



Wingecarribee Shire Council

Environment and Climate Change Strategy

Engagement Outcomes Report

March 2021

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Acknowledgement of Country

This document acknowledges the Traditional custodians of the land we now know as Wingecarribee Shire Council, the Gundungarra and Dharawal people. We pay our respects to Elders, past, present and emerging.

We also acknowledge the present Aboriginal and Torres Strait Islander people, who now reside within this area.



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All care has been taken to prepare this report for Wingecarribee Shire Council.
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Contents

Acknowledgement	2
Executive Summary	4
Motivation	8
About this report	10
Summary of the engagement	11
Snapshot of quantitative survey findings	13
Engagement Findings	
Theme 1: Bushland	17
Theme 2: Waterways and Catchments	19
Theme 3: Biodiversity	21
Theme 4: Sustainable Built Environment	23
Theme 5: Green Neighbourhoods	25
Theme 6: Sustainable Living	27
Theme 7: Adaptation and Resilience	30
Theme 8: Council Operations	32
Conclusion	34
Appendix A – Survey Data (quantitative)	35

Executive Summary

Beginning the process with community engagement acknowledges the importance of developing an Environment and Climate Change Strategy that is informed by, and aligned with, the lived experiences and visions of the Wingecarribee community.

A collaborative project

In bringing the Climate Emergency Declaration (2020) to life, Wingecarribee Shire Council acknowledges that having a lasting impact requires a collaborative approach. As such, the first two stages of engagement aimed to capture a community vision that would serve as a foundation for the development of an Environment and Climate Change Strategy (The Strategy) that responds to the unique challenges and strengths of Wingecarribee's community and environment.

This need for greater collaboration was a priority for engagement participants, who wished to see Council work closely with households, local businesses, grassroots organisations and state and federal governments to leverage existing strengths and assets or remove barriers to action.

The vision, aspirations and big ideas captured during the community engagement (as outlined in this report), provide a values-based context for conducting further assessments and studies on the technical aspects of environmental planning and climate response, and develop a Strategy that is anchored in rigorous research.

An integrated engagement approach

Undertaken in three stages (the third to be completed once the Strategy is available for public exhibition), the engagement process was designed to enable both the broader community and key stakeholders to participate in meaningful ways, in-person and online. This report includes the insights from Stages 1 and 2 of the engagement, which captured the ideas, feedback and visions of over 550 community members from across the LGA.

550+

Community members contributed

411

Online survey responses

100+

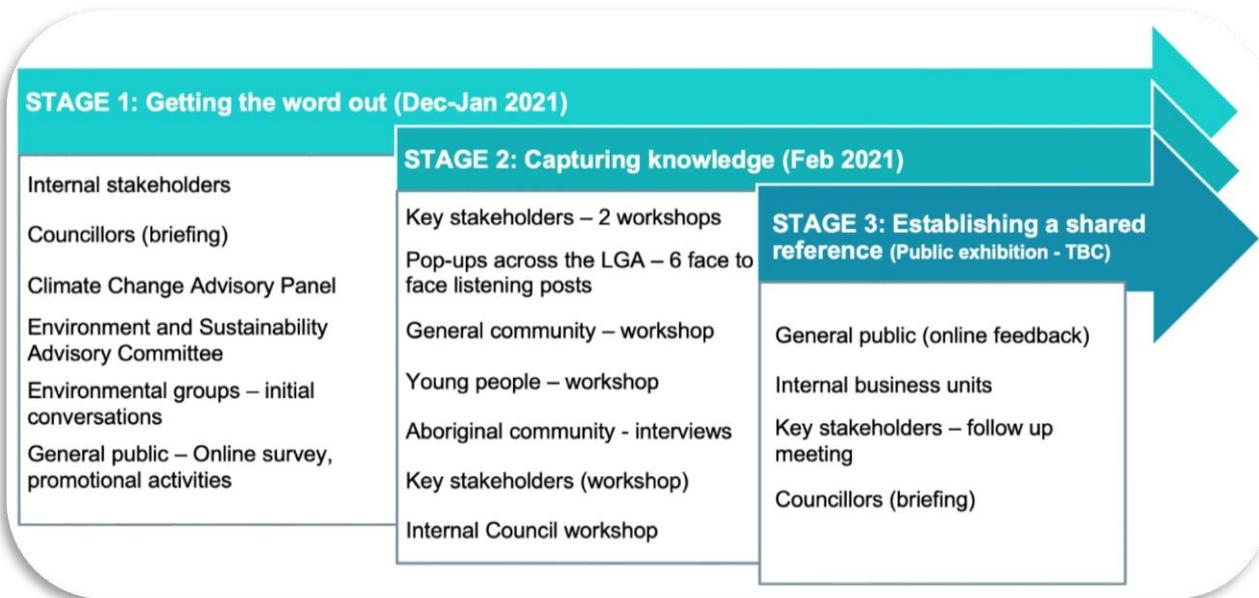
Attendees at 6 pop-ups, across the LGA:

- Bundanoon
- Bowral
- Berrima
- Hill top
- Mittagong
- Moss Vale

57

Workshop participants

The Engagement Process:



A passionate community

The engagement highlighted the groundswell of local action from passionate residents, businesses and organisations that are already acting on the community’s desire to see a more sustainable way of living in Wingecarribee Shire. Across all engagement methods, participants provided nuanced and balanced discussions on how residents and Council need to re-shape the current social and political conversation, to prioritise the protection of the natural environment and urgently respond to climate change. It was broadly acknowledged that Wingecarribee’s human resources, special natural and built environments, significant agricultural lands, and its easy access to the global economy of Sydney, leaves it uniquely placed to be a world leader in Environmentally Sustainable Communities that utilise the need for change as a catalyst for better living.

