



Koala Awareness and VMS Campaigns Evaluation



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Introduction

The aim of this study was to evaluate the effectiveness of two interventions that were conducted in the Redlands Coast region in 2020/2021, namely the Koala Awareness Campaign and flashing Variable Message Signs (VMS) on selected roads in koala zones. These initiatives have been implemented for the third consecutive year and included a series of koala-focussed advertisements and speed activated flashing signs on roads that aimed to increase residents' awareness and attitudes toward koalas in the community during the koala breeding season. The 2020/2021 koala awareness efforts were aimed at increasing acceptance for koalas in males aged 24 and under with a secondary target of older males, aged 44 years and over. In addition to the koala awareness campaign, VMS were implemented in suburbs where koala-specific zones are found (Ormiston, Thornlands, and Birkdale) to remind residents to slow down and remain vigilant.

Evaluation in the two previous years included conducting two rounds of pre/post face to face intercept surveys (Year 1: September 2018 and March 2019; Year 2: October 2019 and February to March 2020) to assess program effectiveness for the Koala Awareness Campaign and VMS. Due to the COVID-19 pandemic the 2020/2021 evaluation was conducted online and via a mail-out. This outcome evaluation aims to understand whether the above koala conservation initiatives are effective in isolation and when acting together. Specifically, the aims are to:

- Measure the effectiveness of VMS for drivers to slow down in koala conservation areas
- Assess the effectiveness of an awareness campaign to improve residents' attitudes, awareness and knowledge towards koalas in their community for all Redland City Council residents
- Examine how response to koala conservation initiatives improves when citizens are exposed to and participate within multiple initiatives
- Provide an overview of the longitudinal impact of the campaign over a 3-year period

Method

Pre and post-campaign surveys were administered to evaluate the effectiveness of the initiatives implemented. Due to COVID-19 restrictions, the 2020/2021 evaluation occurred online and via a mail-out. The pre-survey was conducted from August to September 2020, following survey approval by the Redland City Council working group. A follow up survey was conducted from March to April 2021, following campaign completion and removal of VMS. The questionnaires focused on demographic and geographic characteristics, perceptions, and behavioural questions regarding conservation actions.

The online survey was promoted through a three-week Facebook paid advertisement campaign that targeted Redlands residents, and was shared on Redland City Council's social media channels. The Facebook ads reached 17,300 in the pre-survey and 13,381 Redlands residents in the post-survey. The online survey was also sent to a mailing list of people that had agreed to be recontacted for research purposes and have subscribed to the *Leave It!* newsletter (N=830). Paper surveys were sent to 1,400 Redland residents across Ormiston, Birkdale and Thornlands who live in known koala habitat areas. The mail-out provided an option to complete the survey online via a QR code or to fill out the paper survey and return via pre-paid mail. In previous evaluations, a face-to-face intercept survey methodology was utilised, however due to COVID restrictions alternative methods were required. The survey mail-out method was used in an attempt to access the group of participants who may not usually complete surveys online. Incentives were offered, where participants could opt to go in the draw to win one of ten \$50 Coles/Myer gift cards in the pre-survey and one of ten \$50 Westfield gift cards in the post-survey.

The pre-questionnaire included questions to assess koala awareness, knowledge of koala fatality, perceived ability to protect kolas, and psychological factors that are associated with the intention to slow down when driving in koala areas (see Appendix A for the pre survey). The post questionnaire included the same koala focused questions as the pre survey. To measure the effectiveness of the campaign, recall questions were also added to the follow up questionnaire, including unaided and aided recall of campaigns, recall of communication channels and the content of the advertisements. Redland City Council has run a series of koala conservation initiatives during the last three years, and to capture the impact of that, additional questions were used to identify current and future intention to take action in koala conservation behaviours (see Appendix B for the post survey).

Once data collection was completed, all data from the online and paper surveys was collated and entered into SPSS software. Data was cleaned prior to analysis, and coding was undertaken to identify themes for open ended questions. Additionally, data analysis was performed using descriptive statistics and tests to assess whether there were any statistically significant group comparisons.

Results

A total of 769 surveys were collected from Redland Coast residents. The majority of the respondents are female (73%) (see Figure 1). Just over half (53%) of respondents are aged over 55, as a result of the mail-out surveys, with the mean age of the sample being 53 years old. Figure 2 shows a full breakdown of age. There were respondents from the entire Redland Coast region with a higher number from Ormiston and Cleveland. See Table 1 for more details.

Demographics



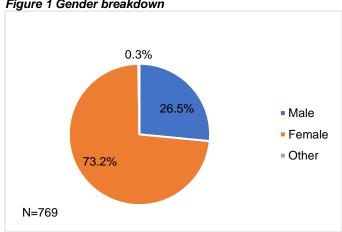


Figure 2 Age breakdown

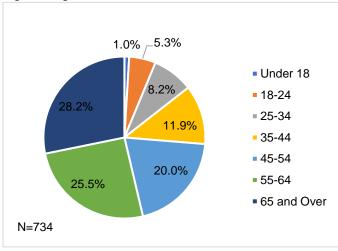


Table 1 Respondents' postcodes

Postcode	Suburb(s)	%
4157	Capalaba, Sheldon	3.5%
4158	Thorneside	0.4%
4159	Birkdale	10.7%
4160	Ormiston, Wellington Point	31.2%
4161	Alexandra Hills	4.1%
4163	Cleveland	24.9%
4164	Raby Bay	10.3%
4165	Thornlands	13.4%
4183	Mount Cotton, Point Talburpin, Redland Bay, Victoria Point	0.4%
4184	Bay Islands (Karragarra Lamb, Macleay Russell Coochiemudlo)	1.2%

Recall – Koala Awareness Campaign

To understand whether respondents could recall the koala awareness campaign, respondents were asked an unaided recall question asking, 'What initiatives have you heard of in the last 12 months?' which yielded 258 comments, 134 of which were categorised into themes. The most recalled Redland City Council initiatives were the flashing koala road signs (n=30), slow down koala signs (n=21) and wildlife road signs (n=12). There were also various recollections of the koala awareness campaign with the 'bachelor advertising (mating season)' (n=9), 'ad campaign on bus shelters and buses' (n=8), and 'billboards-breeding season ad' (n=4) having been recalled.

