have the wonderful weather, sunsets and beach amenities that we are very spoilt to have on our doorstep. Having a safe and accessible coastline also assists with tourism within the Council, meaning more employment opportunities and growth.</i>
<i>The City of Joondalup coastline is one of the main reasons we moved to this area five years ago. The City has done a fabulous job of keeping it accessible for families to use for recreational purposes.</i>
<i>The City has a coastal hazard assessment and, as such, any future private developments likely to be impacted by such hazards, ought to be made aware that the City accepts no liability to preserve or protect any private developments in these areas. Also, the City ought to advise, if able to, any parties likely to be affected by this policy.</i>
<i>More groynes and seawalls.</i>
<i>The priority for beaches should be for marine recreation, not for commercial activities.</i>
<i>Beaches tend to be dynamic as structures, varying with seasonal conditions and the influences of human activities. Dune systems tend to be damaged by people infiltrating them. Pinnaroo Point erosion appears to be related to the construction of Hillarys Boat Harbour over an extended timeframe.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Rubbish along cycling path, including dog poo bags.*

*I do not want to see Ocean Reef Marina enlarged, with Bush Forever dunes built on where there is endangered wildlife. Natural dunes, with healthy natural growth, are necessary for coastal protection and should be conserved, not built on! What is the point of living near natural beauty if it is built on! I moved to Ocean Reef for the ability to view the ocean, dunes and natural beauty and clear clean beaches when I became disabled. The ocean is warming and rising — protect the dunes — nature is better than concrete and paving. Roots — native vegetation and its roots! Use the natural ecosystem and do not allow building within a certain set distance — which I believe used to be the case in WA and why the coastline here is better than in the east.*

*Need to put a rock wall from Pinnaroo Point to Wanneroo and cow rocks to stop erosion of the beach.*

*It is awesome and, within reason, should be protected. I see kids damaging the dunes and vegetation, often by playing in them, this should be prevented.*

*It is the main reason we live where we do, and we fully support initiatives to protect it. It's great to see so many planting days coming up. The new, natural looking playgrounds are great and we look forward to enjoying the extension of the path at Burns Beach.*

*No, thank you for the opportunity of completing the survey.*

*Over the years the rehab of the dune system appears to have had a positive effect on the area with fewer blow outs etc. along the coast.*

*If you decide to add more shops and cafés, the ideal situation, if the human waste does not get into the ocean, so also thinking of some cool ideas to reduce this outcome would also be very much appreciated by many members of the community.*

*Coastal erosion is a fact of life, in many cases man's efforts to control it have only made things worse. Even the "experts" cannot get the modelling right, groynes and rock walls may protect one area to the detriment of areas further along the coast. Longshore drift will continue to happen whatever.*

*Stop replacing the fence at the base of the dunes.*

*Planned retreat has to be the only suitable policy to adopt, that considers the maintenance of various coastal ecosystems and components of the beach that we value — beach, water and waves, vegetation and coastal ecosystem. I would object in the strongest possible terms if any Council/ratepayer funds were used to undertake coastal engineering or protection works where the focus was on protection of private property. This would be totally unacceptable.*

*A tidal pool would be nice.*

*Need to ensure the natural vegetation & ecosystem is continually protected — imposing greater fines and/or restricting access to sensitive areas needs to be considered & enforced.*

*Some of the natural areas within City of Joondalup coast are the best in Perth and they need protection!! Eg north of Hillarys between Marina and Pinnaroo Point*

*I am concerned local residents will have difficulty accessing their local beaches due to lack of parking.*

*The building of boat harbours and structures have decreased the erosion of the coastline in some areas at the expense of other areas. The building of the proposed Ocean Reef Marina will have a big impact on the erosion process. We were informed in documents relating to the Marina that Mullaloo Beach was accreting and there would be minimal impact from the building of the Marina. However, at the same time, home owners in Mullaloo were being told that they were subject to the 100-year sea surge and their title should be noted. The maps used for this process (four years apart) shows that the sea level rise had doubled in that period. When the consultant who produced the maps was asked how these maps could be accurate, he stated that he had to use data produced by the State Government for the purposes of the policy where the requirement was stated. Where is the accuracy and efficacy in reports that we see on climate change from government agencies?*

*Allow kitesurfing in more beach areas; there are more kites and fewer people on the beach when it's windy in the afternoons. Allow more kitesurfing in winter time, as there is often no one on the beach.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Please try and save the coastal areas at any cost, as it is so important for all generations both now and in the future.*

*I strongly support encouraging sand dunes and planting appropriate vegetation for protection of the areas behind the beach. More use of rock groynes should be made to allow build-up of longshore drift sand. Existing rock groynes at Sorrento could be extended. Large, grassed area at Sorrento is little used and expensive to maintain and water. Planting coastal shrubs and woodchips/mulch with walk paths and more sheltered BBQ facilities is preferable to grass. Existing BBQ facilities at Sorrento are little used because they are too exposed to wind — they should be housed in shelter huts with seating. Access paths to Sorrento Beach are badly designed. If they were narrower and curved, then the sand would not blow up onto the grassed area. A shower and change room is needed for Sorrento North Beach which is the most-used beach now because of the shark net which is popular.*

*It's beautiful and not too commercialised let's keep it that way.*

*The beaches are the reason I moved to this area, otherwise, I'd still be living in [ - - - ]. It's very important that I can enjoy them. I think there is scope for more restaurant/retail in some limited areas. (e.g. the beachfront side of the block with the Mullaloo Pub). Some development also could help pay the preservation costs for the beach, although that might just be a drop in the ocean.*

*I've been visiting Whitford Nodes for about [ - - ] years. Erosion at present is the worst I've seen. It could be a cyclical process with a coincidence of weather patterns which have the wave height, frequency, swell height, tidal range etc. to cause the maximum erosive effect. The Hillarys breakwaters also are a major factor and probably amplify the erosion when erosive conditions are ideal.*

*So far (I have lived here for [ - - ] years) the coastal development has been limited and sensitive. I support the development of Ocean Reef Boat Harbour, but with limits to the height of developments and with quality design that minimises impact on the coastline. If financial resources are limited, we should restrict expenditure to maintaining what we have — an example of what I would consider unnecessary expenditure was the creation of a "dual carriageway to nowhere" on Whitfords Avenue, south of the junction with Northshore Drive.*

*Do not rezone the Ocean Reef Bushland from Bush Forever status. Leave it alone.*

*Please increase the size of the Dog Beach. Maybe have a Dog Beach open between two of the groynes at Sorrento during the quieter colder months.*

*A valued part of Perth lifestyle that needs proper management.*

*Still waiting eagerly for the Ocean Reef Marina. As a longer-term resident of Joondalup, I feel like I've been waiting forever for the delivery of the promised & proposed marina — we never seem to be getting closer as it keeps moving further into the future. I feel like I'll be dead before it actually ends up happening!*

*Private property should be encouraged to move. Public property should be moved. You cannot defy the forces of nature.*

*We are so lucky to live here, experience all that nature has to offer, we must embrace this and look after our precious world. Genuinely, people need to be educated about the costs, financial and otherwise, for the bigger picture if we do not do anything. The results would be catastrophic in my opinion.*

*City should encourage the development of café's etc. in the area and expedite the completion of the walkway through to Mindarie. The parking issues around the existing Burns Beach Café and the proposed new site need resolution. Re-consideration of the provision of dog walking time ranges along the North Burns Beach coast and the development of another access point.*

*I regard the coast as a very beautiful environment, and as something in need of protection and management if we are all to continue enjoying it into the future.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*As long as environmental protection of sea, dunes and beach is maintained, I am in favour of parts of the foreshore being developed for use. See Santa Monica in USA for example of how fitness equipment, beach volleyball, cycling tracks and bike hire, pop- up seasonal cafés on the sand, chess and board game benches etc., enable the beach to cater to many with very little impact on ocean and beach long term.*

*I'm always disappointed and concerned at the level of rubbish/litter pollution along the coast and neighbouring streets in particular, as litter will undoubtedly end up in the ocean. I'd like to see more being done about this; perhaps encourage local businesses to use biodegradable takeaway cups/cutlery etc, provision of rubbish bins (especially along the ocean front path) and better education to our community.*

*The entrance/exits to car parks to the north and south of Marmion Angling Club are very dangerous. Visibility is bad for cars entering and leaving West Coast Highway. Many cyclists do not slow down, or even look, when riding along here, frequently too fast, bearing in mind the numbers of pedestrians, dogs, prams, and vehicles. Why were the bollards that forced bikes to slow down removed? There's no point in arguing who is in the right, after somebody is killed or seriously injured. Something needs to be done to regulate the volume of traffic using West Coast Highway as an access route. It frequently takes many of us several minutes just to get out of local streets on to WCH to go to the beach, whether in a car or on foot. Perhaps block access near the Sorrento Surf Club (ie permit access to beach parking from the north or the south, but not ability to drive through) and force people to use Hepburn Avenue/Marmion Avenue. Ditto at Beach Road, ie limit use of that section of West Coast Highway as a through road. Make it unattractive, except for local residents accessing their properties. This road is too narrow, and the footpath too close to the traffic, to be used as a major through road.*

*We do need more cafés restaurants along the coast to make better use of it.*

*Survey is OK, but most people do not understand the importance/value of dunes and vegetation, re the geographical processes, re erosion and low-cost prevention. Also, the City needs to acknowledge the geographical fact that what you do in one part of the coast has an impact somewhere else along the coast. E.g. interfering with longshore drift in one place to capture sand to prevent erosion, means less sand along the coast to absorb the ocean energy, which increases the rate of erosion elsewhere.*

*Protecting the natural environment sand dunes, vegetation and scrub growth and the animals that live in it should be the most important aim of this project.*

*You guys must put surfing artificial reef in place, especially with the new Marina coming, as it will remove 1 and maybe more surf breaks in Ocean Reef and Mullaloo. We beg you.*

*There is no such thing as manmade climate change. Make your only action to save ratepayers some money by sacking your environmental officer. Sack the whole department. [- - -] pseudoscience cranks.*

*The coast needs protection as sand erosion is extremely bad in some areas, eg Seabird is precarious. A balance between commercial development and housing needs to be carefully monitored to ensure each locality is not overburdened, thereby adding stress to what is in places a fragile coast.*

*This coast is stunning, full of bird and wildlife, but very walkable user friendly. There are areas to suit everyone. They are clean and tidy most of the time, my family and friends use the beaches parks and BBQ areas throughout the year. I feel strongly they should be restored and presented wherever possible, keeping a balance of the natural and the need for amenities.*

*Nature cannot be beaten but only managed to the best of human ability and within fiscal bounds without imposing more costs on ratepayers for the elite that decide and can afford to live on the coastal strip.*

*Our most valuable natural asset needs to be nurtured.*

*Need for more cigarette butt boxes all along the coast. More education about responsible use of our coastline. Fewer plastic bags when planting the dune vegetation.*

*Beautiful areas which need to be protected. Would like more dog beaches.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*The City of Joondalup is doing a fantastic job in maintaining a good range of facilities putting the City of Stirling to shame. I greatly appreciate what you are doing. The little things matter, like the stainless steel topped coastal fences, multiple watering stations, dog watering stations, toilets, low impact signage etc. Thank you for setting such a good standard.*

*Options need to be provided in winter for waste. I understand the bins are removed from the sand as the water levels come up higher in winter, but bins need to be supplied somewhere near the sand at the beach entrances as so much rubbish is left behind in winter.*

*As a dog walker in the Ocean Reef area, I have no beach access locally. I love the unspoilt beauty of our coastline, but rarely set foot on the beach cos I can't take my dog. Perhaps you could introduce dog access and stop putting in car parks and playgrounds which increase footfall and rubbish.*

*It is a beautiful coastline and is a huge part of our family's life.*

*Should consider year-round professional lifeguards/beach inspectors for Sorrento (shark net), Hillarys Marina and Mullaloo (from Hillarys Marina wall to North Mullaloo/Ocean Reef Marina). To ensure public safety and control dogs on non-dog beaches/drinking/dune access.*

*Need a lot more space and facilities for animal exercise areas and places animals are allowed. Everyone has animals and tourists love them as they miss their animals at home. And to leave the bushland south of Ocean Reef Marina, it's a small area of peacefulness to walk by the ocean without car fumes in your face while you attempt to get fresh air.*

*I believe the City of Joondalup is currently doing a very capable job of maintaining the coastline.*

*The coast is one of the greatest assets for City of Joondalup. Recent investments (eg dual lane extension from Marmion Avenue to Swanson Street, \$600,000 each for entrance sculptures that are not very inspiring) has been an excessive use of ratepayers' funds. Overspend just to spend the budget for not much benefit would be much more effectively spent on the coastal province, developing the platform for future coastal protection (eg enabling selective use of the coast for retail activities to enable protection mechanisms to be partially funded by private ventures). Especially encouraging the restaurant community to the waterfront. Bring on Ocean Reef Harbour development — not another 30 years please...*