“We can't expect Council to do everything. We, the community, have to accept the not unreasonable responsibility of working together for the common good”.

– Survey participant

What are the community's priorities?

The following priorities were expressed during the first two stages of engagement. These priorities have been further distilled into key vision statements for what the community would hope for Wingecarribee to be like in 2031 (the end of the term of The Strategy)



CLIMATE CHANGE: Reducing CO₂ emissions

- Setting an ambitious target(s) for reduction in CO₂ emissions (distinguishing between Council emissions and community emissions)
- Protecting lives, property, assets and infrastructure against the impacts of a warming climate and increasing natural hazards
- Council leading the way in adopting renewable energy - "walking the talk"
- Advocating state and federal government for coordinated action on climate change (e.g. investments and subsidies for renewable energy; rejection mining/extractive industries in the LGA)



ENVIRONMENTAL PROTECTION: Protecting our biodiversity

- Establishing strategic wildlife corridors
- Creating buffers between suburbs settlements and bushland
- Minimising planting of exotic species
- Minimising contamination and pollution of waterways



SUSTAINABILITY: Living sustainably

- Targets for zero waste
- Identifying revenue opportunities from waste and grey water
- Adopting regenerative agricultural practices
- Promoting sustainable businesses and housing projects within the Shire
- Celebrating local environmental champions and local success stories



PLANNING: Sustainable planning for growth and economic development

- Prioritising environmental sustainability in the planning and management of growth in the region
- Creating, enabling and promoting a green local economy that responds to global trends and demand
- Developing an economy that supports sustainable agri-business, and a greater value proposition for preserving agricultural lands in the LGA

What is the community's visions for Wingecarribee 2031?

The community engagement captured a deep concern over climate change, the current state of the environment, as well as future trends and growth. Participants welcomed Council's decision in 2020 to declare a Climate Emergency and to develop an Environment and Climate Change Strategy for the LGA.

While Council initiatives and commitments were well received, it was also clear that community members felt frustrated by what they regard as a delayed response to climate change and piecemeal approaches to managing growth sustainably. This frustration was expressed in general terms and included all levels of government including Council; key agencies; businesses and industry; and parts of the community who are climate sceptics or are resistant to change.¹

Even amongst those who were not satisfied with current levels of action (or inaction), there was a positive and hopeful outlook for the region (under the proviso of immediate action).

These visions acknowledge that Wingecarribee has unique strengths and opportunities for creating a sustainable future, leveraging its rich natural, agricultural, economic and human assets; its proximity to Sydney; and the significant investments already made by Council and the community to protect the area into the future.

The community embraced an opportunity for "blue sky thinking and generating big ideas - as summarised in the adjacent graphic. It should be emphasised that these are not to be read as specific *expectations* that the community have - rather these are bold and blue-sky suggestions for further exploration.

A COMMUNITY VISION FOR WINGECARRIBEE 2031

The Wingecarribee community aligned on a number of key visions for a more sustainable future. Acknowledging the strength of local resources, and the importance of preserving the local environment, participants embraced blue sky thinking to envisage a Shire that is a world leader in sustainable living.

ZERO WASTE

Residents and businesses embrace innovation to not simply reduce landfill, but to leverage an economic benefit from re-using and recycling



CARBON POSITIVE

Wingecarribee is a global leader in the adoption of renewable energy, regenerative agriculture and natural resource management to become a carbon sink



LIVING AMONGST THE LANDSCAPE

To preserve the local biodiversity, Wingecarribee manages its growth in a sustainable manner, and minimises the impact of the built environment



A GREEN ECONOMY

Leveraging its proximity to Sydney, Wingecarribee embraces green businesses and provides a local economy that facilitates sustainable living



A CULTURE OF CHANGE

Celebrating local champions, developing resources and facilitating change, makes sustainability part of the Shire's identity



¹ It should be noted that most participants expressed views that aligned with the science of climate change. However, support for the Climate Emergency Declaration was not unanimous and Council may wish to consider further engagement during the public exhibition of the draft Strategy with targeted groups whose views are not directly aligned with the climate agenda, and who perhaps may have an alternate view on different aspects of the Strategy, and namely barriers to change.

Motivation

Wingecarribee Shire Council is motivated to deliver an Environment and Climate Change Strategy 2031 that is anchored in good science while delivering on community aspirations and priorities.

Council is developing an Environment and Climate Change Strategy to replace the current Environment Strategy (2012 - 2017). The new strategy aims to guide investment, resourcing and operations over the next ten years and in alignment with the community's overall vision and aspirations for the Shire, the Community Strategic Plan.

Knowing from previous engagement (particularly for the CSP) that the natural landscapes are fundamental aspects of the Wingecarribee community's sense of identity, belonging, and wellbeing, Council recognised a need for engagement that could help inform the development of the Strategy in a meaningful way and in tandem with science-based research.