Respondents were then given an aided recall question that provided example images of the koala awareness campaign, where they were asked 'have you seen any of the activities shown below?', they were able to tick any that applied (See Appendix B for aided recall example). Campaign A was an example of the 'Koala Bachelor' in which 35.8% (n=98) of respondents recall the campaign. Campaign B was an example of the 'action orientated' campaign which returned much lower recall rate of 8.8% (n=24).

Data analyses showed that overall recall rates for the Koala Awareness Campaign in 2020/2021 was 36.2%. One of the main objectives of the Koala Awareness Campaign was to target those aged 18-40. The recall rate among this audience (18-44) was 38%, slightly higher than the overall recall rate.

To understand which channels delivered, respondents were asked which communication channel they had seen. Results showed that the most successful medium was bus shelters (27.8%), followed closely by billboards (26.3%), and then Facebook (17.4%) (see Table 2 for full breakdown). Bus shelters, billboards and Facebook were recalled across a variety of age groups, however highest recall for channels, on average fell between those aged 45-64 indicating the campaign effectively reached the secondary target group, namely males aged 44 years and over.

Table 2 Recalled media channels

Media Channels (N=270)	n	%
Bus shelters	75	27.8
Billboards	71	26.3
Facebook	47	17.4
Bus ads	26	9.7
Shopping centres	21	7.8
Ads in online news services	16	5.9
Magazine	9	3.3
Instagram	8	3.0
Pop-up ads in phone apps	6	2.2
Snapchat	2	0.7
Can't remember	2	0.7

Participants were asked what messages or images they remember from the advertising, with the 'Koala Bachelor' (44.4%) being the most remembered image (see Table 3 for further breakdown of images and messages). The last question in the koala awareness recall was if the ads prompted them to do anything differently. Almost one half of respondents (45.0%) stated that the ads did prompt them to do something differently. Respondents were then given the opportunity to state what the ads prompted them to do, with 'slow down' (n=40) and 'be more aware when driving' (n=12) the most mentioned actions taken by Redland City Council residents to mitigate threats to koalas (see Table 4 for the full breakdown). These prompted behaviours, were similar to the previous campaign period (2019/2020).

Table 3 Ad message/images remembered

Messages/images remembered	n	%
Koala Bachelor	48	44.4%
Slow down /drive carefully/ safely	13	12.0%
Koala image	8	7.4%
Be aware, koalas on the move	7	6.5%
Decline/threats to survival of koalas	6	5.6%
Flashing koala sign	4	3.7%
Keep dogs indoor at night	3	2.8%
Yellow and black sign	3	2.8%
2 children marking trees to be saved (NRMA ad)	2	1.9%
Koala zone	2	1.9%
Koalas cross here	2	1.9%

Table 4 Prompted behaviour from ad

Prompted to do	n
Slow down	40
Be aware when driving	12
Confine dogs at night	3
Report koala sightings	2
Donate to conservation efforts	2
Install wildlife escape	2
Join events to support koalas	1
Plant a tree	1
Spread the message to family/friends	1

Recall - Variable Message Signs

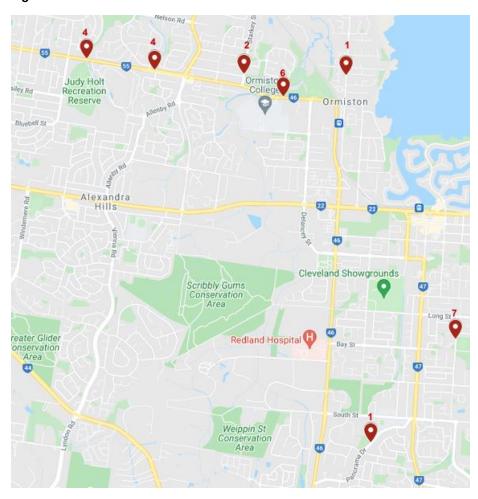
In this evaluation period the variable message signs (VMS) were placed in three established koala neighbourhoods, Ormiston, Birkdale and Thornlands. Respondents were then asked to identify whether they noticed the VMS signs in any of those areas (Ormiston, Birkdale or Thornlands) and 67.3% agreed that they did, which is an increase from 64% in early 2020 (see Figure 3).

An open-ended question asked which area they noticed the signs. Many respondents answered with broad suburbs, however the thematic analysis only included those that gave a specific location within each of the suburbs. Figure 4 below which shows the most recalled locations on a map, with Fitzroy Street (n=7) and Sturgeon Street (n=6), Old Cleveland Road East (n=4), near Birkdale dump (waste transfer station) (n=4) and Starkey Street (n=2) the most commonly recalled sights for koala signs.