*The improvements to Iluka Beach car park, lawn area and toilets is a great asset to Lachlan residents and visitors.*

*It is a fantastic resource that we are very blessed to have right on our doorstep — we should protect it for ourselves and future generations*

*Not too familiar with issues regarding coastline.*

*A daily beach user at Mullaloo for 30 years, I don't believe there has been increased erosion in recent years. In the past, occasional winter storms would cut into the frontal dunes, but it seems like many years now since this has happened to any great extent. Furthermore, on the beach shoreline in front of the Korella Street terminus there are sand covered rocks that are exposed in some winters, but they have not been exposed for some years either.*

*It's pretty poorly managed to be honest. As much as removing seaweeds are good for tourism, it also promotes wind erosion through summer.*

*The groynes at Sorrento Beach stopped rapid erosion in the 1980s. I feel that more groynes could be placed to protect the area at Quinns — as facilities are already in place and cannot be removed. In the future, development should be kept well away from sandy dunes and sandy foreshores. Development is OK where there is rocky foreshore. Public access must be the number one priority for all foreshore areas.*

*You're doing a great job. I love the new paths??*

*I have not been able to assess the beaches since the last storms.*

*Whilst I agree we don't need to be inundated with cafés, we are limited along this stretch of beach when coming off the beach and wanting coffee or lunch with a beach view. We tend to head away from Iluka when wanting experience. This is a shame as we have an amazing coastline with little amenities or choice. Ocean Reef Marina needs to get underway so that we have an alternative to Hillarys Marina.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Dune rehabilitation is important as is maintaining the beach for all public users and not having private housing encroach on the beach. I like that there is a long distance between the busy road and the beach. This increases the tranquillity of the beach. I also like that the beaches are largely underdeveloped. This adds to their attractiveness.*

*I support any reasonable effort to keep our beautiful coastline pristine.*

*Please make the beaches available vastly for the disabled.*

*if you install hard structures and vegetate the beach and dunes you remove the gentle berm that allows for the natural action of the ocean removing and replacing sand through the different seasons. A good study is the Illawarra Beach Care page <https://www.facebook.com/BeachCareIllawarra/> I know Perth Northern Beaches has had its fair share of erosion issues, and they need to do something, but is planting on the berm, is planting inside the storm surge wave run-up zones the answer? We've seen in the Illawarra how just such measures can actually induce, amplify, deepen and prolong beach scarping cycles. And we've seen how removing vegetation from these zones has vastly improved how our beaches handle storm events and in particular their ability to recover quickly from same. It will be interesting to see how this pans out over the coming years/decades. I suspect that like the Illawarra, initially it will appear to be a good thing, but later on...who knows. Let's just hope they aren't planning on planting coastal wattle!*

*Only that I feel it is vital to keep the Dog and Horse Beach. I have neither, but love to see these animals and their owners enjoying the beach and socialising. Vital for city kids also who may not otherwise get to see horses especially up close.*

*Inexpensive measures can be taken, eg raking seaweed during peak weed season to edge of dunes instead of removing. Weed at base of dunes will cause sand build-up. Create artificial reef running north of Little Island with building rubble to create wave calming, encourage reef fish, and maintain sanctuary for seals which are currently decreasing.*

*The Ocean Reef Marina project is irresponsible development and should not be progressed.*

*We have an amazing coast, which is slowing being ruined with development; too many people not appreciating the importance of protecting the coastal environment. With development, comes more people in the area causing damage to the natural environment, due to ignorance on how to use the coast correctly without causing harm (disposing of rubbish on the land and water). No development should have been allowed at least 2 km from the coast and have the natural buffer zone which mother nature intended to do its job. If you, as a Council, are stupid enough to grant all these permits for buildings and housing right on the coast, knowing you received the rates for all the extra housing, then complain you have to fix things (with our ratespayers' money who do not live on the buffer zone) is not acceptable as far as I am concerned. Burns Beach zone was changed after a lot of protest by locals and others once again falling on deaf ears, the developer wins again! Next mistake will be Ocean Reef, leave it as is; you can only drink so much coffee in a day. It will be interesting to see what will still be standing in 50 years, I won't be here but hopefully my children, grandchildren and great grandchildren will have the chance to enjoy a natural beach zone without a building, coffee shop or any other high rise for that matter.*

*Please do your best to keep it as beautiful as it is. We are very lucky to have such an amazing coastline. Thank you.*

*Impose restriction on any development that falls within the first stable dune area.*

*I love it & have lived close to it my whole life. We need to move fast and come up with an action plan to save it or keep it as it is for as long as possible. Please don't ruin it by putting in more groynes or sea walls, it will ruin it.*

*We have one of most beautiful coastline in the world, allow everyone to enjoy this wonderful stretch of sand & ocean. Tell the whole world, let everyone come and visit. There is enough sand for all of the people of Europe for their enjoyment.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Don't waste money on wire fences every year they are destroyed by nature. Sand bags might help. It will be difficult to stop kids from sliding down the dunes. It's great fun, so perhaps some education needs to happen. Signs don't work. We managed litter by having catch phrases like — drop something sport — that no one minded saying. If we encouraged the kids at school to have a catch phrase even to have a competition to find a funny one with a prize for the best. The kids would then educate their families on dune care. A small step, but an important one.*

*You need some bins along the walk from Iluka to Burns Beach. There are no bins and we often see people throwing rubbish in the dunes. Could be easily fixed with some bins along the path.*

*I hope the Shire does not build anything new near the coast and also that the Shire do not use our rates relocating infrastructure before it needs to be. If there is storm damage, act on it, don't act on a possibility.*

*It is a great asset to city dwellers and tourists alike. The natural dune environment is exceptional along the northern beaches. While sandy beaches are ideal, the dunes are more important to preserve, and they should be protected. I am unsure whether sea walls and groynes etc. will really make any difference to the erosion predicted. Ensuring any new development is not too close to the beaches is important, but don't move any existing facilities until it is really necessary.*

*It is a rare resource so close to the city. It is very valuable as a natural resource. It should be protected from development at all cost.*

*I love the coastal paths and am deeply grateful to have access to them for enjoying and appreciating the dune areas and beach on long walks. I like how the dune vegetation areas are fenced off and protected for the plants and the animals there, farther north (City of Wanneroo) there are problems with people driving and littering through the supposedly protected dune areas which I find upsetting and dangerous for people out walking. One negative point I have about the coastal path, which I don't see how the City can do much about, is how people leave the bags provided (for cleaning up after dogs) along the side of the path or tied onto the fences.*

*The car park at Pinnaroo Point is used at times and known to the police for hooning and drugs and a known meeting point, because of its seclusion there are also (sadly for them) people sleeping in their cars and vans for days sometimes. It is hidden and becoming a place you think twice about going which is sad I would not walk down there after dark, I am not the only resident who feels this way unless something is done it will only get worse as a few weeks ago when the police were called to the toilets at the car park further up (Whitfords) to remove a naked man from outside the toilets early in the morning I rest my case!?? We all love this coastline.*

*I feel more should be done about fishing rubbish left in fishing spots. More fines etc, undercover fisheries officers patrolling.*

*It's beautiful and we are blessed to live here.*

*There has been a bit of seaweed washed up between Mullaloo and Pinnaroo Point. This is a natural occurrence, but will it be taken away and a tractor clean up the sand/rake it?*

*Would be nice if there were more dog friendly beaches around Burns Beach as you always use to be able to take dogs along the Burns Beach.*

*We love Mullaloo Beach and the surf lifesaving club. We are very much looking forward to the development of the Ocean Reef Marina. Thanks.*

*Keep up the good work.*

*It's great to have a local government that actually care!! And are also helping the next generation! Thank you.*

*Not really, just please look after it. It is one of the best assets in the City.*

*You do a great job. Keep it up. Love the new stairway to heaven at Iluka Beach. Lovely view.*

*Monitoring and reporting the extent of sea level rise is relatively cheap. Let's not take expensive action to mitigate its effects until it's clear that sea level rise is happening to the extent it will have negative impact.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*There is a lot of plastic and other rubbish on the beaches. The amount I see is only increasing as time goes on. Something big needs to be done to combat this on the beach and in the surrounding areas to reduce plastic near the coast and reduce the amount getting onto the beach (more bins, get recycling).*

*Please stop annual replacement of fences at Whitfords Dog Beach. Its wasteful and makes the Shire look foolish. There must be a better approach to keeping people off the foredune. Maybe you should look at driving deep pylons at 100 metre intervals and suspension fence with much signage hanging on it (this sort of approach is used in stock fencing on floodplains). This would delineate the no go area clearly. Also, there is a good friendly dog walking community at that beach some community engagement to get a group of concerned people to police 'keep off the dunes' behaviour.*

*Public access should be prevented in bad areas when summer has ended, no building should be allowed within a certain distance of coastal vegetation in the event of further erosion. Think 30 years, not 5 or 6. Maybe put coast before money. Expensive homes and buildings mean nothing if we can't use the coast that commands those prices. The beaches should be for everyone long term.*

*Recognise we are so lucky and keep it pristine. An ocean pool as they have over east would be well received.*

*My answer to the questions earlier in survey where I had to slide to oppose or agree or neutral I was unable to slide past neutral to the strongly agree category, so all my neutral answers should be strongly agree category.*

*The coastline and beaches mean many things to many people and they are well used. I used to visit the Hillarys Dog Beach daily over many years when I had my dogs. The dogs and I could walk free and enjoy the sand and the ocean. In my old age I like to sit by the beach and reminisce about those good times and to watch people and dogs enjoy the beach and the ocean. I am grateful to the volunteers who weed and plant along the coastal dunes. They do a wonderful and very important job.*

*More access for boats (more ramp facilities), increased access to parking at busier sites, consider further commercial developments/café's that can be sustained and bring more people to the beach by providing more options whilst there.*

*Increase the Horse Beach area as it is too small.*

*I think the City of Joondalup have been doing a great job of integrating the parks into the foreshore areas.*

*It's beautiful!*

*Our beaches and coast look a whole lot better than others in the metro area. This I understand is due to our dedicated conservation group.*

*Need to understand the impact of Ocean Reef Marina on Mullaloo Beach.*

*Cycle paths need more maintenance. More lookouts are required. More signage and tourist attractions need development. A tourist centre should be constructed and maintained by City of Joondalup. More shade from large trees is required. A section should be allocated to high rise development. Most importantly, the Ocean Reef Marina needs to be completed in my lifetime!!!!*

*Would like to see a dog beach near Burns Beach.*

*Beautiful and needs to be protected for future generations.*

*Please get you act together and start Ocean Reef Marina redevelopment. [- - -] years ago, when we built our house one of its selling points was a building of a great marina. Still waiting!*

*Don't attempt the impossible, the sea always wins.*

*We have such terrific beaches and are lucky...it's a shame about the closing of activities in Hillarys as the kids loved the slides etc.*

*Erosion is inevitable due to climate change with rising sea levels but also due to increased population. Increasing housing density will increase human pressure on coastline.*

*We chose to call Mullaloo home due to its superb beaches, beautiful foreshore park and lovely café's. We must continue to protect these for future generations to enjoy!*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*There seems to be more sand at north Mullaloo Beach. The rocks haven't been exposed for a number of years and, in the summer, you can easily walk to Ocean Reef Marina along the beach. I seem to remember abalone growing on rocks under the cliffs as a child in the 80s and early 90s with no way of walking all the way along that section of beach. Maybe we haven't had enough big winter storms to wash the sand away and expose the rocks. Perhaps letting nature wash the sand away in winter and replace it in summer is the way to go along this section of beach.*

*The Ocean Reef Marina development should be stopped as an egotistical waste of money with significantly negative environmental outcomes. If it really is about reacting to increasing population and associated factors (recreation facilities, housing etc.) then put the money into Hillarys Marina and join forces with the City of Wanneroo to upscale Mindarie Marina. There simply is no need to have 3 x marinas within approximately 10 kms of coastline — it's ludicrous. The natural areas associated with the Ocean Reef area are unique, comprise Bush Forever Site 325, vegetation systems that have been poorly surveyed and which are the widest belt of natural vegetation found on the City of Joondalup coastline. Other points: \*The Ocean Reef Marina development proposal has not been formally assessed by the EPA. \*Vegetation (flora) and fauna surveys that the City of Joondalup is relying on for this development are lacking in important detail, key flora species are missing, and marine fauna have been mis-identified. \*The Ocean Reef Marina development site has a number of priority flora species for which no definitive actions have been outlined regarding this development. \*As per the MRS Amendment and further to this, the Ocean Reef Marina development will result in increased urban habitat fragmentation, damage to important ecological communities, increased weed invasion and a general loss of the benefits afforded to the local population and visitors by the endemic natural vegetation and localised ecology. \*Visitors to Western Australia (and Joondalup) want to see natural attractions, not man-made megaliths. It is our natural attractions which make our part of the world unique and special. The City of Joondalup has some very special natural areas, including coastal reserves, and can do better than destroying them. \*The Aboriginal and associated Noongar cultural connection to the Joondalup coastline (including Ocean Reef) has not been properly or correctly considered regarding the Ocean Reef Marina development. \*More recent fauna surveys by local Friends Groups, particularly with regards to insects and reptiles, are uncovering an amazing diversity of species in the general Mullaloo, Ocean Reef and Iluka areas. Please feel free to contact me directly in regard to this matter, or to discuss the Submission: Metropolitan Region Scheme Amendment 1270/41 — Ocean Reef Marina Redevelopment. Thank you.*