Council also wished to start conversations and strengthen relationships that would extend beyond the delivery of the Strategy itself. The issues relating to climate change are complex and cannot be solved quickly, nor in isolation, and so it is essential for the success of the Strategy (and the health of the environment) that everyone – namely Council, the community, key stakeholders, government agencies – has a shared reference and sense of direction.

To build this foundation for informed decision-making and collaboration, Council commissioned JOC Consulting to plan, facilitate and report on a comprehensive engagement program with internal and external stakeholders.

This report is the result of an exciting journey where more than 500 people have contributed their time and insights to share their views and values on the future of the Shire. Thank you to all who have contributed. We look forward to continuing the conversation and the collaboration!



"By 2031, Wingecarribee will be a healthy and productive community, learning and living in harmony, proud of our heritage and nurturing our environment."

Community vision for
Wingecarribee, *Community Strategic Plan: Our Future, Our Choice*

CONTEXT

The world has changed dramatically since the development of the first Environment Strategy and the effects of climate change are now being felt in a very real way by the Wingecarribee community, as it is across the world. The drought and Black Summer bushfires in particular have had profound effects on the local community and it is important that their lived experiences and aspirations are considered in a meaningful way as part of the development of the new Environment and Climate Change Strategy.

The Strategy relates to a Council Resolution (12 February 2020) which saw Wingecarribee Shire Council join the approximately 40 local governments across NSW who also have declared a climate emergency.

The Environment and Climate Change Strategy will deliver on the Community Strategic Plan, which outlines the following vision for the Environment: “By 2031, our unique natural environment is valued, protected and enriched. The health of local waterways and air quality is enhanced and there is a greater reliance on renewable energy and waste is minimised. We are leaders in sustainable living and our rural landscapes are productive and preserved. Our wildlife corridors are actively managed and the Shire’s natural assets are protected through programs which engage and encourage community partnerships and participation in initiatives which preserve our native flora and fauna.” (Community vision for the Environment; CSP, page 25)

PURPOSE

The purpose of the engagement was to create broad awareness about the Environment and Climate Change Strategy and help inform the development of a vision and key strategic directions for protecting Wingecarribee’s environment and responding to climate change.

The engagement focussed on establishing a shared framework for nuanced conversations about future priorities to take place. Discussions took their starting point in the community's shared desire to preserve Wingecarribee’s unique environment, character, and lifestyle and evolved around identifying opportunities for leveraging Wingecarribee's unique position and assets to create a more sustainable future. This report documents these opportunities in detail in order to provide direct input into the drafting of the Environment and Climate Change Strategy.



About This Report

This Engagement Outcomes Report is primarily written for the purposes of directly informing the development of Wingecarribee's Environment and Climate Change Strategy 2031. The report is also a way to report back to the community and provide a reference point for further conversations and collaboration.

In order for the findings from the engagement to be directly relevant to the drafting of the Strategy itself, the bulk of the report focusses on providing discussion and interpretations as they relate to key aspects of environmental and climate change planning (as opposed to simply recounting and summarising what we heard at each event as a standard engagement report may do).

This report presents the findings from the extensive engagement program across three main sections:

1. **What we heard.** Providing a clear line of sight to each engagement event, this section summarises the big ideas as they emerged from the individual engagement activities.
2. **Snapshot of quantitative data** from more than 400 survey participants. This part of the report presents a condensed summary of the key priorities emerging from the engagement and as related to Climate Change and Environmental protection respectively.
3. **Key themes (8)** from across all engagement events. This part of the report focusses on providing nuanced discussion about community concerns and aspirations as related to each theme.

Summary of the engagement

The table below provides a brief overview of the main priorities and common big ideas we heard during the different engagement methods. Each of these priority areas are explored in more detail as they relate to the eight themes of this report.

	Priorities	Big Ideas
Online Survey		
14 December – 8 February 2021 411 participants	<ul style="list-style-type: none"> • The preservation of biodiversity • Maintaining the health of waterways • Sustainable growth • Sustainable built environment • Adoption of renewable energy 	<ul style="list-style-type: none"> • Minimise vegetation clearing throughout Wingecarribee • Council to lead the way with climate change targets • Enable easier adoption of renewable energy in all homes • New building guidelines that prioritise sustainability
Workshops (x2)		
4-5 February 44 participants Online	<ul style="list-style-type: none"> • The preservation of biodiversity • Waste reduction • Maintaining the health of waterways • Sustainable growth • Sustainable built environment • Adoption of renewable energy • Council as leaders in sustainability • Developing a green economy • Immediate action 	<ul style="list-style-type: none"> • Enabling and promoting Wingecarribee as a hub for green investment and industry • A plan for growth that prioritises the preservation of neighbouring bushland and waterways • Greater collaboration with state and federal organisations to enable adoption of sustainable practices
Pop-Ups (x6)		
2- 3 February 100+ participants Bundanoon, Bowral, Berrima, Mittagong, Moss Vale, Hilltop	<ul style="list-style-type: none"> • Council as leaders in sustainability • Waste reduction • Maintaining the health of waterways • Sustainable growth • Adoption of renewable energy • Immediate action 	<ul style="list-style-type: none"> • Valuing waterways as a precious resource • Council to help facilitate greater adoption of renewable energy • Innovative housing models that limit impacts of the urban environment
Youth Workshop		
2 February 2021 13 participants Bowral Memorial Hall	<ul style="list-style-type: none"> • Carbon positive • Zero Waste • Sustainable built environment • Green economy • Adoption of renewable energy • Immediate action • Opportunities to be involved • Regenerative agriculture 	<ul style="list-style-type: none"> • Wingecarribee as an energy exporter to other areas of NSW • Wingecarribee as a Zero Waste community • A Waste Economy – utilising waste to generate economic benefit • Embracing regenerative agriculture, and preserving the local agricultural identity • Greater youth involvement in Council decision making