3.7% 29.0% - No - N/A 67.3%

Figure 3 Noticed VMS (variable message sign)

Figure 4 Recalled VMS locations



Lastly, respondents were asked what messages or images were shown on the VMS that they saw.

Table **5** shows that 'Slow down' was the most frequently recalled message (35.8%), and the 'green smiling koala' (20.8%) and 'flashing koala speed sign' (15.6%) were the most recalled imagery from the signs. Given that 'slow down' flashes when people are at speed or near the posted speed, it is possible that this message is more frequently recalled because it has a strong call to action when driving. Comparing to early 2020, recall of green smiling koala face increased from last year which only had 15.3% of mentions. This increase could possibly be attributed to 1) more people noticing the signs, which were implemented across new locations in Redland Coast or 2) change in driving behaviour towards slowing down. However, no definitive conclusions can be made from the data available.

Table 5 VMS message recall themes

Messages recalled	n	%
Slow down	62	35.8%
Green smiling koala face	36	20.8%
Flashing koala speed sign	27	15.6%
Recent koala crossing/sighting in the area	17	9.8%
Breeding season	8	4.6%
Picture of koala	7	4.0%
Slow down for koala crossing	7	4.0%
Koalas on the move	2	1.2%
Be aware koalas/wildlife at night	2	1.2%
Koala with joey in area	2	1.2%
Speed kills them	1	0.6%
Speed limit	1	0.6%
Wildlife zone	1	0.6%

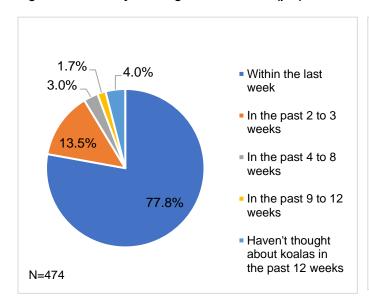
Koala Awareness and Knowledge

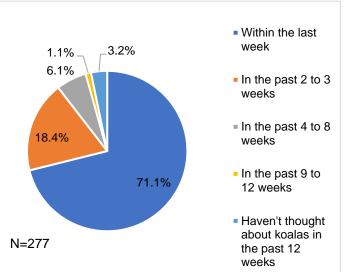
Both the Koala Awareness Campaign and the VMS campaign were designed to raise Redland Coast residents' awareness to undertake actions that mitigate established risks to koalas and to increase resident knowledge on actions needed to protect koalas.

Respondents were asked to indicate when they last thought about koalas. **Error! Reference source not found.** shows that during the pre-survey, over three quarters of respondents (77.8%) reported they had thought about koalas within the last week. When comparing this to the post survey, just under three quarters (71.1%) had reported thinking about koalas in the last week (See **Error! Reference source not found.**). However, a t-test identified that this result is not a significant difference for thinking about koalas in the last week between pre (77.8%) and post (71.1%).

Figure 5 Last time you thought about a koala (pre)

Figure 6 Last time you thought about a koala (post)





Respondents were then asked to indicate when they last saw a koala. More than half (53.9%) reported they have seen a koala within the last week at pre (see Figure 7). In the post survey 61.2% (Figure 8) of participants identified that they have seen a koala with the last week. The post was significantly higher (p < 0.000) than those in the pre survey.

Figure 7 Last time you saw a koala (pre)

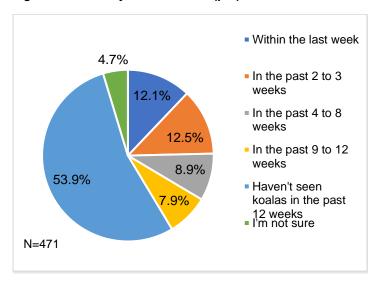
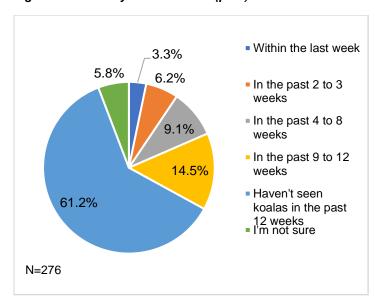
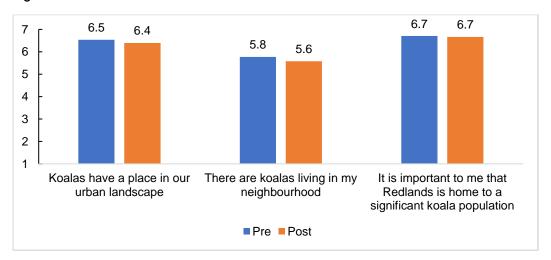


Figure 8 Last time you saw a koala (post)



Respondents were asked to indicate to what degree that they agree that it is important to them that Redlands is home to a significant koala population. Respondents answered on a scale from strongly disagree = 1 to strongly agree = 7 and the average response (Mean) from all participants was used to understand agreeance to the statement. Results indicate a high agreement in community that koalas have a place in our urban landscape (pre Mean=6.5; post Mean=6.4) and that it is important that Redlands is home to a significant koala population (Mean=6.7). There were no statistically significant differences pre and post campaign. Many respondents indicated that koalas are living in their neighbourhood and again no statistically significant differences were observed.

Figure 9 Koala attitudes



The below two charts (Figure 10 and 11) depicts community responses across the 3-years of data collection.