*I use it far less than ever before because of the inaction of governments regarding the shark threat. I used to spend my life there.*

*We think they are a very good Council, seem to be very interested in the coastline, they have workers looking after the foreshore buildings and parks all the time, very happy with our Council, we think the work that our Councillor Mike Norman and his helpers do along the coast is really wonderful.*

*The Council needs to review alternatives in relation to minimising beach erosion, some really good initiatives have been proven around the world — eg Port Elizabeth in RSA. The area allocated for exercising pets is way too small. The area has been reduced by at least 60% over 20 years at Hillarys Dog Beach. At high tide there is insufficient space, and at peak times insufficient parking.*

*Could be further beautified to attract tourists.*

*We need a longer horse beach available longer hours so even horse owners that work can use the beach.*

*Please replace some sand at Burns Beach.*

*We love having the Horse Beach available again — it is a great asset to the area and we certainly utilise it. We were having to drive over 1 hour each way to exercise the horses at a beach when Hillarys Horse Beach was closed & this was dangerous for the horses in hot conditions.*

*Council must make it a high priority to maintain our coastal area...*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Please look after nature when considering works. Our ecosystem is beautiful, but also very vulnerable. Please research/prioritise natural interventions (such as dune vegetation) over more unnatural ones. As there isn't much of it, can you please still allow dog beaches? Thank you for being able to have input.*

*The Joondalup coast is loved by the community for its natural beauty and ease of access. To maintain this natural coastline treasure that others envy the coastal dunes must be stabilised with simple cost effective nature helping hands some of which are noted below: 1. Planting of additional native coastline bush shrubs and trees, with associated maintained reticulation to support the planting in the first 5 years of the planting; 2. Continued prohibited access to dunes areas to limit human damage; 3. The use of strategically placed groynes in a coastal engineering scope is well understood internationally to prevent coastal sediment drift. These can be of a much simpler design than the existing Sorrento rock design. 4. Ultimately the bigger picture is simple, start now to transition Australia's aged coal fired power stations to gas, solar and wind power so by 2025; Australia has a world leading national power production system with no coal fired power stations to minimise the global warming issues earth has. Australia is one of the world's largest polluters per capita and our coal fired power production is the issue. Our nation will be the world's largest (currently 2nd behind Qatar) gas exporter by next year 77 million tonnes/year capacity and we sell it all to developed (Japan, Korea etc.) and stated third world countries (China) for power production. There has been something very wrong within Australian politics for decades regarding coal fired power production.*

*Curb the amount of weirdos hanging around Pinnaroo Point.*

*It's beautiful, please try to maintain just as it is using a range of groynes to mitigate beach erosion.*

*It is absolutely imperative that the dune system is maintained to protect from erosion. This is the most cost effective and sustainable solution to the problem of erosion. Looking at the erosion problems the Hillarys Marina is causing, the Ocean Reef Marina needs to be scaled down considerably, if not cancelled all together, or Mullaloo Beach and Burns Beach will further suffer erosion issues. No more building should be built in among the dunes to prevent traffic, both foot and vehicle. A wide and vigorous media campaign needs to be launched by the City of Joondalup to educate the public about staying out of the dunes to allow the vegetation to do its job and keep the dune system strong. Too many people are walking through the dunes with pets or children sliding down them.*

*Please allow more cafés, restaurants and bars along our coastline! We like to eat/drink and relax with a beautiful sea view.*

*Keep asking the community for the best outcome for all.*

*It is a critical part of the City, the ecosystems and leisure pursuits of locals and visitors.*

*Dog Beach needs to be bigger.*

*Park Runs are making using paths around Whitfords Nodes dangerous — swarming onto narrow routes. Running four (4) abreast at you and not giving way as they race down the path at you.*

*Keep the coastline natural and build the dunes up further to protect the City of Joondalup.*

*I usually only visit the Sorrento and Hillarys Beaches — I am not too familiar with beaches to the north, but I am aware that problems exist around the Quinns areas.*

*When will the pathway be extended from Burns Beach to Mindarie?*

*Walks along the pristine beach at Mullaloo have saved my sanity on many occasions, as have the walks along the pathway to Ocean Reef. The birdlife is so amazing and uplifting. That birds choose to use this area as a breeding ground is testament to its pristine nature. It is essential that this beautiful natural piece of the coast is maintained. Once gone it can never be replaced. I do have concerns about the huge amount rubbish left by fishers on the rocks at Ocean Reef. They show no respect for this beautiful area. Maybe bins nearer the fishing spot may help.*

*There is only one area to exercise dogs within a reasonable distance. We already have our access restricted on some weekends for cycling events. Do not do anything that further restricts the exercising of dogs.*

*A highly valued community asset.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

<i>I think it's a great idea that you're planning to avoid or minimise damage to the coast.</i>
<i>Do not want to see over development like planned 4 storey monstrosity near Sorrento that residents and visitors don't want. All about developers making money, too much extra traffic and not enough parking.</i>
<i>It is beautiful, and we should do all we can to protect it.</i>
<i>Better to have pet litter on pathways than plastic bags left to rot by lazy dog owners. Many fence lines are penetrated by surfers...eg Burns Beach! Iluka in part, also by the Ocean Reef Sportsman Club. Fines never happen, hence the problem.</i>
<i>I strongly support the maintenance and protection of the whole coastline belonging to the City of Joondalup. Mullaloo Beach is one of the most beautiful beaches I know.</i>
<i>We are so lucky to live in an area with such a beautiful coastline. I'm very supportive of preserving it.</i>
<i>I have recently moved from [ - - - ] to [ - - - ] and I am so happy to be close to the coastline. The path through the dunes is great and I feel lucky that we have a developed coastline.</i>
<i>Horses are not mentioned. They and their owners, trainers value the beach.</i>
<i>We are in dire need of more dog exercise beaches. The beach south of Pinnaroo has become too small and narrow and we are too frightened to go there with our dog and children. The dogs are forced to exercise in a narrow stretch of beach and there is no way to avoid boisterous or aggressive animals. Even worse, the owners are also squashed into this area making it dangerous for everyone. We need more exercise areas that can be used at particular times of day or spread out through the coastal strip. Otherwise the time has come for City of Joondalup rangers to supervise the beach at all time and carry out registration checks etc. to encourage only those owners who are truly responsible for their dogs to attend.</i>
<i>I would like to see the seaweed being left where it is deposited by nature to assist in the stability of the beaches.</i>
<i>It was difficult to choose which strategy to prioritise without having any information about the advantages and disadvantages of each option. Not sure if you will get any meaningful data except that you have asked for uninformed public opinion. What soft protection measures have been used successfully around the world? Artificial reefs eg "Reef Balls" eco-based techniques eg mangroves etc.</i>
<i>I love all of it and hope it stays the way it is.</i>
<i>I think that the coast is what makes living in the City, and in Perth more generally, so fantastic. I think we should be protecting our coast, with emphasis on ensuring that it can be enjoyed by the most amount of people.</i>
<i>Keep the coastline beautiful and natural looking. No more ugly fences and walls along the road!!!</i>
<i>You need to consider the people who have paid premium prices for their homes along the coast before you make any decisions. In my case, my home is my superannuation and if it fell even more in value than it has done since 2012 when I bought it, then I will end up with nothing. If there really is a chance that we will lose our coastline, then first of all you need to compensate those who stand to lose the most, ie their homes, rather than those who stand to lose time at one of their favourite beaches. That is where you should be directing your money first before trying to save the coastline.</i>
<i>More cafés/kids' parks along the beach/coastal paths so fewer people going to certain spots — therefore more spread out along coast and less impact on specific areas.</i>
<i>Keeping more natural walk ways like Mullaloo would be great.</i>
<i>City of Joondalup must consider outcomes of any actions taken (to combat erosion) with all ratepayers in mind, not only the people who have chosen to purchase property and live along the coastline.</i>
<i>We have to do the best to care for the coastline in a long-term care program, no short cuts. All possibilities have to be considered and the best long term, note long term, plan for the future chosen, especially as we have the ocean raising its level by a metre in the future and where does that leave all these plans? [ - - - ]</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Our beaches are a real benefit; however, I do also believe that, whilst not dealt within the above survey, we need to have more opportunity for development of facilities such as cafés/bars so that the waterfront becomes a greater hub of social activity.*

*While the survey had to be generic and quite simple, I think one of the key determinants for trying to combat erosion etc. was overlooked (except very last question) and that is to preserve natural integrity of our unique coastline and associated systems. I believe (given the focus of this survey) that if the drive is to introduce breakwaters etc., then examination of living reefs and green engineering should be explored as alternative to the traditional groyne/breakwater structure. These green engineering alternatives create wondrous places for exploration, enhance natural species, are shown to favour native species over introduced ones and increase tourism (again by creating rock pools etc. that people can explore and enjoy). I would be happy to discuss or expand upon this if interested.*

*It is a beautiful coast and I don't want to see it disappear under a pile of rock walls and reinforcements. Developments should be carefully designed to complement the coastal condition before being approved, and to ensure they add to the amenity and natural beauty. A comprehensive advisory program should be put in place to inform residents and business owners of the dangers of coastal erosion, urging them to act now to relocate or adapt to conditions. Some structures will have to be demolished to make way for some reinforcement (as above), however it would be a disaster to turn such a beautiful natural area into a steel and concrete mess.*

*There is nothing the Council can do to stop coastal erosion until it happens. It shows no sign of happening, therefore this whole exercise is a waste of ratepayers' money. Please stop this nonsense!*

*Don't try to remove the Horse Beach again. Offer to extend the Horse Beach a further 50 m towards Pinnaroo Point. Manage the dog section better and provide better access and amenities to Whitfords Nodes to ease congestion in peak periods.*

*Oh yes, I do but don't want to say it here.*

*There needs to be more dog friendly beaches, especially between Whitfords and North Beach. A small beach area immediately north of the Marmion Angling Club would be ideal for dog access as it is rarely used and would save dog owners from having to get in their car to drive to dog access beach areas.*

*Increasing Shire rates are way too high and should be fixed for three years minimum. And lower the number of lazy, useless Council employees 50%.*

*It's our most important asset. Let's protect it while still implementing sustainable changes which allow everyone to use these areas for different responsible purposes.*

*All its flora and fauna are precious: birds, reptiles, mammals, marsupials, insects. We must do what we can to protect and preserve it. It's our children's children's future.*

*We sure do love and appreciate how well manicured Mullaloo Beach is!!!*

*For me, I found that prioritisation of the options provided was quite difficult because I feel it is a far more complex issue than can adequately be addressed with a simple "tick and flick" response. Broadly, it is my view that there are a number of important conflicting demands to be addressed which will require a new, and perhaps uncomfortable realisation amongst the broader community with regard to how we treat and use our coastal environment into the future. At the end of the day, it will be all about balance and the carefully considered expenditure of available funds.*

*It is probably unlikely to occur, and the City should allow all development that it would allow.*

*It is a beautiful coastline. I would like to see some lighting on the coastal path from the Boat Harbour (Hillarys) to Mullaloo to make the path safe at night, but I realise that this may be too expensive to justify the work.*

*Having access to the coastline is one of the huge advantages of living in this area. There needs to be a balance between corrective action and environmental impact, which can be a hard balance to find.*

*Would like to participate in volunteering to help maintain the coastal environment.*

Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):
<i>Build the Ocean Reef Marina and avoid costly rework.</i>
<i>Beaches, such as North Burns Beach or Iluka Beach and other small beaches that are not suited to swimming are more suited for dog beaches as they are not much good for swimming. Whitfords Dog Beach is such a beautiful swimming beach and so is rather spoiled by the large volume of dog traffic. The horses are fine though. There also needs to be a toilet block at the North Burns Recreation/Picnic Area.</i>
<i>I have been using this area of coast for [ - - ] years so have seen a variety of changes to beaches in this time. I think the Dog Beach area is one that is particularly in need of help. It is very well used.</i>
<i>It's beautiful, if possible we should save it.</i>
<i>Hi, I'm a mum of [ - - ] who loves to exercise with our dog; unfortunately, when we get to the Dog Beach at Whitfords she can only sit in a seat by the path as she can't access the sea as she can't get down to it, she can't get in to the water with her dog, I've seen these ramps in pictures and these would fab for disabled people of all ages. Thanks [ - - ]</i>
<i>Please never pave the limestone path up "twin peaks" at Nodes, it's a lovey place to run. Also, during abalone season I often see people going into the dunes, I know this is hard to prevent, but more officers out there might help.</i>
<i>We have wonderful beaches, their intent, being accessible to all for swimming, fishing, recreation and relaxation, needs to be preserved and not be prejudice by development.</i>
<i>Yes, I found this survey poorly worded and difficult to answer numerically. I would have preferred to have been able to tag them each as equally important and then to give my reasons. Naturally as a home owner, I felt compelled to put residential homes and properties as top priority for protection, but It follows that, unless beach erosion is addressed first and foremost, all the other areas will become at risk. If I had marked beach and dunes as top priority, am I saying homes and buildings are not important????</i>
<i>Congratulations on the survey!!</i>
<i>The coastal ecosystem has a fox and feral cat problem which is not being adequately managed by the City of Joondalup (or any other LGA). The value of the City of Joondalup coast includes native flora and fauna. More prominent and proactive pest eradication programs should be included in the coastal preservation plan.</i>
<i>We need more areas for dogs on the beach with nice picnic areas, shade shelters, proper paths to the water, free dog washing taps and trees. Make it like a family gathering place.</i>
<i>The new development of the lookout and playground Iluka/Beaumaris Beach is wonderful. Thank you.</i>
<i>Create a swimming beach at Burns Beach. Will focus people in one area.</i>
<i>Love using the coast for a wide range of activities and can see the effort the City of Joondalup put in to maintaining it for us. Natural ecosystem preservation is paramount for me.</i>
<i>It would be lovely if more parking could be created at Whitfords Beach.</i>
<i>Worth preserving for current and future generations!</i>
<i>I believe that the formation of a greater sea wall or groyne at the Pinnaroo Point area would assist with protecting and mitigating the erosion of the Whitfords Nodes Beach; however, I would be reticent to do this as it may/will impact to the north of the point — Mullaloo. The beach suffers from storms — foul weather from the north-west during the winter, and the erosion caused doesn't get the chance to re-supply with on flow sand (sub-surface water) from the prevailing south-west winds and onshore flow, due to the physical barrier formed by the Hillarys Boat Harbour north Marina wall. As witnessed on the south side of the Marina, the side builds up from the on-shore flow, this blocked by the Marina to the north side. Sub-sea formations to assist with mitigating the north-west swell or replacement sand could be trucked in at great expense. Maybe a series of shorter groynes, as built to the south at Sorrento, City Beach or at Yanchep/Capricorn could be investigated for effect and suitability? [ - - ] is one of the 4 founders of the Ocean Reef Sea Sports Club (formerly Whitfords Sea Sports Club) — has considerable knowledge over the past 50 years with documented/photographical evidence of the this area. [ - - ] contact details are [ - - ] should you wish to contact [ - - ].</i>



<b>Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):</b>
<i>Develop North Mullaloo similar to Simpson Park or better still, duplicate what has been done in Yeppoon! Block off north end of Oceanside Promenade and make the beachfront a destination location not a highway!</i>
<i>Please put in a well-designed “A-frame” artificial reef for medium to advanced surfers in the area south of Ocean Reef Marina and North of Mullaloo Point. If City of Joondalup can install a high-quality wave the benefits are: 1. Reduce erosion 2. Create a reef habitat for fish 3. Significantly increase economic activity for Mullaloo and the new Ocean Reef Marina 4. Significantly increase local property values — <a href="https://www.savethewaves.org">https://www.savethewaves.org</a> — <a href="https://www.washingtonpost.com/surfonomics-quantifies-the-worth-of-waves/2012/08/23/86e335ca-ea2c-11e1-a80b-9f898562d010_story.html?noredirect=on&amp;utm_term=.14a4b9f95d18">https://www.washingtonpost.com/surfonomics-quantifies-the-worth-of-waves/2012/08/23/86e335ca-ea2c-11e1-a80b-9f898562d010_story.html?noredirect=on&amp;utm_term=.14a4b9f95d18</a></i>
<i>Such an important asset to the City. Should be kept as natural as possible, with reasonable access.</i>
<i>Yes, maintain and improve walk ways and cycle ways (preferably keep them separated), encourage cafés and restaurants in selected areas. We have world class beaches on our doorstep, and with the collaboration and financial support of the WA tourism industry the whole State can benefit. There are plenty of foreshore wilderness areas outside the metro area.</i>
<i>Don't develop it leave it alone, stop moving nature...they were here 1st...</i>
<i>Keep things in balance and protect the beach and infrastructure for all to enjoy.</i>
<i>Please do all you can to protect the best beaches in Perth.</i>
<i>I don't support the building of exercise stairway at Hillarys Nodes (not sure if this is still proposed). Staircases can be built anywhere — please don't build them in fragile coastal dunes.</i>
<i>A comprehensive assessment of the whole coastline needs to be completed prior to introducing measures. This needs to be continually updated as measures are implemented as the measures can have an adverse effect on other parts of the coastline.</i>
<i>Yes, please cancel further plans for ruining Ocean Reef. The impact on Mullaloo Beach will be catastrophic. Have we learned nothing from the filthy mess created at Hillarys Boat Harbour? the idea that the status of the 'Bush Forever' can be discarded so development can go ahead and ruin such a beautiful area. Thanks for the opportunity to comment.</i>
<i>Long term, it will be just too expensive to protect the entire City of Joondalup coastline from sea level rise. Better to take action to mitigate climate change now.</i>
<i>Please protect the dune systems that are left along the coast. They offer protection for beach erosion; some important coastal dune systems are still hanging on. They are a natural resource and don't exist in other parts of the world which makes them special, and international tourists love them. Our beaches are the most beautiful that I have seen in the world. They are a gift and should be treated as such.</i>
<i>It's important, but we shouldn't spend a fortune if it's not going to be effective. Protecting the eco system is more important than a place to swim.</i>
<i>I have seen the use of geotextile bags at Watermans Bay and other places like Cocos island, I would strongly oppose them as they break apart in the weather. I frequently find large pieces of these bags in the water and on the beach, not just at Watermans Bay, but also on the beach at Lennard Street. I have also noticed with the most recent storms that there was a huge backwash at Watermans Bay because the retaining is too close to the water line. I think there should be a lot bigger buffer zone from roads and infrastructure, like alongside the Whitfords beaches. The other problem with these bags are that they are made up of millions of micro fibres, which are one of the big threats to marine life and ultimately humans.</i>
<i>I am disabled and a dog owner. I would love to take my dog for a swim and have easier access myself by pathway to the water or a sitting area/deck. What I do now at the Hillarys Animal Exercise Beach, which I am grateful for, is walk with assistance to the end of paving and let my [- -] go to explore and swim. But I cannot go any further. I bring a chair to sit on the end of the path, but don't have a wide view and cannot physically retrieve my dog. Or join him in the water.</i>
<i>We are lucky to live by the coast and should take measures to protect the coast for future generations.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*We are lucky to live along a beautiful coastal area and the way it is maintained is a credit to the City of Joondalup services. When the Ocean Reef Marina is completed it will further enhance this wonderful area.*

*There's always seasonal changes, so some months there're large sandy beaches & others there're small or none. Certain times of the year also have sea grass washed up & rotting on the beaches.*

*Stop wasting money on the pseudoscience of climate change. Sack all bureaucrats who push the lie. All Councillors who have swallowed the lie need to resign. You will bankrupt this country if you nut jobs keep throwing away people's money on this. Have you morons not noticed that Tim Flannery's predictions for Perth that he made 15 years ago have completely failed?!?!?*

*Keep infrastructure away from the coastline. A perfect example of what not to do — West Coast Highway!*

*We have a wonderful pristine coastline and it is enjoyed by many. I would hate to see the likes of Scarborough Beach replicated along the coast; I very much like it the way it is.*

*The bins had disappeared from the beach at last glance. Will they return? It helps me to collect rubbish and bin it with my family. What measures are in place by the local Council to clean the beach of rubbish currently? Thank you! [- - -]*

*It has been managed really well; the walking paths cycling paths and amenities are great. Since the playground went in, parking is difficult to find on weekends. A beautiful playground is being enjoyed by many families. The facilities, barbecue, and area always looks clean and tidy, and along the coastal walk, it's pristine. Only wish all dog walkers would pick up their dogs' business. I always do. Do you think you could put bins along coastal walk from Ocean Reef to Iluka so people don't leave their dogs deposits on path? Do you think you could provide bio-degradable bags? That would be great. Thank you.*

*Very disappointed to see that residential development has come so close to the shore at the expense of the natural dunes and vegetation. Especially when there are the natural effects of erosion along the coast. I think there should be some areas that are close, but then it needs to provide more restaurants and cafés as we do not utilise our coast well in that regard. It's hard to, but a balance between nature and humans is very important.*

*1. Global warming and climate change are UN/EU policies, based on science that is not proven and therefore has no place in City of Joondalup policies and actions. 2. Coastlines, by their very nature, are dynamic, and the beach and adjacent hinterland have been changing over eons, and will continue to do so; therefore, throwing ratepayers' money at fixing these changes is like throwing good money after bad, or a little like King Canute using ratepayers' money to tell the wind, waves and rain (and possibly tsunamis) to stay away. After all, the coastline has been steadily moving eastwards over time, as evidenced by early maps of the Western Australian Colony, and surveys of the seabed out towards the reefs off our coastline. 3. Building groynes, concrete walls and moving sand is costly to ratepayers and never solves the coastal problems as one-off outlays. They become permanent increasing imposts on the Council's budgets, which are funded by the long-suffering ratepayers, with weak accountability by the Council to the ratepayers. 4. Proven science indicates that all manmade structures built on the beach and into the sea, such as pipes, groynes and marinas, have what is internationally known as longshore drift, which means that sea currents, which roughly run parallel with the shore (in the same area there will also be sea currents running roughly at right angles to the shore, including the low and high tide movements), will, over time, move sand, shingle and loose rocks from one area and pile it in another area, leaving parts of the beach without sand and shingle, thereby exposing underlying rock, which then breaks down under wind and wave erosion and helps undercut nearby coastal rock cliffs and sand dunes, such as at Burns Beach. Therefore, the City of Joondalup needs to keep all manmade structures around the coastline to a minimum, so as to minimise the impact of longshore drift.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*I would like to have the horse beach extended. I do not own a horse and never have. I appreciate the opportunity for horses and owners to be able enjoy our beaches. I consider that this is a right. My children grew up seeing the horses at close range and they loved the opportunity to see them. I take my dog there and obey the rules in the horse section by keeping him on a leash. But a longer section for horses would be a wonderful action.*

*Needs more spaces to exercise dogs safely off the lead without interfering with other people.*

*Don't build Ocean Reef development — will spoil the natural beauty of the area and will take out 4 good surf breaks.*

*The City of Joondalup has a beautiful coastline which needs to be protected as much as possible. The protection should ideally be natural and maintain the existing environment and ecosystem.*

*Protecting people's homes must come before anything else. Clearly building structures to protect the dunes will also protect the houses and businesses. Any rational consideration of protecting recreational amenity must come after protection of property and businesses/people's livelihoods and jobs. Also, it is important to keep in mind that all you have is 'modelling' within a 100 year timeframe, so there is no urgency. Better to think this through than to rush into a course of expensive action for short sighted political expediency just be seen to be doing 'something'. I do not think a mere public survey will give you sufficient data upon which to make a decision. One modelling exercise will give you a different projected outcome than another. You need a few models to assess. I speak as someone with academic knowledge of modelling.*

*The pathway and parks are a fantastic amenity provided by the Council. But the coastline is a natural gift which we should do what we can to look after, even if we need to relocate our pathways and parks further inland. Ensure development is appropriate when close to the coastline (Burns Beach) keep it well back and maintain the greenbelt.*

*It's an integral part of the attraction of the City. Dune vegetation provides some stability but is under threat by coastal processes and human impact. More needs to be done to protect and enhance the narrow strips that have been retained during development.*

*Our coastline is an asset worth protecting.*

*I believe it is imperative to maintain natural environment and prevent commercial/residential development west of the coast road and to retain all beach areas for the benefit of everybody.*

*Really appreciate all that is done. Please could Merrifield Place be re-tared and proper parking bays be marked. It's used extensively in summer for parking and this would help the residents. Thank you.*

*Beaches change with the seasons, I do a lot of beach walking and fishing, though often further north of Burns Beach. The sand seems to get washed away in winter with the storms and more weed gets deposited on the beaches, but in spring and summer the sand seems to build up again.*

*Not entirely relevant to this survey but another dog exercise beach is needed. The one beach that permits dogs (at Hillarys) is massively overused and hence problems with safety and useability having so many dogs in such a small area — also can't be great for that environment.*

*City of Joondalup needs to be doing more to protect the natural dune system. The destruction of dunes at Burns with development has made a huge difference to the natural dune ecosystem. The destruction of more dunes and coastal vegetation that is about to take place at Ocean Reef is disappointing. Saving dunes would make a difference to the amount of erosion in the future.*