Snapshot of quantitative survey findings

This section provides a snapshot of key quantitative data from the online survey which help inform discussion throughout the body of this report. See also Appendix A for an overview of the quantitative findings. Qualitative findings from the survey are discussed as they relate to the eight themes of the report.

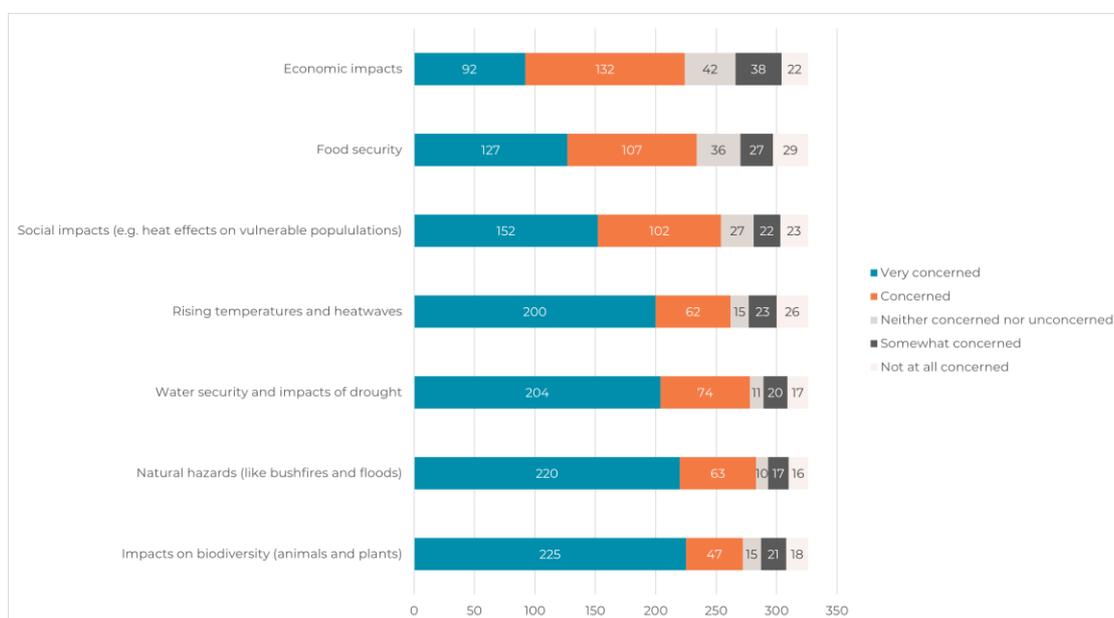
As the first and most broadly circulated engagement method, the online survey was designed to capture a baseline understanding of the community’s concerns, values, and priorities as they relate to climate change and environmental protection (capturing the thoughts of over 400 community members). The quantitative survey was utilised as a starting point for further exploration during the workshops, pop-ups and other discussions. This section provides a brief snapshot of the quantitative headline findings.

CLIMATE CHANGE

The online survey provided an opportunity to capture an understanding of existing concerns and to better understand the driving force behind the community’s desire to see Council take immediate action against the impacts of climate change. Given that the survey was conducted in the shadows of the 2019 bushfire season (that posed such a threat to Wingecarribee) it is not surprising to see that the number one concern was *Natural hazards (including bushfires and floods)*, with 87% of survey respondents indicating that they were "concerned" or "very concerned". Similarly, survey participants commented on the particular risk that *Water security and increased drought* (85%) posed to the region’s agricultural practices (an element of Wingecarribee’s identity that participants from all engagement activities valued).

The third most common concern about climate change, was the risks posed to local biodiversity, with 84% of survey participants expressing some level of concern about this impact. As a key priority captured in the engagement, the importance of biodiversity was a major talking point that was explored further in workshops and pop-ups.

Perhaps somewhat surprisingly, given the region's reliance on the environment for its economic activity, survey participants expressed the lowest level of concern for the *Economic impacts* that climate change may have upon Wingecarribee. Observing the trend in responses to this survey question, the most immediate risks to resident’s way of life garnered the highest level of concern, while the impacts of food security and economic hardship may have been too far off on the horizon, or too abstract, for the community to consider to be of equal threat.



When asked to consider ‘*What do you feel Council should focus on to better respond to climate change?*’ survey participants provided responses that aimed to reduce the CO₂ emissions of households and commercial buildings. This common priority was further explored during workshops and pop-ups, where participants were asked to discuss the barriers to adopt renewable energy sources and sustainable building materials (as discussed in Theme 4 and Theme 6 of this report).