Figure 10 Koalas have a place in our urban landscape (3 years)

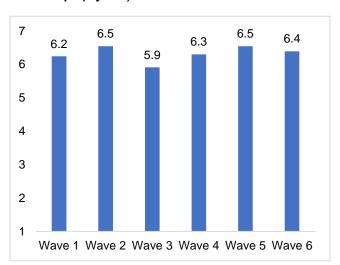
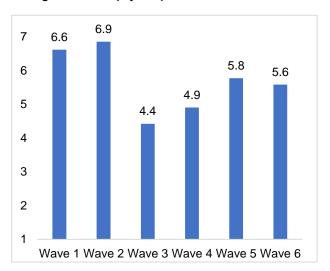


Figure 11 There are koalas living in my neighbourhood (3 years)



To understand the level of knowledge, a question about koala movements during breeding season was included (*Koalas move around a lot more in their breeding season (July-December)*) with respondents answering either "True", "False", or "Not sure". Results showed that in the pre survey 83.5% answered this was true, and 77.2% answered true in the post survey (see Figure 10). There was no significant difference in breeding season movement knowledge between pre and post.

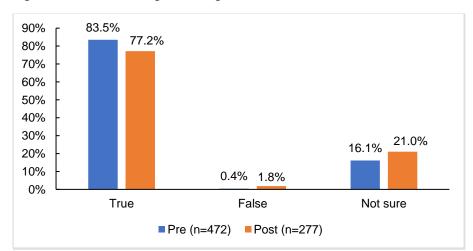
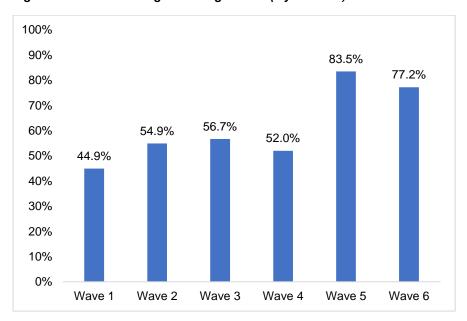


Figure 10 Koala knowledge breeding season movement

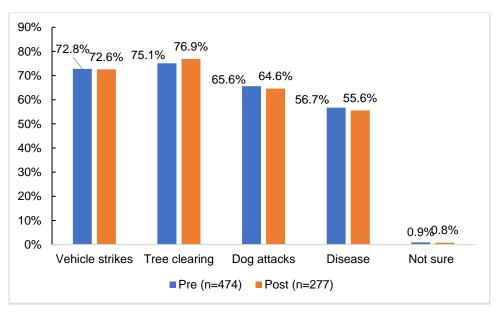
Consideration of time series data indicates that ongoing community awareness raising campaign efforts have increased community awareness of koala movements. By Year 3 of more than 70% of the participants are aware that koalas move a lot during breeding season (See Figure 11).

Figure 11 Koala knowledge breeding season (3 year trend)



Further to understand the level of knowledge, a question regarding the main causes of koala deaths was included. Respondents could tick all that apply (vehicle strikes, tree clearing, dog attacks, disease, or not sure). Analysis indicated that overall, there was a reasonably high knowledge of koala fatality causes, see Figure 12. Both pre and post results improved from the previous period (October 2019-March 2020).

Figure 12 Koala fatality knowledge



Respondents were then asked if they knew I know how they can help to protect koalas. People's knowledge on how to protect koalas significantly decreased (p < 0.000) from pre (Mean=5.8) to post (Mean=5.2) (see Figure 13). A possible explanation for this decrease, may relate to ongoing community development causing habitat destruction evidenced in the following comments made by survey respondents.

7 6 5 5 4 3 2

Figure 13 I know how I can help protect koalas

Pre (n=476)

1

Examination of data collected over the three years in response to the question "I know how I can help protect koalas" (strongly disagree = 1; strongly agree = 7) demonstrates that some residents do not indicate full confidence that they know what to do to help protect koalas (see *Figure 14*).

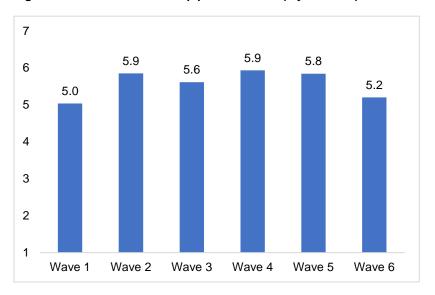


Figure 14 I know how I can help protect koalas (3-year trend)

Post (n=277)

An open-ended question invited respondents to outline actions that they, as individuals, can take to protect koalas. Responses were coded into overarching themes. In the pre survey, 136 participants responded. Table 6 outlines the most frequently mentioned actions, with 'being more aware when driving' (n=33), 'slowing down' (n=20), 'petition council to stop

[&]quot;The actions of individuals is a "drop in the bucket""

[&]quot;There is not much I can do to help protect the koalas if they have nowhere to live"

[&]quot;Things can be done at planning level- shunting this back onto individual is naïve..."

[&]quot;Individually it is difficult, without being Government led with an individual focus for the week/month"

development/land clearing (n=20), and dog/pet behaviours such as 'leashing' (n=19) and 'denning/containing' (n=19) were the most frequently mentioned.

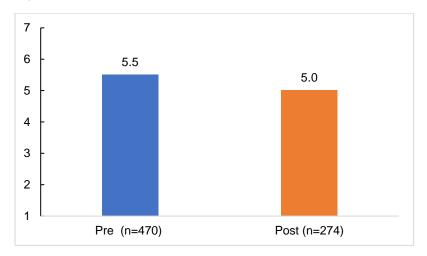
The post survey included the same open-ended question, with 239 respondents leaving comments on what actions they can take to protect koalas. Likewise, to the pre survey, 'be aware when driving' (n=61), 'slowing down' (n=53), 'denning/containing dogs' (n=43) and, 'petition council to stop development/land clearing' (n= 36), were again the most frequently mentioned actions. Some important koala protection actions were mentioned more frequently between pre and post such as tree planting, which increased by 3.1%, and utilising pool and yard escapes which increased by 2.3% post koala awareness campaign. It is important to note this was a message conveyed in the 2020/21 koala awareness campaign.