*It is a magnificent coastline and worth protecting for its natural beauty!*

*The City of Joondalup has a decent balance of developed/maintained public beaches and preserved/untouched natural beaches, if the developed/maintained beaches are at the expense of the environment, then they are simply not worth it. In saying that, if you are able to protect the environment and the already-established facilities then that would truly be the best outcome.*

*Take note of Bunbury's advances in beach protection and clean safe areas, e.g. Bunbury runners' clubs are picking up rubbish and doing more environmental education. Also look into educating nearby takeaway businesses to use more environmentally-friendly containers and cups, e.g. discount for bringing your own takeaway coffee cup.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Consultation from a world-renowned expert such as the Dutch group — Deltares — they are working on similar issues worldwide. They did consultation with the Dutch Government to build and maintain the dikes for country protection. They consult with governments and engineering companies to prevent flooding. Please consider this group, rather than waste money and time by consulting with so-called experts that will lead to non-optimal results.*

*Let's develop it so that we make use of this massive tourist and commercial opportunities. Bars, pubs, hotels and entertainment all the way. Be great to drag us out of the dark ages.*

*Our coast is our most valuable asset! It drives the lifestyle of so many Western Australians. I have chosen to live in the northern beaches especially because of it. This is bigger than trying to save infrastructure etc. It is about saving what we live here for!*

*It's a great coastline and needs to be protected for the benefit of the ratepayers.*

*It is a beautiful coastline that overseas visitors are envious of. We should do what we can to protect and preserve it.*

*Being from the north east coast of UK I consider sea walls are the only option.*

*The best part of Joondalup is the coast, it has some of the best soft white sand with hardly any rock structures. The value of the city would decrease dramatically for my family if the coast experience was to decrease significantly. We have plenty of white sand across the coast that could be used to replace sand loss.*

*Would love to be able to go to Iluka Beach more often. With [- - -] its easier/safer to drive to Mullaloo. Iluka is full of rock which isn't pleasant to walk or relax on.*

*Would very much like to see the once proposed upgrade to the Ocean Reef Marina, ie beach playgrounds, cafés, entertainment, small shops. Look how busy and utilised Hillarys Boat Harbour and Sorrento Quay are, and we need another one along the northern busy corridor. Mindarie is just too far away and there is not enough to do there. We live nearby and would welcome more to do on weekends etc. as would many people.*

*Bike paths...the recent upgrade from north of the Ocean Reef Boat Harbour to Burns is a disgrace. You couldn't have laid a more dangerous path for all users — walkers trip over the poorly laid concrete and bike riders also suffer a disjointed ride and is neither smooth or flowing. The new street layout on Oceanside Promenade is an absolute joke given that every new street layout includes a dedicated bike lane. You have inserted islands making it dangerous for both bike riders and cars. You cleared metres of bush to accommodate a walk path next to the new parking area — but surely taking the wall out another metre (bundles of space and not more bush cleared) to give walkers more room and to also expand the road to give the bike riders a safe area makes sense. What gets proposed in initial consultations is not what the end product is. What happened to the round-about for Oceanside Promenade and Keywest Drive? Every other street gets one. That area has a massive blind spot being on a curve of the road and cars parked blocking a safe view.*

*There is a need to push ahead with the path to Mindarie which seems to be taking so long. We need an access path/boardwalk through dunes to the beach at the end of the current Burns Beach development. Access that doesn't further erode the dunes.*

*I am totally against the building of additional buildings such as cafés and food joints along the waterfront, as has happened in other sections of the coast. Everyone we meet on our morning walks along the beach, regardless of the time of year, all comment on what a wonderful beach we are blessed with. Safe swimming, relatively calm water, no aggressive surfers, very few jet skis making a nuisance of themselves. Our main irritation is the laziness of some of the visitors who find it too much trouble to take their rubbish away when they leave, as well as public consumption of alcohol. There are plenty of rubbish bins provided, but these slobes are just too lazy to carry their rubbish that extra few metres. Sometimes the car park proves inadequate, and then your rangers become too aggressive and start putting fines everywhere. Exercise a bit of tolerance.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*I would not say the facilities or parking are ample, in some cases, not even good. There should be more close parking for people with disabilities, especially near the Dog Beach. Able people can walk further from parking areas to the amenities available. I often turn around and leave without even stopping when I can't get reasonable parking. The coastline does need to be protected, and should be, and a priority list should be made up with a strong focus on attending to "natural" and accessible public areas first, and commercial or financial investment areas following later. It is "everyone's" coastline. I hate the idea of seawalls but if they are necessary in the end, then do whatever is required.*

*Dogs on Mullaloo Beach in winter months.*

*More community input focus groups. More education to residents about future impacts that may occur.*

*It is a beautiful coastline. I would hate to see it erode away and nothing be done about it.*

*Yes, it is a beautiful stretch of coastline and should be protected as much as possible. We are extremely fortunate to have access to such a clean, open space. I feel sorry for the people who have built houses in vulnerable areas but maybe they also need to do some forward planning. I am extremely grateful to the government which had the foresight to secure the Whitfords Nodes for future generations. I am also grateful that the City of Joondalup has a beach cleaning tractor to maintain the environment in its pristine condition during the summer. Thank you.*

*I would love the City of Joondalup to follow the example of the Townsville City Council and have something like The Strand created along the length of our coast. Let's be proactive, rather than always reactive. Our beaches are even more beautiful than Queensland we should make the most of them for the most number of people.*

*Revegetate where possible.*

*Building fences along the beach to stop access is a waste of money and has been proven to be futile over many past years. The best solution is to load the sandhills/dunes with prunings...the larger the better. This allows the sand to be trapped and support coastal vegetation regrowth. I swim daily at Whitfords Nodes car park beach entrance over the past [- -] years and prior to that I lived in [- -]. A classic error was to give a subbie the job of installing 2 support posts the day of last Friday's storm...one has been eroded and the other will go tonight...clever!!!!*

*As for most of the Perth area, the beach and ocean are the major day-to-day leisure time area. No special plans are needed to visit it, just turn up and go for a walk, swim or cycle. Those that are passing by in their cars may have chosen the coastal route in preference to Marmion Avenue or the Freeway to take in the coastal views. Local businesses catering for users of the coastal facilities thrive and provide social hubs for people to meet. Walking along the beach or walking/cycling on the coastal paths promotes social interaction between users not usually so apparent in the urban environment.*

*Don't build the Ocean Reef Marina. Invest that money in protecting the Marmion Marine Park.*

*I've indicated that maintaining a sandy beach and dune system is important for me, but I need to clarify. A rising sea level will upset the current high-water mark and existing beach and dunes, but both will re-establish themselves with a new high-water mark, by themselves. All we really have to do is clear out the rubble of buildings etc. that the sea demolishes. Maintaining the natural systems is most important to me, not using artificial systems to preserve the existing beach and dunes. There's no need to go down Holland's extreme path, protecting homes etc. that are wholly below sea level, though it is technically possible, as they have demonstrated with their national project. Orderly retreat, rather than do nothing, is my recommendation. And re-creation of access and facilities, where appropriate, on safer ground. I'd rather spend public money on helping people relocate, than on engineered solutions. Unlike Holland, we do have space to relocate to. And we know their insurance companies won't help them, so some compulsory acquisition and relocation funds might be better public policy. I don't advocate the Seabird 'you're on your own' approach. My only disappointment is that sea levels are not expected to encroach further — I was looking forward to eventually having a beachside property!*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

<i>I do not want our coastline to be another Surfers Paradise, which Scarborough is fast turning into.</i>
<i>[multiple Comment Forms submitted] I would hate to see our beautiful coastline turn into another Surfers Paradise with huge buildings all along the coastal strip.</i>
<i>We seem to be maintaining a lot of infrastructure for beaches and coastline which is very little used between Iluka and Ocean Reef Marina.</i>
<i>It has been great to see the wider and safer pathways created along Oceanside Promenade in Mullaloo. The lookout and playground at the Iluka Foreshore park has made that area more appealing to visit with the kids. Looking forward to seeing progress on the new Ocean Reef Marina as well as the area in Iluka just south of Burns Beach where a small commercial area has been proposed. Currently, there are no café/coffee/dining options within close walking distance on the coastal side of Iluka, other than the food truck that visits the foreshore on weekends.</i>
<i>Please try and extend the Horse Beach??</i>
<i>For a City area, the wildlife of the City of Joondalup coast is terrific. I'm disappointed it wasn't specifically included in the survey. I hope it isn't omitted from consideration in any future plan.</i>
<i>Please refer to my letter dated [- - -] to the CEO.</i>
<i>Thank you for keeping the animal exercise beach at Whitfords open.</i>
<i>We all enjoy them so much, they make people feel good. Everyone can enjoy this environment, and it is free. It provides a natural health benefit.</i>
<i>On the Sunshine Coast, Queensland they use soft groynes (what I call them!) Large bags filled with sand? They seem to be less harsh and blend into the landscape compared with hard stone groynes. I would imagine they would be cheaper than hard groynes and could be trialled at Whitford Nodes.</i>
<i>We need to avoid building infrastructure in the sand dunes if we wish to protect the beautiful coastline that we have in these northern suburbs. Also, how is the Ocean Reef Marina going to effect the Mullaloo foreshore?</i>
<i>A fitness park would be awesome, something to match Cottesloe, and a better separation between the road and the footpath would be awesome.</i>
<i>I personally would like a local on which I can exercise my dogs. The currently available beach is really too far.</i>
<i>I love that I can enjoy our beaches without having to pay for parking like other cities in Perth.</i>
<i>It is not in the long-term interests of developers or residents to have residential lots that are located extremely close to the tidal zone, in an area that is extremely vulnerable to erosion, and/or at an elevation that is marginally (a few metres) above the highest expected tide. It should not be the responsibility of City of Joondalup ratepayers to rectify private property issues when lots have been sold and properties have been built in such vulnerable areas.</i>
<i>It is vitally important to maintain our coastline, it is Perth's biggest tourist asset and a part of our lifestyle.</i>
<i>It's magnificent and I hope we can preserve it for the enjoyment of generations to come.</i>
<i>I don't believe any housing properties are close enough to be under threat from the erosion.</i>
<i>We would love to see development of the Ocean Reef Marina.</i>
<i>Ensure all parking remains free for use.</i>
<i>It is wonderful to live near so many lovely beaches (I live in [- - -]) and I make use of them almost every day by going for long walks. There is nothing more peaceful, refreshing and rejuvenating to me than walking along the beach (particularly the sand in bare feet). I would highly appreciate and value any efforts the City of Joondalup goes to to protect our beautiful coastline/beaches.</i>
<i>It is well maintained and a pleasure to live near.</i>
<i>Beautiful scenery along these beaches! Don't allow them to become any more commercialised than they already are. Let them remain as natural as possible.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Found it difficult to use drop down areas in the survey, would only allow me to rate a few rather than all. We have a fantastic climate and natural coastal line available to us, I would like to see it develop and maintain for all to use now and especially for the future seniors to enjoy.*

*Our coastline is the jewel of the City — and more should be done to promote and preserve it at the same time. This is our biggest asset, and in certain areas away from residential housing, could have some wonderful cafés and terraced grassed areas right on the beach (Fremantle/City Beach/Cottesloe do this well), making the beach come alive through the day and after dark, to take in our beautiful sunshine and sunsets, which you don't get anywhere else in the world. I have lived away from Perth/City of Joondalup for [- - -] years, worked and travelled the world — and nothing is as special as our coastline — it's what I yearned for all those years away, and what I make the most of now that I'm home again to enjoy it, now with a family. Yes, steps to preserve our coastline are critical for the future, but with this comes opportunity for development at the same time, to make this a global, 'must-visit' destination, and one the local community can take advantage of even more, and benefit from (and show-off).*

*More rubbish bins please and more patrols and punishment for dog owners who are regularly on the wrong beaches!!!*

*The City of Joondalup has a beautiful coastline and we must preserve it for the future.*

*It's [- - -] lovely!*

*We have some of the most beautiful beaches in the world. Let's do what we can to protect them for future generations.*

*The coastline in Joondalup is one of this beautiful City's best assets and should be preserved and enhanced wherever possible. Although I am in favour of keeping the area as natural as possible, I would still like to see the marina at Ocean Reef finished in my lifetime.*

*Great effort so far in getting the right balance for conservation, but also accessibility (walking/cycling etc). Would love the footpath/bike path to be extended beyond North Beach (which appears to be on the cards, but not happening any time soon). Also, maybe better care with future designs. For example, the new lookout at Iluka Beach doesn't blend with the beautiful wooden boardwalk the other side. It stands out now as an ugly metal lookout rather than the wooden one. Seems a strange and poor choice.*

*20 years ago, the Council said they would stop people four wheel driving on the beach over safety concerns and not to build houses. We knew that was not true and you built suburbs right on the beach. Now, tax payers will be forking out for your past mistake.*

*It's beautiful, and the stretch of path from Ocean Reef Marina to Burns Beach is the best in Perth. It must be protected!*