TOP OPPORTUNITIES FOR RESPONDING TO CLIMATE CHANGE (OF 398 RESPONSES)

1. **Set key Council climate change targets to drive local and regional change (46% of respondents)**
2. **Promote building practices and types of developments that improve resource efficiency (46% of respondents)**
3. **Invest and/or facilitate investment in solar renewable energy for the community (44% of respondents)**
4. **Advocate State and Federal Governments to make policy change (32 % of respondents)**

ENVIRONMENTAL PROTECTION

When asked to consider ‘*What do you feel are the most important overall government priorities for looking after the environment?*’ the top four responses all revolved around a desire to see the protection and enhancement of biodiversity in Wingecarribee’s local ecosystems. Further comments captured on this topic, highlighted an existing sentiment that the impacts of urban environments and built forms was the number one cause of environmental degradation. These top priorities were key topics of discussion during the longer form engagement methods, with each of them being a priority within their respective themes for The Strategy. Survey comments captured as part of this question closely aligned with the discussions that were observed during workshops and pop-ups, wherein participants wished to see Council prioritise environmental sustainability within their planning practices, and ensure that growth within the LGA does not compromise the biodiversity and health of local ecosystems

TOP OPPORTUNITIES FOR PROTECTING THE ENVIRONMENT (OF 398 RESPONSES)

1. **Protecting native flora and fauna (biodiversity) (53% of respondents)**
2. **Minimise vegetation clearing (40% of respondents)**
3. **Secure water quality of our creeks and rivers (38% of respondents)**
4. **Ensure our urban areas are more sustainable (30% of respondents)**

THEMES



What are our goals?
Engage with the community
to improve our
environment.

Community
Management
Sustainability

ENVIRONMENT
LEADERSHIP

Theme 1: Bushland

“Trees are necessary for our physical and mental health, and essential for the health of the environment. They are our most valuable asset in the Wingecarribee”

– Survey Participant

The Wingecarribee community participants recognise bushland as an important part of the local identity, and greatly value the ability to easily access these beautiful landscapes. Across the engagement, "bushland" was the most common landscape and/or natural feature mentioned by participants, many of whom offered insights and local knowledge about particular bushland areas and reserves.

When survey participants were asked *What do you value most about the natural environment in Wingecarribee?*, the "bushland" one of the two most common responses collected (along with "the green rolling hills"). Given the importance of bushland to the community, it is no surprise that survey participants rated *“Minimise vegetation clearing throughout Wingecarribee”* as the second most important action (after *“Protecting native flora and fauna”*) for Government to take in protecting the local environment.

A strategic approach

Participants wanted Council to take a strategic approach in preserving and enhancing the local bushland and advocating with NSW Government for protection of bushland against urban sprawl. While many people recognised the great work that Council is currently doing to manage the local natural environment, they also felt these areas are under threat due to a combination of urban sprawl, current planning controls and zoning, and limited resources of Council to maintain large natural areas.

In particular, participants wished to see Council map and rezone land to allow for long term protection of local bushlands, flora and fauna. A number of participants noted that Council’s current zoning and planning controls enable for a considerable amount of land clearing in important wildlife corridors. In general, community members believed a strategic and coordinated approach would afford better movement and protection of at-risk wildlife, and appropriate consideration to rare flora within the wider bushland of the LGA. Many acknowledged this approach as being an essential action if Council is to consider a more sustainable growth plan across the LGA. (See also Theme 8 below on Council operations).



Managing exotic species

The introduction of exotic species into the local bushland was one of the top 5 concerns identified through the survey. Participants referred to the spreading of exotic species as an “invasion” and highlighted that suburban tree planting was a key source of the issue. Exotic species such as agapanthus and tulips were highlighted as high risks to bushland, with key stakeholders acknowledging that many of these species are increasingly popular amongst local gardeners and a key attraction for visitors, despite being listed as a weed by Council.

Survey and workshop participants were keen to see Council take a leadership role in controlling exotic species, in particular in terms of:

- Undertaking/coordinating land care and clearing of exotic species (e.g. in cooperation with local volunteers)
- Greater education regarding the incorrect planting of exotic species by local residents
- Avoiding planting of exotic species in all public spaces leading a Shire-wide awareness campaign to minimise the planting of exotic species on private land

Bushfire risk management

While local residents have a deep connection to the local bushland, the community are acutely aware of the increasing risks of bushfires, as temperatures continue to rise, and Wingecarribee’s suburbs continue to edge closer to areas of bushland. As such, *Natural Hazards like bushfires and floods* was the number one concern that survey participants had about the impacts of climate change, selected by 87% of participants.

Across all engagement activities, participants praised the works of local emergency services, and volunteer groups who are taking action to minimise the risk of bushfires and wished to see Council work closely with these groups to share resources and facilitate a more efficient bushfire management process, including recovery work. Comments relating to this concern highlighted the vital importance of Council maintaining strict fuel-clearing protocols, alongside the RFS, with particular attention given to those reserves which border houses and suburban areas.

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Promotion of native species and minimisation of exotic species on both public and private land
- Establishment of vegetation maps to inform/implement a strategic bushland strategy for the LGA; mapping key reserves, corridors, linkages, and assets that are in need of protection.
- Review of current zoning under the Local Environment Plan (LEP) and development controls (DCP) to protect priority bushland areas against land clearing.
- Facilitate coordination and support for natural hazard (including bushfire) management and response
- Collaboration with local Aboriginal community on Caring for Country practices (including Indigenous cultural burning practices)

Theme 2: Waterways & Catchments

“Sustainable natural areas, biodiversity and clean water are the basis of all life and must be protected.”