Table 6 Koala protection action themes

Koala Protection Actions	Pre		on Actions Pre F	Po	ost	
	n	%	n	%		
Be aware when driving/drive carefully	33	19.6%	61	15.4%		
Denning/containing dogs (and pets)	20	11.9%	54	13.7%		
Slowing down in koala habitat areas	20	11.9%	53	13.4%		
Petition council to stop development/land clearing	19	11.3%	36	9.1%		
Leashing dogs	23	13.7%	41	10.4%		
Stop tree clearing	17	10.1%	24	6.1%		
Plant trees	10	6.0%	36	9.1%		
Report sick/injured/ or in danger koalas	10	6.0%	16	4.1%		
Report koala sightings	6	3.6%	13	3.3%		
Install wildlife escape (pool and yard)	5	3.0%	21	5.3%		
Educating others (neighbours, family, friends)	5	3.0%	10	2.5%		
Join Koala Action Group	3	0.8%	-	-		
Signing petitions/joining rallies/protests	-	-	16	4.1%		
Donate to wildlife/conservation organisations	-	-	11	2.8%		

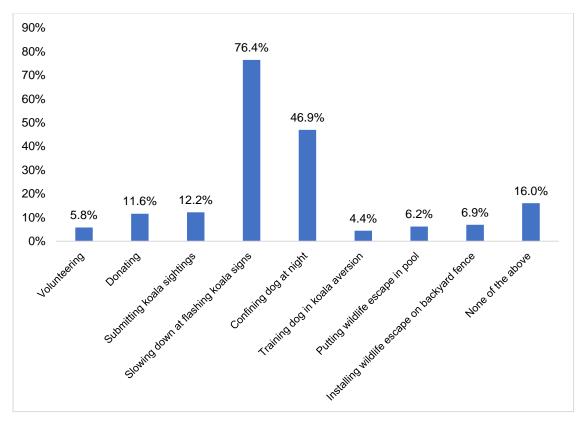
Koala protection action intentions decreased between the pre (Mean=5.5) and post (Mean=5.0) surveys (see *Figure 15*). Considering much of the sample is older (65 and above), there were many comments suggesting that they would like to partake in koala walks (such as koala watch) but just do not feel as though they are able-bodied enough to do so, other age groups noted that they don't have the time due to work and family commitments. Age groups 18-19 (Mean=6.0) and 40-44 (Mean=5.9) had the highest intentions to take action to protect koalas in the next month.

Figure 15 I intend to take actions to protect koalas in the next month



Respondents were asked to identify which koala conservation actions they had partaken in, in the last month both in the pre and post survey. 'Slowing down at flashing koala signs' (76.4%) was the most frequent behaviour post VMS campaign however statistically significant differences pre and post campaign were not observed. Second, 'confining dog at night' (46.9%) was the second most commonly mentioned action and again no statistically significant difference was observed (see Figure 16 for more details). Both behaviours were focal behaviours promoted during the Koala Awareness Campaign, which indicates the importance of featuring actions community can take in communications.

Figure 16 Engaged koala conservation actions in the last month



Conclusion and recommendations

Key insights

This report for Redland City Council summarised the results of the pre and post campaign survey, including an evaluation of changes resulting from the Koala Awareness Campaign. The overall aim of this survey was to examine the effectiveness of Redland City Council's koala conservation initiatives: the Koala Awareness Campaign and the VMS. The questionnaire focused on investigating the effectiveness of the initiatives in increasing Redlands residents' attitudes and awareness about koalas and slowing down behaviour and undertook to examine community responses across three years of activity. The key insights from this evaluation are summarised below:

Koala Awareness Campaign Evaluation

- Campaign recall rates were lower in 2020/2021 (36.2% when compared to 68.2% in 2019/20) and the Koala Bachelor was the most recalled imagery. Koala Bachelor has been an established campaign across Redlands Coast for 3 years and lower recall rates could be caused by desensitisation to the imagery and message. New 2020/2021 action orientated messages also had a low recall rate (8.8%). While there is no clear reason for this low recall shown in the data available, comments from co-design sessions run in the community mentioned that important information (such as the call to action) were 'buried' down the bottom of the advertisement which could impact overall recall of the message.
- The current campaign was targeted towards 18-40 age demographic, and analysis of this particular segment showed a slightly higher recall rate (38%) for the Koala Awareness Campaign.
- Bus shelters were the most effective communication channel, followed by billboards, and Facebook which were recalled most across a wide variety of age groups.
- The Koala Awareness Campaign prompted 45% of people to behave differently. Most mentioned slowing down when driving and being more aware when driving, which is consistent with behaviours reported as a result of previous campaigns.

VMS Campaign Evaluation

- Recall of VMS increased from 64% in the previous year 67.3% of respondents could recall the VMS in Ormiston, Birkdale, and Thornlands.
- Of the location recall, the new VMS location in Fitzroy Street in Thornlands was the
 most recalled VMS location. The new locations on Old Cleveland Road East (near the
 Birkdale waste transfer station) was also recalled. This finding suggests that changing
 the location and adding new locations can help with sign attentiveness.
- The message 'Slow down' was the most recalled sign. The 'Green smiley koala face' and 'koala flashing speed sign' recall rates increased from the previous campaign year.
- Slowing down was identified as the most performed koala conservation action by respondents.