*It is beautiful, we are very lucky.*

*Please save places like Hillarys and Sorrento for our future generations.*

*Whitfords Nodes Park and Pinnaroo Point are underutilised, they could be used to take the pressure off Mullaloo and Hillarys Parks as these are so full in summer. I, as a local, cannot even go down during the weekends. [- - -] attends the MSLC on Saturday mornings in summer and we cannot get parking, this is frustrating. I believe if the playground at Nodes was updated, many more families would use this park and beach area. Will the Dog Beach be extended? this is far too small for the population. City of Stirling has many dog access beaches, we prefer to use these as they are less busy.*

*Support groynes and walls only if coastal engineers are consulted and appropriate modelling takes place for location decision making.*

*It's so nice, so please do everything to keep it this way. Put the natural eco systems first above everything else.*

*More facilities — cafés, restaurants, tourism, hotels etc. A beautiful coastline, but with very little infrastructure/amenities.*

*There are bandicoots living along the coast at Burns Beach. Please adopt some policy to protect the bandicoots, such as removing cats that are in the parks, or compelling people to keep them inside.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*No bins placed close to beach at Iluka Beach, limited place to put rubbish in that we pick up, have to leave it next to bins as those available around the lawn area are already full.*

*Whilst not necessarily about the coastline, I would like to see the City of Joondalup be more proactive in regard to shark mitigation.*

*It is great to see that you are considering the natural environment. We are very blessed to live in the City of Joondalup and we should take care of it, particularly our coastal areas. My young kids absolutely adore the beach and it is a great day out for them and something very Australian that should be cherished.*

*The City does not appear to value the biodiversity and geo-heritage conservation values of the coastal reserves. The geology and geomorphology of this area is unique and should be valued and protected. The importance of the natural heritage of the coast is inadequately protected. This area of diverse fauna and highly adapted flora needs better protection from inappropriate human use and development. This important ecological corridor is being degraded by continual clearing for roads and other infrastructure and damaged by trampling of vegetation, litter pollution, weed invasion, feral fauna and pets.*

*It needs more and better maintenance.*

*Further beach access needed for exercising dogs in Northern Joondalup beach area.*

*Traffic noise is horrendous. Can traffic be diverted away from West Coast? Better group transport rather than cars.*

*Use reconstituted wooden planks, which sit above the dune, for pathways.*

*Please develop Ocean Reef Marina. Open up Dog Beach to horses at the weekend. More parking at Dog Beach. More beach cafés.*

*Yes, although not likely a popular opinion, I am not a fan of the Dog Beach precinct at Whitfords/Pinnaroo Point. The Dog Beach limits are ignored continually, and the car park/access paths are always in a poor state — dog droppings and urine. Also, the pathway between the Dog Beach car park and Whitfords Nodes is in disrepair, with large height differences between slabs. This section required the unbroken red dual use path to replace what is their currently.*

*I have noticed many improvements, such as the additional parking, improved pathways, added water fountains and many rehabilitation projects in the dunes (especially along the Iluka Beach), and added playground at Iluka Beach, which draws many more people down there (which I think is good for the community).*

*Expand Horse and Dog Beaches.*

*I have observed that there is a natural cycle of erosion, rebuilding and seaweed on the beaches. This is related to seasonal storms. This may get worse as we allow climate change to affect our planet.*

*I appreciate the beautiful walkways which everyone can access. Could we please have a Dog Beach between Sorrento and Beach Road? Even if it was only during winter or late afternoon or early morning.*

*Protection of coastal dunes and beaches at all costs (limit houses and businesses) especially big developmental flats like in Sorrento. If the dunes and coast go — Joondalup and the economy suffers. If these dunes and beaches are washed away because of over use and destruction — Joondalup will cease to exist. Increase the number of groynes and get the best brains in the world with proven methods of coastal protection through proven methods to advise — immediate action at all cost — if we want a perfect coastal area, we must pay for it. Please please note: rather than "making Joondalup pretty" with artworks etc — make it ecologically safe and protected for the next 500 years at least. This area amounts to nothing if the natural vegetation goes.*

*Love the northern beaches. Great facilities and playgrounds by the Council.*

*We need to protect our coastline. This is what makes our state so beautiful.*

*Please note, every day our community gathers at [ - - ] to catch up, we strongly suggest that minimal seating be reinstated, there is absolutely no impact on car parking or safety issues.*

*Private residences need to accept the risk of developing near a coastal area. High cost activities, such as the Marmion Angling Club car park, should not be funded by the City.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*It is important to maintain a mixture of developed (commercially) and natural coastline in order to cater for the whole community. There is plenty of commercial development already in place (at Hillarys, Mullaloo, and further north at Mindarie). I believe placing more commercial areas, such as at Ocean Reef, is overdoing it. This is just as bad as building high rise buildings, it spoils the coast and takes away the natural beauty.*

*I would like to see the coastal pathway continued onwards to Mindarie.*

*It is important to maintain and protect the coastal region. This will allow for continued use of these public spaces for all ratepayers.*

*Maintain a development set back from the coast. Look at ways to reduce greenhouse gas emissions to reduce the impact from climate change.*

*I love our coastline and would like to thank you in advance for your help in conserving its natural beauty.*

*I spend a lot of time picking up rubbish along the beach and feel this should be something done by the Council or those completing Community Service. We have the most beautiful coastline and must do all we can to protect it and the marine life that live within it.*

*The drag and drop or numbering does not work.*

*Need to expand the dog/animal exercise area, even if just in the cooler months of the year. Need to restrict kitesurfing. It poses a real risk to beach users, as significant numbers of inexperienced riders cannot handle the equipment safely. The ropes, kite and wind conditions pose serious threats to beach users.*

*As more people will want to use beaches, particularly in summer, car park access is always at a premium. Maybe need to consider more park areas.*

*We love our coastline and use it every day. We want to protect the sand dunes and natural elements that make it so beautiful and give us our unique wildlife; even if they are small, they are important. We see sea eagles?? for the warmer parts of the year, stingrays in the shallows & crabs on the rocks etc. Our family want to make sure the marine reserves stay intact, the sand dunes remain, because, without our beaches and sand dunes, it would just be like all those European beaches that have big concrete walls, no sand to enjoy, no animals to look at, & I feel we would be letting future generations down. We enjoy walking along the coast, swimming, snorkelling, adventuring with our kids & dogs (where possible!) and this is the reason we love living here. It has everything we need — the facilities of course can always be improved, but basically, we have everything we would desire right here on our doorstep & use them every day! Our kids do surf kids at [ - - ], we dine at the restaurants, we BBQ, play & picnic at the parks & playgrounds etc etc. It's a fine line between keeping the natural elements that make it so beautiful & the function of the facilities provided. We are always taking photos of the wonderful nature we see, huge stingray 1 m away from us at the beach, 4 sea eagles flying & catching fish right in front of our eyes, numerous crabs at sunset eating the seaweed off the rocks, nudibranchs washed up after a big storm, blue tongue lizards etc warming themselves on rocks & bubbling on the purple flowers planted in the sand dunes, etc etc. Please don't build big ugly concrete walls everywhere it will ruin our beaches! I would like to see more care taken with the amount of rubbish that we find everyday hidden in the sand dunes, in the drains, lookouts, in the water and in our sandy beaches. We pick up rubbish every time we go out there to walk, run, picnic & explore. Surely the City of Joondalup can get school kids involved in projects to help look after our coastline? Eg clean up our beaches & sand dunes, revegetating the sand dunes, short eco-friendly classes to let the local kids know about the fragile ecosystems we have on our doorstep — have competitions between schools etc. Get the community involved too! The car parking around the White Salt & BP petrol station could be improved too. Thank you.*

*I believe that nature should be left to run its course without interference.*

*There are several beaches that are not safe swimming beaches. These should be dog friendly beaches as they are currently wasted. The residents in Iluka are responsible dog owners, I have spoken to many dog owners who would like to see this being implemented. Please consider this as an option to the beaches that are not being used for other activities.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*We love our Nodes Beach and swim there most days during the warm weather. When we have our daily walk along the beach we pick up rubbish and notice more mess after triathlons and other events close by. Plastic cups etc blow down to the beach. Very annoyed at the number of triathlons that block off our section of the coast for the whole morning when we want to swim there. Other Councils should have their equal share of hosting them. Unfortunately, some people also don't care about bringing their dogs out of the Dog Beach into the humans' beach. Maybe more signs stating how much they will be fined for doing so might work? I've noticed on the Gold Coast in Queensland they make it very clear how much dog owners will be fined if their dog is on public beaches and they keep their dogs in the Dog Beach area only. Do your Rangers have machines to check dogs at the beach are microchipped and registered so accurate information about offenders can be obtained? I believe some dog owners give false names and addresses. You do a great job looking after the beach and I appreciate it. Thank you.*

*Thank you for keeping it clean :-)*

*I wish we had a public footpath between Burns Beach and Mindarie, I think it would be well used and bring business to the area.*

*Clean up of plastic/rubbish left behind by fisherpersons on the sea walls/groynes. Erect some signage regarding littering.*

*Erosion is part of the natural environment. It is part of nature and the regeneration process it undergoes naturally. Manmade structures like the fencing placed at the Kallaroo Dog Beach was a waste of money as, within a year, the beach had eroded and people were still in the secondary dunes. Most people I feel that are down the beach respect it, but placing barriers up that the water will erode achieves nothing. I personally run along the coast a lot and love this. People of all walks of life that come down. Mainly for their own space, time or their families. It is more about education about the beach, the natural environment and respect for the natural surroundings, than stopping, fencing and causing the "natural environment" to be structured and manmade, eg Sorrento beach. Buildings, groynes, eroded beach. If that part becomes eroded, so be it, but maintain the beautiful and natural parts that are not too. Keeping the beaches and the area around it as natural as possible for all to enjoy would be my vision. As we plan for climate change, which we must, maintaining the environment in its natural state is also important to enjoy. The reason we go down to the beach is for its natural beauty and its natural state. Not fences, walls or barriers. If beaches become less accessible to some, then that is what nature needs for that area, fewer people. For the areas that have more sand and beach, then these areas can have more people. Redirect the people there and not to the risk areas. We live in a changing world where we need to constantly change and develop. If closures for the environment are needed, people will accept change or expand unaffected areas to deal with the changes.*

*Would just like to see all of the Western Australian Coastline preserved in its most natural state. Especially no high-rise buildings being introduced to any part of the coast.*

*A beautiful natural area, full of flora and fauna. The abundance of birds, marsupials and huge variety of plants make this a very special place. The coastal walk and new lookout in Iluka are extremely popular and well loved. The local volunteer groups that maintain this with the Council, through clean up events and plant and dune regeneration, are to be applauded.*

*I have not been here long enough to comment on any change. Finding the balance between protecting the coastline/dunes and passive recreational facilities is difficult and subjective. The protection of private and commercial properties should not be "no matter what cost".*

*It would be great if Mullaloo Foreshore could have an area where dogs can be allowed. It is a big park — divided into 2 by the car park. Maybe an area can be set aside for those of us who want to take a ball down or have a picnic/BBQ with our dog. Some people just ignore the signs anyway, but for those of us who don't, it would be nice to be able to go to this park with a dog.*

*The beauty of the coast should be protected by limiting buildings along the coast. Natural ecosystems need to be protected. Car parks are preferable to parallel parking and have one of the greatest influences on me visiting. I like quiet, not crowded beaches. The Dog Beach should be opened to horses all the time and dog owners need to be fined for not picking up after their dogs.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