– Survey Participant

The Wingecarribee community acknowledged the vital role that healthy waterways play in building greater biodiversity and enhancing the quality of local ecosystems as a whole. Survey participants nominated *Securing water quality of our creeks and waterways* as one of the three most important actions for Government to take to protect the environment.

Catchments and road run-off

The impacts of the expanding road network in the LGA, and the increased volume of traffic on these roads was a concern for engagement participants when discussing the health of the local waterways. Participants expressed a concern that the processes and protocols within water catchment areas were out-dated and insufficient for current traffic volumes. There is also an urgent need to address catchment and filtration processes as the local road network undergoes an unprecedented rate of change.

Sustainable agricultural irrigation practices

Participants commonly acknowledged the importance of maintaining the region’s agricultural heritage and farming practices and wished to see farmers given greater assistance in transitioning to sustainable, regenerative agriculture. The use of toxic chemicals (such as pesticides) and/or nutrient dense fertilisers was considered the greatest threat to the health of local waterways, with participants highlighting particular national and global cases of incremental contamination that lead to the destruction of entire water systems (despite the use of federally approved farming materials).

While it was widely acknowledged that Council has limited capabilities to restrict the use of these products, participants wished to see Council assist in promoting more sustainable practices to local farmers (with particular attention given to highlighting the business case for organic/sustainable farming). Further to this, across all engagement activities, participants commonly acknowledged the importance of maintaining the region’s agricultural heritage and farming practices and wished to see farmers given greater assistance in transitioning to sustainable, regenerative agriculture.



Sewer overflow

Key stakeholders acknowledged the need for greater capacity of the sewer system. It was expressed, by some participants, that the current system, and its lack of easy integration with NSW Water major pipelines, resulted in considerable water contamination during heavy rainfalls. Furthermore, a number of engagement participants with specialist knowledge relating to sewerage, highlighted the minimum capacity requirements for new developments in the area to be a considerable danger for the surrounding waterways during heavy rainfall (a number of key stakeholders and community members acknowledged that the current system was inadequate to protect the local waterways, and that the key barrier of cost should not be considered a reasonable excuse for maintaining the status quo).

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Utilise independent baseline readings of waterway health across the LGA to establish 2031 targets for localised bodies of water
- Facilitate greater collaboration with Transport NSW to undertake an audit of filtration processes for run-off from major roads in the area.
- Council to promote its recent adoption of solar energy at the local water treatment plant
- Establish Sustainable Farming Guidelines for local producers and growers to easily access assistance in adopting Sustainable practices
- Review of existing sewer systems and establish baseline reading for water contamination during heavy rainfall periods.

Theme 3: Biodiversity

“I think we are in the last moment to protect this country's incredible flora and fauna. We have to stop destroying habitat”

-Pop-up Participant

Protecting the biodiversity of natural ecosystems was the number one theme captured across the community engagement. In particular, the survey identified biodiversity as the most important aspect of the natural environment in Wingecarribee, but also the top concerns for participants.

The community's desire for urgent action in this area was further reiterated in survey responses, where *Protecting native flora and fauna (biodiversity)* was the number one recommended action for Governments to take in protecting the environment (receiving 32% more votes than any other response).

Planning for sustainable growth

The community expressed a belief that what they consider poor planning of new housing estates (and suburban sprawl) was the number one threat to the biodiversity of local ecosystems. In particular the clearing of bushland, that was previously a “buffer-zone”, was placing increased stress on these ecosystems. The run-off of nutrient rich fertilisers, increased noise, and atmospheric pollution were all highlighted as causes of decreasing biodiversity in the LGA.

Participants wanted to see Council play a stronger advocacy and planning role in managing sustainable growth, including undertaking a review of the existing LSPS, LEP, and housing strategies, in order to give greater consideration for the protection of the local environment.



The fundamental importance that the community place on this theme is best illustrated by the responses from the 411 survey participants who were asked to nominate the most important actions for Council and NSW Government to take to protect the environment. Of the 14 options that were available to choose from, the four most common responses all related to minimising the impacts of growth in the area, and protecting the biodiversity of natural ecosystems, these included:

1. *Protect native flora and fauna*
2. *Minimise vegetation clearing throughout Wingecarribee*
3. *Secure water quality of our creeks and waterways*
4. *Ensure our urban areas are more sustainable*

Minimising the impacts of extractive industries

As discussed previously in the Waterways and Catchments section of this report, current land use management is seen as having a detrimental impact on the natural environment. Participants also discussed the impacts that local mining practices have upon the landscape and natural environment, and the wide-spread effect it has upon biodiversity. Participants, and young people in particular, did not consider the economic benefits of local and/or coal mining practices to be worth the environmental cost, and wished to see a transition away from these industries within Wingecarribee Shire Council LGA, and within broader Australia. They focussed on the impacts that local mining practices have had on the natural environments that surround these sites, and the elimination of the thriving ecosystems that previously existed on these lands.