Awareness and Attitudes toward Koalas

- Across three years of data collection respondents agree that it is important to them that Redlands is home to a significant koala population.
- Advertising prompted almost one half of residents to do things differently and 'slow down' and 'be more aware when driving' are the most mentioned actions taken as a result of the koala awareness campaign by Redland City Council residents to mitigate threats to koalas.
- Koala fatality knowledge has increased overall from the previous campaign year (2019/2020) and threeyear comparisons indicate residents' knowledge increased to an all-time high at the end of Year-3, suggesting that ongoing, long-term campaigns have a positive effect in changing community knowledge about threats faced by koalas living in urban areas.
- Two koala protection actions that individuals can take (tree planting and installing wildlife escapes in pool and backyard) increased after the 2020/21 Koala Awareness Campaign.

Recommendations

- Facebook, bus shelters and billboards were identified by a variety of age groups as mediums they saw during the 2020/21 koala awareness campaign - these methods should be continued to be used as they are frequently noticed by varying age groups.
- Moving forward messages that clearly state the actions that residents can take to protect koalas should be built into future awareness campaigns. Taking from the codesign report results "They want to see more informative campaigns and actionable messages that enable readers to understand how they can contribute" broadening the messaging to include more basic koala protection knowledge such as 'what to look out for on your walk' or 'the koala friendly trees your yard needs' are additional messages that can be considered.
- Channel utilisation through Instagram and Snapchat can be valuable in reaching younger audiences. While the sample is too small to draw definite conclusions, the lack of recall among the younger demographics (compared to offline channels such as bus ads and billboards) may show that the channels aren't being used to their full advantage. Social media delivering videos and animations received the highest engagement, liking and sharing.
- Message development with the target audience are recommended. Testing of messages and channels with the target audience through focus groups or co-design methods is recommended during the message design phase to ensure messages will reach and engage the segment.

Appendix A - Survey

Community Survey



Welcome!

Take time out on us and enjoy a cup of tea while you help University research. This survey will take approximately 10 minutes to complete and you can go in the draw to WIN 1 of 10 \$50 Coles/Myer gift vouchers.

You can choose one of two methods to complete the survey:

 Scan the QR code at the bottom using your phones camera app or through your Facebook app on your phone (To find the scanner on the Facebook app, tap your setting menu, scroll down to Apps, tap QR code)

or

2) Fill the paper survey attached and mail back to us (reply paid)

Thanks for participating!

Social Marketing @ Griffith, Griffith University, Australia

Email: socialmarketingsurveys@griffith.edu.au

Scan me to complete the survey online!