<i>Excellent dune rehab and maintenance by volunteer groups.</i>
<i>Keep it beautiful, that's why a lot of people walk there (Burns Beach). If you want people to use the beach for swimming, create a bigger foreshore area and parking as Burns Beach parking is very minimal.</i>
<i>Mullaloo Point used to be a good surf break in the autumn and winter months. Since the Council has been putting sand back into the water via a front-end loader, it doesn't allow the sand banks to naturally form and make good surfing waves...please stop putting the sand back in the water! Thank you.</i>
<i>The coastal vegetation and continuing revegetation does definitely help to hold sand from blowing away that I've noticed over many years of using the coast walkways.</i>
<i>Please preserve the current coast as we have it now. Please consider the impact of future private development along the coast. We live across the road from the Sorrento Plaza development and are very disappointed with the height outcome that has just been decided by the WA Planning Commission.</i>
<i>It's in good condition, but need more rubbish bin facilities for general/recyclable/animal waste.</i>
<i>The Iluka foreshore and the rest of the north coast is truly a place to protect. We are lucky to live in such an area.</i>
<i>Private home protection should not be at the cost of ratepayers.</i>
<i>There are a number of questions where the consideration of residences being threatened/protected against future erosion. I would feel extremely disappointed if Joondalup funds were being used to support this type of protection. Rates from ratepayers, should be used to provide services for the betterment of the majority of those ratepayers, but definitely not to those in minority.</i>
<i>Please maintain, and do not block development of Surf Life Saving Clubs and public interest clubs.</i>
<i>Higher density in-fill development and increased visitors attracted by the Sorrento Centre development will inevitably increase the environmental stress on the coastal foreshore, in conjunction with environmental factors from global warming.</i>
<i>Beaches change constantly, there is absolutely no evidence of sea level rise or manmade climate change. Do some research and survey the environment for a decent period of time before building on it and you will know where not to build.</i>
<i>Just do what you believe is right, fitting with the environment and try to keep ratepayers happy; thinking you are doing something worthwhile it's all we ask.</i>
<i>The rubbish on Mullaloo Beach needs to be addressed, people fined, more bins and emptied more regularly, especially in summer. Since the cafés etc. have been there, the rubbish left on the beach is terrible, especially the plastic cups and straws from Dome Café. I have been going to Mullaloo Beach for [- -] years and this breaks my heart. My family and I pick up other people's rubbish, but the bins are so full we have to take it home with us in summer.</i>
<i>A few nice bars and cafés at the end on O'Mara Boulevard would be nice.</i>
<i>I wrote to the Council around 2005 expressing my concerns about the erosion of beach from the Marina to Pinnaroo Point. I was met with a very curt response "you cannot compare summer coastline with winter". When I explained I wasn't comparing the different seasons, but the erosion at the same time of the year over the years I had been visiting the beach, I received no further response. I was absolutely disgusted with the response by the City of Joondalup. Whilst it is good to see the City of Joondalup is finally taking the erosion of one of our most precious natural resources seriously, action should have been taken years ago.</i>
<i>Local Dog Beach area encroaches on recreational swimming area. Dog owners continually have dogs off leash running through children playing on beach in Hillarys.</i>
<i>More dog friendly parks along the coast. It's a shame that the park at Mullaloo has a dog ban. I don't mind staying off the beach, but I'd like to be able to take my dog for a picnic at the closest coastal park.</i>
<i>It's beautiful and well maintained, thank you??</i>

<b>Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):</b>
<i>The coast is an important part of the City. As a [- - -] with [- - -] children I highly value the importance of having a place to take them to exercise, play and explore. It is also a great place for communities, like the surf lifesaving. I also think it is important environmentally as well, as humans we should do our best to protect it.</i>
<i>Better bike pathways on West Coast Drive. Rangers for the dog owners who don't pick up droppings after them, hit with fines, especially early mornings. Thanks.</i>
<i>I am a frequent visitor from the UK and I think Joondalup Council do a fantastic job looking after the coastline, I wish they would do the same in the UK, I will be back next year as usual.</i>
<i>I see teams of 'Friends of...' groups re-vegetating and rehabilitating the dunes, this is great work and I guess volunteers mostly. This seems a sensible, relatively low cost, approach, allowing native dunes plants to provide structure and support. Could this be a more structured approach and provide funds to generate employment re-enforcing our dune system?</i>
<i>I am not in favour of the planned Ocean Reef Marina development. This is one of the last strips along this part of the coastline where you can still enjoy a nice walk through dunes and natural vegetation away from the 'sea of houses'.</i>
<i>I look forward to Ocean Reef Boat Harbour being redeveloped, but hope it is undertaken with the future and environment as key considerations.</i>
<i>If we start early with sensible sustainable solutions &amp; encourage + utilise community help/ assistance &amp; participation. Eg community busy bee days &amp; working with other environmental organizations. This can be done efficiently &amp; at a reasonable cost. We are all in this together.</i>
<i>I believe it is well maintained and sincerely appreciate the efforts of the City to provide amenity and access for all beach users.</i>
<i>I would love the Hillarys Dog Beach to be extended all the way to Marina, it's narrow and fairly short, so it can get very busy. Allowing dogs access to the beach in winter months would be awesome, too. I use the coastal path in Mullaloo daily to walk my dog, and it's such a shame we can't use the beach when there is hardly anyone there!</i>
<i>Joondalup is fortunate in the coastline that it has and should preserve it for future generations and not overdevelop it.</i>
<i>Yes North Burns Beach should be opened up for diverse range of activities with restrictions like Quinns Dog Beach.</i>
<i>To help protect wildlife and clean-up environment around beaches and parklands, you need to put environmentally friendly plastic one-use bags for pet owners. A lot of bags end up in ocean, waterways or sand dunes so there is a need to replace usual bags with bio degradable cornstarch bags as other shires have done. At Dog Beach to reduce erosion, dog owners have to be responsible not to let dogs (and owners) climb dunes — some people are stupid and need to be fined for this and for leaving bags on beach.</i>
<i>We have an amazing coastline, with beautiful beaches and great facilities, and it would be a huge loss if these disappeared.</i>
<i>We don't want the coastline to be developed with cafés, restaurants, residential or any other type of buildings that will impact our beautiful natural looking beaches. The only party that benefits are the developers that make a nice profit while the community is left with ugly looking commercial coastlines. And this same viewpoint applies to all the suburbs in Joondalup where we don't want developers coming in and increasing the population density and thereby spoiling our peaceful suburbs. Thanks.</i>
<i>This whole area is too precious and valuable. It must be protected and kept for the future.</i>
<i>Critical to the ongoing protection of the coastline is maintaining the integrity of the coastal dune system as an important and sustainable way of limiting coastal erosion in the medium term.</i>
<i>We need more grassed areas.</i>
<i>Beautiful coastline and well maintained.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Yes, there needs to be another Dog Beach. Whitfords Dog Beach is far too busy and a fair drive from my home in [- - -]. There are so many beaches between Ocean Reef Harbour and Burns Beach that would be suitable for allowing dog access! Please consider adding a further dog friendly beach in our City for our furry friends. So many people use the cycle path from Ocean Reef to Burns Beach to exercise their dogs and it would be perfect if the dogs could have a little area where they are allowed to go and have a cool off in the ocean.*

*I love our coastline.*

*This is a superb stretch of coast for all ages, having safe swimming beaches and some with adequate surfing conditions. I would be very angry if the Dog Beach was extended any further north or south, or that the City of Joondalup relaxed their monitoring of the minority who still do the wrong thing regarding the restrictions on dogs, either on the beaches or in the parks. I have witnessed on too many occasions dogs running freely amongst the young and elderly south of the Dog Beach. I am a dog owner, but feel the existing Dog Beach is more than adequate.*

*Visitors from O/S and interstate that I take to the coast believe it is wonderful that private dwellings have, mostly, been prevented from encroaching on the shoreline.*

*Another Dog Beach north of Whitfords would be beneficial.*

*I really hope the City of Joondalup will take seriously its role in protecting our fragile coast by ceasing coastal development and continuing to fund Coastcare groups and the vital rehabilitation work they do. I am opposed to developing the Ocean Reef Marina into anything that envelops the Bush Forever site or destroys the reef. The Marmion Marine Park deserves our full protection to ensure the survival of many species that inhabit the reef. The bush around the coast has been my sanctuary and sanity for many years, and I am always surprised at the biodiversity present in this area.*

*The coast is the main asset in the City of Joondalup.*

*So, what you have to do to keep our beaches; best thing WA has.*

*City of Stirling have done a magnificent job upgrading Scarborough Beach with the skatepark, rock wall and basketball court. City of Joondalup should follow this lead and install solid infrastructure that will last for years and prevent further erosion.*

*I haven't seen a lot of change over the last 5 years in comparison to Quinns Beach areas. But would support dredging and pumping of sand as they do on the Gold Coast and oppose a concrete or groyne structures.*

*Ocean Reef Marina? When's it being upgraded?*

*It's beautiful, no building of property close to the ocean which will stop houses and commercial properties falling into the ocean. It also will allow people to have access to the coastline.*

*The area at Pinnaroo Point is severely underutilised and would benefit from development (cafés/ community facilities/upgraded parks and possibly residential apartments).*

*I think some areas will be affected and others not so much. I think wait to see where the affected areas are, and place groynes as needed. Don't overreact to something that hasn't happened yet and may not even happen. Concentrate on dune revegetation and sand retention. Let development still happen and life carry on. We haven't seen any sea level rises yet.*

*Put in longitudinal research by using fixed markers to conduct an empirical approach to the issue. Prioritise change and planning in accordance to the data. Proximity and the rate of change to the liveability of the area needs to be the focus of the research gathered. Get your facts then organise the liveability factors.*

*City of Joondalup — please be mindful that we are a City of dog owners that has grown significantly but has not increased permitted access to our beaches with our pets. Please look at allowing access to our beaches in the low season or at off peak times. By making access so limited, it pushes ridiculous numbers of dogs into one area and, in summer, Whitfords Dog Beach is impossible. Look at City of Busselton for inspiration.*

*Love the Joondalup coast.*

*Hopefully Mullaloo Beach will stay as it is. Most beautiful beach and white sand we have on the coast.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*This survey is very generic in nature and I would like the opportunity to comment further when more substantial proposals are formulated and costed with a number of alternatives being considered to address specific issues. In general, I believe privately owned facilities should cover their own costs for protection of those assets (and insure themselves against loss); however, some assistance by local government may be justified in special circumstances, such as if the risk has resulted by actions of the local government.*

*1. Environment 2. Beaches and cycle paths, playgrounds, ablution blocks. 3. Would be good to have another staircase in our coastal strip like Jacob's Ladder 4. Lookouts are a real bonus — perhaps create more.*

*Saving our coastline includes better rubbish disposal. Eg: a recycling plant in WA so less waste ends up on the beaches. Use recycled plastic to make the paths, roads and car parks. Timer-locked toilet blocks at night so they can't be vandalised.*

*We should implement parking restrictions so that beachgoers get to use the car parks that are there already. Unfortunately, a lot of cyclists and triathletes take the parking spots and then head off on a 3 hr ride. They're not even at the beach, but they use up the car park spots!*

*It seems to me that this part of the coast is still underrated in comparison to Scarborough/City Beach etc and yet is perfect for swimming most of the year. It is very suitable for young families and the elderly because many of the beaches are protected by reefs and therefore safer.*

*Keep car parks free. Provide a summer coastal bus route.*

*The coast is the only reason why lots of families decide to live in the north suburbs it needs to be preserved! About the climate change — what are we going to do to stop it happening?*

*It is beautiful!*

*Please protect and look after this very special and beautiful environment.*

*Mostly very happy with upgrades and maintenance. In particular, the removal of graffiti that appears in the underpass from Ern Halliday. The proposed fitness area at Nodes sounds great and the car park has been improved but still see loads of birds in the remaining trees. Well done to the team there.*

*Need more development along the coast, particularly more park and recreational areas and cafés/restaurants. Also, expand current Iluka Foreshore Park as now too small to handle community pressure. Require a dog beach, possibly at the under-utilised beach just north of the Ocean Reef Boat Harbour. Finally, get moving with the development of the Ocean Reef Marina. It's long overdue, much needed and has been overwhelmingly supported by the community.*

*Slightly related. Coastal parks like Iluka Park, huge wonderful park with water features and play grounds, but not one toilet. People need to go, and as a result you see toilet paper in the surrounding vegetation. Public places need toilet facilities. It's a basic human need.*

*Love the work you have done at Iluka. It's a great place to take the family.*

*More work can be done on the Burns Beach coastline to make it more attractive for local residents.*

*Should have a playground installed at Sorrento Beach, just North of the Surf Club building.*

*I think a thorough analysis of the options to protect the coast should be carried out before any works are done. This fragile area would be impacted by any works so needs to outweigh the devastation caused by the works itself. Furthermore, any actions should be in the interests of protecting the coasts natural ecosystems after all this will in turn protect infrastructure. Works should not be carried out just so the City is seen to be doing something.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Extremely concerned with the impact on the coastline and local traffic should the proposed shopping precinct and nursing home be built on O'Mara Boulevard, Iluka. The increased traffic is already extremely high as it is, especially in summer/spring time. Which then presents issues with parking, heavy traffic, congestion, use of glass in car park/grassed area, drinking alcohol???? on pathway/car park area, high pedestrian/dog use. Iluka is a Dog Beach. This unfortunately has a significant impact on the environment, wildlife and facilities due to misuse — dog owners not taking responsibility for their pets (picking up after their pet, manner in which they discard plastic do-do bags, keeping on leash, respect for other beach users/children etc). Unsavoury individuals "hanging out" in car parks, toilet blocks, sand dunes. Individuals not adhering to warning signs in relation to the access to sand dunes, or should I say disregarding signs and accessing in any event. Increased rubbish, impact to environment, wildlife and ratepayers. Traffic significantly increased with a lot of congestion.*

*It would be very easy and free to rectify. From around April to November each year, allow pets on the beach from the beach north of the Marina. No one uses this stretch of coast at this time because it is full of seaweed. It would allow cyclists, runners and walkers to have more use of the pathways and would also would decrease pet owners use of surrounding parks. The Shire of Busselton does this along Geographe Bay and it works extremely well*

*Develop like the east coast.*

*The coast is one of our greatest assets both for tourism and local use. It is imperative that we protect and enhance it as Scarborough has done.*