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. Note that considerations for the Bushland theme would also apply to the Biodiversity theme; some of which are repeated here for ease of reference. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Establishing transition plan away from mining industries within the LGA
- Undertake vegetation mapping to identify high priority biodiversity values and places
- Review LSPS, Housing Strategy, and existing planning controls against vegetation mapping and identified biodiversity priorities to safeguard habitat and high value conservation areas against urban sprawl or development
- Establishment of vegetation maps to inform/implement a strategic bushland strategy for the LGA; mapping key reserves, corridors, linkages, and assets that need protecting

Theme 4: Sustainable built environment

“Sustainable urban areas are increasingly important as the population of the highlands grows. We need to be planning for growth with adaptation and future conditions in mind”

-Survey Participant

The use of sustainable urban design and building practices was a key area that participants wished to see Council take action on. Whether in the form of advocacy, legislation, local planning controls or assistance in eliminating barriers to more sustainable development and quality housing, the community highlighted a number of common ideas that they wish to see Council adopt. These suggestions considered it a priority for Council to be seen as a leader and to better manage growth and infrastructure delivery across the LGA.

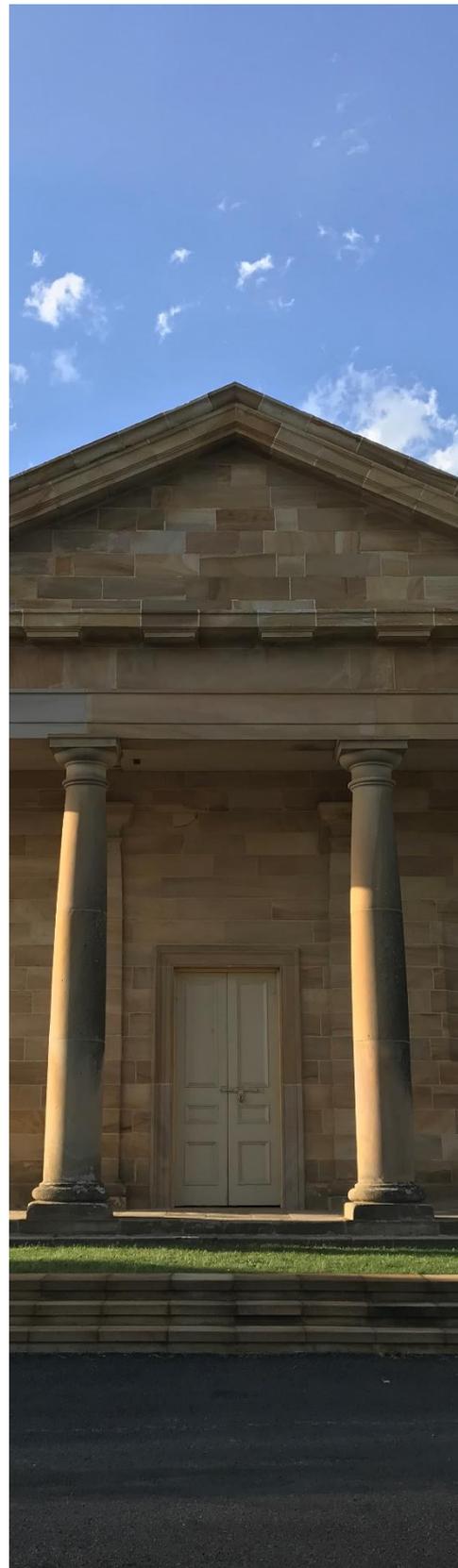
Sustainable building standards and materials

Promoting building practices that improve resource efficiency (particularly energy use) was the number one priority recommended by survey participants, when asked what they felt Council should focus on to better respond to climate change. Participants expressed a strong desire for Council to take a leading role in advocating for changes to the current building codes, standards, and practices as well as existing incentive structures. They also wanted to see Council actively encourage and enable more sustainable development (e.g. by facilitating access to relevant information).

Sustainable urban design

Participants recognised the opportunity for Council’s public spaces project to promote a more sustainable built environment and wished to see this leveraged further to create change amongst the community (see Theme 8 below). In addition to Council projects, the community also wished for there to be greater sustainability requirements on all large developments in the LGA and provide greater concessions to ecologically conscious developers.

When exploring the desire to see greater protection for waterways within the LGA (as discussed in Theme 2 above), there was a common sentiment that wastewater and run-off from urban environments was an area that had seen little innovation in recent times. Participants acknowledged the immediate need for Council to be giving greater consideration for water sensitive urban design principles in all public works, and development approvals. However, some stakeholders also noted that the current guidelines on water sensitive urban design were too prescriptive, and in some cases could cause negative overall environmental impacts.



Theme 5: Green neighbourhoods

“We are in a unique area...that values the green space between our villages and towns. We are in the middle of a wonderful national park, we have amazing waterfalls and some fantastic places to visit”

-Survey Participant

“The green space in between” (recognised as nature and agricultural spaces that neighbour the towns and villages) was a common theme captured throughout the community engagement, as participants expressed the importance of these spaces to the local identity. When asked to nominate what they most value about the natural environment in Wingecarribee, the ability to easily access “pristine open space” was one of the top 5 most common themes captured. The community commonly expressed concerns that the growth of Wingecarribee’s suburbs is a great risk to this element of the Shire that they value.

Furthermore, the community value the preservation of local agricultural industries and the ability to easily access/view these wide-open spaces. As such, Wingecarribee’s “Green Neighbourhoods” must not only consider access to the parks and open spaces that are highly valued in a more urbanised city, but also the ability for residents to feel a connection to local farming lands and “green rolling hills”.