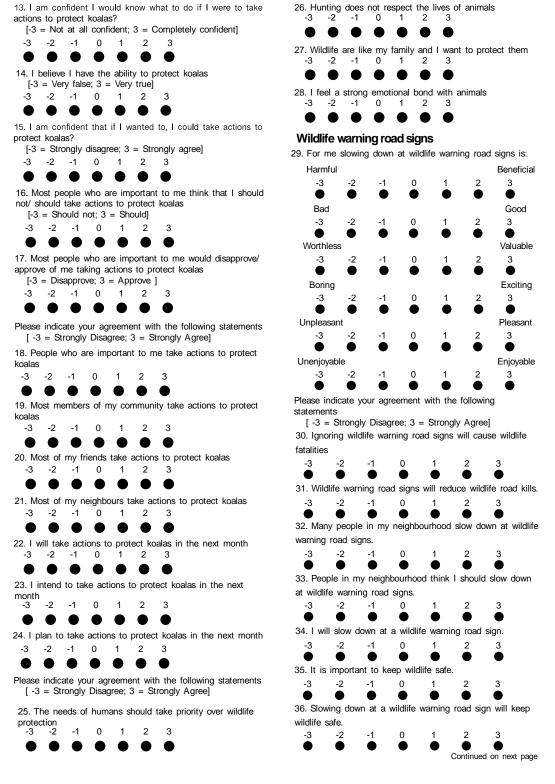




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About Koalas	
When was the last time you thought about koalas? Within the last week	9. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3
In the past 2 to 3 weeks	
In the past 4 to 8 weeks	
In the past 9 to 12 weeks	If strongly agree, what actions can you take to protect
Haven't thought about koalas in the past 12 weeks	koalas?
2. When was the last time you saw a koala?	10. Have you engaged in any of the following koala
Within the last week	conservation actions in the last month?
In the past 2 to 3 weeks	Volunteering and partnership programs
In the past 4 to 8 weeks	Donating to koala conservation organisations
In the past 9 to 12 weeks	Submitting koala sightings
Haven't seen koalas in the past 12 weeks	Slowing down at koala zone signs
I'm not sure	 Keeping your dog confined at night
3. It is important to me that Redlands is home to a significant	Training your dog in koala aversion
koala population [-3 = Strongly Disagree; 3 = Strongly Agree]	None of the above
-3 -2 -1 0 1 2 3	11. Whose role is it to protect koalas and their habitat
	The City Council
4 16 16 16 16 16	The community
Koala conservation is: Worth time and	Both the City Council and the community
and effort effort	Not sure
-3 -2 -1 0 1 2 3	Other (please specify
	Please indicate your agreement with the following statements
Not important Very important	[-3 = Strongly Disagree; 3 = Strongly Agree]
at all	12. If I were to take actions to protect koalas, it would:
-3 -2 -1 0 1 2 3	make a difference for koala populations
Meaningless Meaningful	-3 -2 -1 0 1 2 3
Meaningless Meaningful -3 -2 -1 0 1 2 3	\bullet \bullet \bullet \bullet \bullet
	help protect the environment
Unenjoyable Enjoyable	-3 -2 -1 0 1 2 3
-3 -2 -1 0 1 2 3	• • • • • •
	make me feel I am helping the community -3 -2 -1 0 1 2 3
Koalas move around a lot more in their breeding season (July to Dec)	
True	make me feel good
False	-3 -2 -1 0 1 2 3
Not sure	
6. The main cause of koala deaths are (Please tick all that	be a hassle
apply)	-3 -2 -1 0 1 2 3
Vehicle strikes Disease (e.g. Clamydia)	\bullet \bullet \bullet \bullet \bullet
Clearing of trees Not sure	take too much time
Dog attacks	-3 -2 -1 0 1 2 3
7. Koalas have a place in our urban landscape	• • • • • •
[-3 = Strongly Disagree; 3 = Strongly Agree]	disrupt my normal routine
-3 -2 -1 0 1 2 3	-3 -2 -1 0 1 2 3
• • • • • •	• • • • • •
8. I know I can help to protect koalas	be a waste of my time
[-3 = Strongly Disagree; 3 = Strongly Agree]	-3 -2 -1 0 1 2 3
-3 -2 -1 0 1 2 3	





night?

Yes

No

Sit

Stay
Come back
when called
Aversion (not)
chase things)
Stay quiet
on command

45. Which of the following can your dog(s) do?

Never Rarely Sometimes Often Always



37. Slowing down at a wildlife warning road sign is	46. What is your postcode?
nconvenient.	
-3 -2 -1 0 1 2 3 • • • • • • •	47. What is your gender?
8. Slowing down at a wildlife warning road sign will keep the	Male
oads safe.	Female
-3 -2 -1 0 1 2 3 • • • • • • • •	Other
39. Slowing down at a wildlife road sign will increase my ravel time	48. What is your current age in years?
-3 -2 -1 0 1 2 3 • • • • • • •	49. What is your level of education?
0. Do you slow down at wildlife warning road signs?	School Education level
Never	Certificate level
Very rarely	Advanced Diploma and Diploma
Rarely	Bachelor's Degree
Occasionally	Graduate Diploma and Graduate Certificate
Very frequently	Postgraduate Degree
Always	Would you like to be recontacted to assist the next phase of this study?
About your dog	Yes
1. Do you own any dogs? Yes	• No
No (Skip to Q) 2. How many dogs do you currently have?	Would you like to go in the draw to win 1 of 10 \$50 gift vouchers?
	● Yes ● No
Has your dog ever recieved any kind of rofessional trianing?	
● Yes	If you answered yes to the above, what is your email address?
● No	
If yes, what is the name of the dog training business?	Please note your email address will only be used for what you agreed upon above

Thank you for your time!



Appendix B - Survey

Community Survey



Welcome!

Take time out on us and enjoy a cup of tea while you help University research. This survey will take approximately 10 minutes to complete and you can go in the draw to WIN 1 of 5 \$50 Westfield gift vouchers.

You can choose one of two methods to complete the survey:

 Scan the QR code at the bottom using your phones camera app or through your Facebook app on your phone (To find the scanner on the Facebook app, tap your setting menu, scroll down to Apps, tap QR code)

or

2) Fill the paper survey attached and mail back to us in the prepaid envelope

Thanks for participating!

Social Marketing @ Griffith, Griffith University, Australia

Email: socialmarketingsurveys@griffith.edu.au

Scan me to complete the survey online!





About Koalas

1. When was the last time you thought about koalas?	
2. When was the last time you saw a koala? Within the last week In the past 2 to 3 weeks In the past 9 to 12 weeks Haven't seen koalas in the past 12 weeks I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Tolearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] 8. I know I can help to protect koalas [-3 = Strongly Disagree; 3 = Strongly Agree]	 Within the last week In the past 2 to 3 weeks In the past 4 to 8 weeks In the past 9 to 12 weeks
In the past 2 to 3 weeks In the past 4 to 8 weeks In the past 9 to 12 weeks Haven't seen koalas in the past 12 weeks I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -1 0 1 2 3 -5 -1 0 1 2 3 -6 -1 0 1 2 3 -7 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -4 -1 0 1 2 3 -5 -1 0 1 2 3 -6 -1 0 1 2 3 -7 There are koalas living in my neighbourhood. -7 There are koalas living in my neighbourhood7 There are koalas living in my ne	
In the past 4 to 8 weeks In the past 9 to 12 weeks Haven't seen koalas in the past 12 weeks I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -	Within the last week
In the past 9 to 12 weeks Haven't seen koalas in the past 12 weeks I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -1 0 1 2 3 -5 -1 0 1 2 3 -6 -1 0 1 2 3 -6 -1 0 1 2 3 -7 -1 0 1 2	In the past 2 to 3 weeks
Haven't seen koalas in the past 12 weeks I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec)	In the past 4 to 8 weeks
I'm not sure 3. It is important to me that Redlands is home to a significant koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Disease (e.g. Clamydia) Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -1 0 1 2 3 -5 -1 0 1 2 3 -6 -1 0 1 2 3 -6 -1 0 1 2 3 -7 -1 0 1 2 3	In the past 9 to 12 weeks
koala population [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 1	•
4. Koalas move around a lot more in their breeding season (July to Dec) True False Not sure 5. The main cause of koala deaths are (Please tick all that apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -4 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	koala population
(July to Dec)	-3 -2 -1 0 1 2 3
(July to Dec)	• • • • • •
apply) Vehicle strikes Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 -1 0 1 2 3 -5 -1 0 1 2 3 -6 -1 0 1 2 3 -7 -	(July to Dec) ■ True ■ False
 Clearing of trees Dog attacks 6. Koalas have a place in our urban landscape [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 -3 -2 -1 0 1 2 3 -4 0 0 0 0 0 0 8. I know I can help to protect koalas [-3 = Strongly Disagree; 3 = Strongly Agree] Strongly Disagree; 3 = Strongly Agree] 	· ·
[-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 8. I know I can help to protect koalas [-3 = Strongly Disagree; 3 = Strongly Agree]	Clearing of trees Not sure
7. There are koalas living in my neighbourhood. [-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3 8. I know I can help to protect koalas [-3 = Strongly Disagree; 3 = Strongly Agree]	
[-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3	-3 -2 -1 0 1 2 3 • • • • • • •
[-3 = Strongly Disagree; 3 = Strongly Agree]	[-3 = Strongly Disagree; 3 = Strongly Agree] -3 -2 -1 0 1 2 3
	·