*Because there are significant stretches of the coast that are vulnerable to sea level changes, it is very important to limit significant development to those sites that are either least vulnerable or can be protected at least cost to the ratepayers now and in the future.*

*The City has done a wonderful job supplying facilities along the coast in the Sorrento area. It is so good to see families out enjoying the grassed areas and beach. The lifesavers do a wonderful job which I really appreciate. They also contribute to the health and wellbeing of young people who are taught how to work in a team, use the beach safely, exercise and eventually save the lives of beach goers.*

*Great to have the Dog Beach. Please extend down to Hillarys in the off season as no one uses the beach except dog walkers.*

*There is an abysmal lack of disabled fishing facilities in the Joondalup area. The one at Hillarys Boat Harbour is a muggers' paradise and generally stinks to high heaven from being used as a toilet facility. Even if one is able to catch a fish there, it means dragging it up over the rocks before you can get hold of it. The one at Mindarie is so high and badly situated that when trying to cast in the afternoon your line gets blown straight back at you. Is it not possible to have paths along the top of the various harbour walls to enable disabled access as we most certainly cannot clamber over the rocks as they stand at the moment.*

*It is an area we must do our best to preserve without taking from the natural beauty of the coastline. This relates to the Australian coast as a whole not just where we are lucky enough to live.*

*Use of chemicals to control weeds is a destructive method to insects and smaller wildlife. Steam cleaners and physical removal should be used whenever possible.*

*I don't feel I am educated enough on this topic to give worthwhile feedback.*

*Would like to have wheelchair access to the sand and have better facilities for people with disabilities, eg Changing Place and beach wheelchair at either Iluka Foreshore or Burns Beach. We don't have an accessible dog exercise area where we could swim with our pets.*

*It is very well maintained and always enjoyable to walk along pathways and grassed areas.*

*Get the Marina built asap!*

*Expert knowledge and advice is imperative. Coastal erosion is a natural occurrence and I believe the Council needs to work in conjunction with that advice. Please do the studies and groundwork to determine the most effective approach for our future.*



**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Yes, please let there be more beach at Hillarys for the dogs to be able to be exercised. There is no one using the beach south of the dog sign. Let them use it down to the groyne. Today, peoples' health and exercise is very important.*

*Try to stay as/look as natural as possible.*

*Retention of the prime attraction (ie: the sandy beach) should be the major consideration, pending reasonable economics and noting that perhaps the entire coastline cannot be sensibly retained. Hence, selected spots at regular intervals along the coast should be target. Protection of personal property (and elite lifestyle) should not be at the expense of ratepayers.*

*Do not spoil it with high rise buildings. Keep it as natural as possible. Any redevelopment to blend in with the surrounding area.*

*I believe the predictions associated with climate change should be taken into consideration, but should not be a reason for preventing, commercial development along the coastal areas of the City. There is a complete lack of development of cafés, restaurant and associated facilities at the Whitfords Nodes and Pinnaroo Point (Kallaroo). The Ocean Reef Marina development should also be progressed sooner rather than later, and again, taking into consideration potential climate change effects. The proposed breakwaters, to and from the Marina, should be constructed in order to provide further protection to the foredune and secondary dune areas at Ocean Reef.*

*We have a beautiful coastline, and tidal and ocean activity should be allowed to happen without interference.*

*We are so fortunate to have the pathways, amenities, beaches so close to home. We must all appreciate this and be aware of the fragility of the natural coastline.*

*Please make decisions based on your whole community, not the few who scream the loudest about their own personal loss and make decisions with vision for the future not just short term band-aid fixes to ensure re-election for your own personal gain.*

*Keep it beautiful. It is an amazing coast. I love it.*

*Leave as is. No changes are required.*

*The fences along the beach were washed out — such a waste of money. Good education would be better to protect sand dunes.*

*The main reason we built our home in [- -] was because of the beach and the lifestyle that comes with it. The beach immediately north and south of Burns Beach Park are an essential part of that. One (Burns Beach) provides extensive sandy beaches; while towards the south (Iluka to Ocean Reef) you have beautiful coves and one of the best coastal walkways in the State. We truly have a hidden gem here that would be a crime to change. Please find a way to correct this with minimal impact on the beaches. Thank you.*

*Please stop all development along the coast length within the primary and secondary dune systems. They are there for a reason and other taxpayers do not wish to pay for remediation actions to save those who knowingly chose to build there in the first place.*

*Joondalup has a very poor provision of dog beaches. It has one at Whitfords and, while it is a good length, it is narrow, meaning it gets congested. The Joondalup coast is some 20 km long and it does not have another dog beach, meaning residents have to drive to access an appropriate beach. Dog beaches are present every 4 km or so from South Coogee, all the way to Whitfords, only Joondalup has such a poor provision. Wanneroo, despite a lower population density, has three. This might not be the focus of this survey, but I thought I'd share my views.*

*The Council needs to ensure its lighting along the walkway section from Beach Road to MAAC Club is maintained. Also, the steps down to beach at Lennard Street are great but also need some maintenance.*

*Generally speaking, a valuable and well-maintained asset for the community. The balance of facilities provided, and the natural environments maintained, appear OK at present.*

*I would hate it to reduce sandy beaches because of erosion.*

*Lucky to have such diverse and amazing beaches. Mullaloo Beach area is outstanding. Love to see a really great kids playground at Whitfords Nodes, would bring huge commercial opportunities.*

<b>Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):</b>
<i>Good luck, it's going to be a big job. I hope the State Government will help out with some of the cost as the coast is used by more than just ratepayers.</i>
<i>So far I think is ok, but with room for improvement.</i>
<i>The beautiful coast and amenities are the best reason to live in the northern suburbs and should be protected.</i>
<i>Looking forward to new café.</i>
<i>There's really nowhere to swim at Burns Beach! (very rocky).</i>
<i>The coast is why we live where we live.</i>
<i>Understanding the inevitability of sea level rise with climate change, it would be very unwise to allow buildings to be built too close to the coast. The Harbour Rise development in Hillarys will need protection in the future.</i>
<i>I believe we need to be more proactive in protecting the beaches and coastline rather than wait for the infrastructure to be at risk before reacting. Joondalup has more sandy beaches than Councils to the south. It would be a shame to lose these.</i>
<i>I run along the cycle track early some mornings and there seems to be a lot of rabbits around, which could be adding to the vegetation diminishing.</i>
<i>Climate change is real, and something needs to be done!</i>
<i>Leave it as it is for everyone to access and use; you can't change the natural environment; we don't need a new Marina, we already have Hillarys and Mindarie.</i>
<i>Rangers need to patrol north Burns Beach more frequently as there has been a lot of graffiti appearing on the toilet block near the café and on the pathway approaching the toilets. Also, surfers climb over the fence to enter the dunes for quick access to the sea everyday instead of using the stairs provided.</i>
<i>Would love to have access to one small beach where all dogs remain on lead.</i>
<i>Don't build in vulnerable areas...Protect the dunes and the vegetation...</i>
<i>Thanks for inviting the community for their views.</i>
<i>We are blessed with a wonderful place to live and enjoy, so need to be diligent to preserve and regenerate the natural landscape as much as possible. Having grown up in [- - -], I am vehemently opposed to allowing building and high-rise development close to our beaches and keeping them accessible to all, with mindfulness about limiting access where regeneration &amp; dune protection is needed.</i>
<i>Please do not reinstate ugly and useless fence along the beaches and dunes. Let the beauty of untouched nature and accept the natural action of the ocean waves and tides...Furthermore, limit useless spending of our ratepayers' money which has been wasted in the past with fence installation and removal once distorted by nature...Thank you...</i>
<i>I strongly oppose the building of a "Jacob's Ladder" at Hillarys Nodes because the area is a Bush Forever site + the coastal vegetation is in a good healthy condition + presence of an active, rare and vulnerable osprey nest (some 20 years old) on the top of the telecommunications tower. These birds hunt for food in the coastal vegetation and in the vicinity of Hillarys Boat Harbour. Recently, I have witnessed a member of the public using a drone to catch "good photo" of a fishing osprey. Clearly the noisy machine was hassling the bird just at the time it is fishing for its daily meal. I oppose the use of drones for such "conservation" purposes. The osprey flew home to its nest without catching any fish! The Hillarys dunes are deteriorating fast due to higher than usual tides and storm seas; or some change in coastal infrastructure elsewhere along the coast. Conservation of these dunes is a priority; and now needs professional intervention. Also, the community should be educated to respect and conserve the dunes for the long term.</i>
<i>I think the beaches are well maintained and we all need to pitch in to help prevent further erosion.</i>
<i>We don't need too many marinas.</i>

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Our fragile coastline is currently protected by offshore reefs, rocky outcrops and sand dunes covered with natural vegetation. The State Government has suggested no construction should take place within 100 metres of the shoreline. Any disturbance or construction, whether in the ocean or on coastal land, will have a direct influence on wave and wind power. The result would be irreversible changes to the local environment, causing erosion and irreplaceable loss of native plants, birds and animals. A wide variety of wildlife, including bandicoot, echidna, goanna, blue fairy wren, white breasted robin, osprey etc. inhabit the stretch of natural coastal areas between Mullaloo and Burns Beach. This unique area needs to be saved in its natural state for current and future generations to enjoy the peaceful beauty of the local ecology and the magnificent scenery.*

*Cost needs to be considered in context with future mitigation strategies; however, safety needs to be first and foremost. The beach and coastal areas outlined are important recreational locations for the community. I believe that infrastructure should be provided to support recreational activity; however, a strategy of providing appropriate supporting infrastructure at key locations needs to be applied. As part of this, I would see planning for the removal of infrastructure that is at risk due to erosion etc and relocating it at more appropriate node, aligned to the nature of the activities undertaken (fishing, dog walking, swimming, horse exercising, kite surfing, picnics etc). I also hope that the Cities of Wanneroo, Joondalup and Stirling are all working together to implement appropriate coastal strategies and together are collectively planning for the needs of the community, rather than duplicating provision of activities and infrastructure.*

*It is one of the main drawcards for the City. Having accessibility to the beautiful ocean walkways is a perfect complement to bush walks available around the lakes. The walks are used by young and old, at all times of the day and in all seasons. If future commercial development threatens our coast, then it should be arrested. Whilst I love the café facilities, I am just as happy having a food van. It's always a complex blend to improve facilities and protect the environment; enlisting the help of local residents should pay off in the long run.*

*Make some beaches dog friendly during winter months.*

*Please use scientific analysis of the environmental problems to ensure the preservation of our beautiful coastline. The ratepayers of the City of Joondalup should be given factual information to make informed decisions about the expenditure and priorities for the preservation and improvement of facilities and the natural coastline. I have completed this survey, but found it difficult to make decisions about the numbering 1 to 7 about things that I don't really have expertise or knowledge about. For example, how much degradation of the dunes and coastline has there been? How quickly is it occurring? This survey irritates me, because I don't really think it has much validity.*

*There has not been any real erosion in the area. I have been visiting Mullaloo and surrounding beaches since 1980. What I have found is that each year the beaches are getting bigger...especially the area between north Mullaloo and the Ocean Reef Marina. The winter erosion has been less and less. As a result, the beaches are getting bigger...Why is the City of Joondalup worrying about a problem that does not exist? Rather, the silting up of the harbour at Ocean Reef might be a bigger problem at this time.*

*Coastal councils further north have already decided to let nature take its course, will this have an impact on any works done here? There is potential that the Council will be fighting the sea forever. Surely a strategy should be in place to minimise the cost and maximise the effectiveness of any strategy well into the future.*

*We have a beautiful coast which is relatively pristine, such an integral part of why we choose to live in Perth. The bushland along the coast is home to so many critters, birds, and beautiful flora, we are lucky to have it and should look after it. The limestone rock face north of Mullaloo before Ocean Reef is beautiful and is at risk of being lost with development of the Harbour, which would be a shame to lose. The new parking along the streets has worked great in that area.*

**Verbatim responses — Do you have any further comments about the City of Joondalup coast? (N = 588):**

*Stop wasting money on engineers who tell the Council the same thing over and over, "the water level is too deep to build proper foundations at Ocean Reef " on a half-funded budget. Either spend the money on the proper foundations, such like Abu Dhabi and other parts of the world that had the same issues, or keep wasting the funds on dredging the Marina every few months. I would have rather my rate increase go toward a proper Marina than have to pay for a parks and gardens levy. The Council should have never allowed the developer Peet to build so many parks well above the standard at Burns Beach in the first place.*

*Please keep looking after our coastline as it is more important than new marinas and social facilities...*

*Utilise the view more, allow more commercial development — cafés, restaurants, bars etc. Prioritise Ocean Reef Marina.*

*Any intervention must be affordable for ratepayers.*

*Needs more rangers to protect. Our land was destroyed by 4WDs.*

*Let's keep it the fantastic way it is; however, I do believe we need more development along the coast.*

*A greater focus on sustaining and improving coastal vegetation areas as these are extremely important in protecting our coastlines. And in stronger protection for current protect areas and coastal bush forever sites.*