9. What actions can you take to protect koalas?

10. Have you engaged in any of the following koala conservation actions in the last month? (please tick all that apply)

- Volunteering and partnership programs
- Donating to koala conservation organisations
- Submitting koala sightings
- Slowing down at flashing koala signs
- Keeping your dog confined at night
- Training your dog in koala aversion
- Putting wildlife escape in your pool
- Installing wildlife escape on your backyard fence
- None of the above

Redland City Council have run a series of intiatives to protect koalas in the neighbourhood

	_							
11. What	initiatives	have you	heard o	of in	the	last	12	months

Continued on next page



12. Have you seen any of the activities shown below? (please tick all that apply)



Koala awareness campaign A



Koala awareness campaign B





Wildlife Watcher Kylie





Flashing koala road signs

- 13. Which media channels do you recall seeing the advertising or media to promote koala awareness in? (please tick all that apply)
 - Magazines
 - Facebook
 - Instagram
 - Snapchat
 - Bus ads
 - Bus shelters
 - Online news ads
 - Ads in apps
 - Billboards
 - Shopping centre
 - Other [please specify_

14. What messages or images do you remember from the ads?

15. Did the ads prompt you to do anything different?

- Yes [please specify_
- No

Flashing koala signs

16. Have you driven through or visited any of these areas in the last 3 months? (Please tick all that apply)

- Ormiston
- Thornlands
- Birkdale

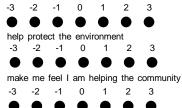
17. Have you noticed the Variable Message Signs (VMS) (road signs with flashing messages) other than in school zones in any of these areas within the last 3 months?

Yes [which areas?	_
No	

18. What messages or messages were shown on the VMS?

Wildlife behaviour

19. If I were to take actions to protect koalas, it would: make a difference for koala populations



-3	-2	-1	0	1	2	3
	lacktriangle		•			
maka	mo	fool	aood			

make me feel good

-3	-2	-1	U	 	3
be a	a hass	le			
_	_			_	_

take too much time disrupt my normal routine

-3 -2 -1 0 be a waste of my time

20. I am confident I would know what to do if I were to take actions to protect koalas?

[-3 = Not at all confident; 3 = Completely confident]

-2 Ω 2 -3 -1 1 3

21. I believe I have the ability to protect koalas [-3 = Very false; 3 = Very true]

-3 -2 -1 0 1 2

Community Survey 22. I am confident that if I wanted to, I could take actions to 33. What is your current age in years? [-3 = Strongly disagree; 3 = Strongly agree] -3 -2 -1 0 1 2 3 34. What is your level of education? 23. Most people who are important to me think that I should School Education level not/ should take actions to protect koalas Certificate level [-3 = Should not; 3 = Should]-3 -2 -1 0 1 2 Advanced Diploma and Diploma

24. Most people who are important to me would disapprove/ approve of me taking actions to protect koalas

[-3 = Disapprove; 3 = Approve]-3 -2 -1 0 1 2

• • • •

Please indicate your agreement with the following statements [-3 = Strongly Disagree; 3 = Strongly Agree]

25. People who are important to me take actions to protect koalas

-3 -2 -1 0 1 2 3

26. Most members of my community take actions to protect koalas

27. Most of my friends take actions to protect koalas

-3 -2 -1 0 1 2 3

28. Most of my neighbours take actions to protect koalas

-3 -2 -1 0 1 2 3

29. If given the opportunity, would you sign up to an activity to help protect koalas? (i.e. Redland Coast Koala Watch, Bushcare, educational activities e.g. walks)

Yes No

Please indicate your agreement with the following statement [-3 = Strongly Disagree; 3 = Strongly Agree]

30. I intend to take actions to protect koalas in the next month -3

What actions are you planning on taking?

Demographics

31. What is your postcode?

32. What is your gender?

Male

Female

Other

Bachelor's Degree

Graduate Diploma and Graduate Certificate

Postgraduate Degree

Wald you like to be recontacted to assist the next phase of this study?

Yes

No

Would you like to go in the draw to win 1 of 5 \$50 gift vouchers?

If you answered yes to the above, what is your email

Please note your email address will only be used for what you agreed upon above



Thank you for your time!