Community members also expressed a need for strategic tree planting in urban areas. Participants acknowledged that any additional planting within the LGA needed to be done strategically, and with consideration for how water intensive certain species may be.

Maintaining local character

Engagement participants acknowledged that the local identity of Wingecarribee’s villages and towns was greatly intertwined with the unique landscapes that they sit within. As such, concern was commonly expressed that new and larger developments did not consider maintaining this local identity, and tended to be placed “on the landscape, rather than amongst it”. While this was a common theme captured during the engagement, the community provided very few concrete ideas on how to best manage growth whilst maintaining the Shire’s unique definition of a “green neighbourhood” – often community members simply called for an end to the assumption that Wingecarribee Shire should and would continue to grow.



Resilient agricultural lands

The Wingecarribee community simultaneously acknowledged the importance of food production and agricultural lands within the Shire, as well as the environmental cost of unsustainable farming practices.

Over 70% of survey participants expressed that they were concerned about the impacts of climate change on *Food Security*. This concern was mirrored by the pop-up and workshop participants, who further highlighted that local food production was not only essential to building resilience in the region, but also an important part of the local culture and heritage. Nonetheless, most participants who acknowledged the value of agriculture also identified a need for change to existing farming practices in order to minimise impacts on the local environment. Participants want to see the region as a market leader in sustainable farming practices, coupled with a local circular economy which created demand for sustainably grown produce, and utilised household waste to further enrich local soil.

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Undertake a Local Character Statement for Wingecarribee's villages, and towns, that identifies and defines a localised definition of what Green Neighbourhood means in each area
- Initiate cooling our urban environments initiatives and projects (e.g. promoting tree planting and native landscaping in town centres and public places)
- Adopt and promote best practice sustainable agricultural guidelines, and provide resources to help existing producers to transition to more sustainable practices
- Undertake preliminary research into innovative, sustainable farming districts around the world – identifying key opportunities for Wingecarribee
- Identify complementary economic opportunities for local farmers, in order to preserve agricultural practices and protect food security in the region
- Better collaboration between key agricultural stakeholders, producers, and marketplaces to build a resilient local food economy
- Establish and work towards sustainable agricultural targets in the LGA

Theme 6: Sustainable Living

“Unless we can significantly change our lifestyle to a warmer climate and more extreme weather, we will not be able to survive long enough to experience any effects of emission reductions in the near future”

– Survey Participant

Amongst the Wingecarribee community exists a groundswell of grass roots and household action to lead a more sustainable life. Every one of the 500+ engagement participants listed some action that they were taking to live more sustainably, including those participants who did not necessarily support Council’s 2020 Climate Emergency Declaration.

Despite the widespread individual action amongst the engaged participants, many commented that their individual action was a rarity amongst the community, and that Council should play a key role in helping more community members “get on board”.

Community and stakeholder workshop participants considered it vital that Council begin to plan towns, villages and an LGA that made a carbon neutral lifestyle an achievable reality.

Adoption of renewable energy

The adoption and implementation of solar energy across the entire Shire was the number 1 single idea heard from engagement participants, and the third most important priority that survey participants nominated for Council to take action on (after *Promoting more sustainable building practices*, and *Establishing Council climate change targets*).

Participants wanted to see Council adopt a carbon emissions reduction target to drive positive change and called on Council to take a leadership role in adopting and promoting renewable energy options and initiatives for both existing buildings as well as new builds.

The adoption of renewable energy sources was the number one theme captured during the Youth Workshop, where participants further explored opportunities to generate renewable energy from household waste and/or hydro. Furthermore, Youth workshop participants were in unanimous agreement that Wingecarribee Shire should aim to become “Carbon Positive”, generating an economic benefit from selling excess energy back to the grid, and repurposing recycled waste into building, landscaping, or agricultural materials.



Sustainable transport

In addition to the measures identified in related themes (particularly regarding sustainability in the built environment), key ideas from the engagement participants for promoting and enabling more sustainable living in the community evolved around sustainable transport and included:

- The creation of a strong, innovative local green economy that would attract green businesses to the area and enable residents to live and work in the Shire, hereby also limiting travel to Sydney.
- The expansion of the EV charging network across the Shire, and collaboration with Transport NSW to ensure this network catered to local resident's most common routes outside the region.
- Expansion of a safe active transport network across towns and villages in the LGA.
- A micro-modal electric public transport network, that intersected with active transport modes.

The collective action of *"Enabling sustainable transport"* was a top 5 priority that Survey Participants nominated for Government to work towards to protect the environment.

Towards Zero Waste

Despite Wingecarribee being a leading Council in waste management and measured in terms of volumes of recycling in 2020, participants wished to see the entire community act on becoming a "Zero Waste" LGA. When asked to nominate things that they were doing to live more sustainably, the top three responses from Survey Participants all related to the minimising of waste in the household (something that was mirrored in the majority of discussions with pop-up participants). This sentiment was shared by young people who explored the concept of "zero waste" further, wanting to see Council become a world leader in creating a "Waste Economy", and generating revenue from the processing and re-selling of recycled household and industrial waste.

Throughout the engagement, community members often raised personal grievances with the waste management services in the LGA, highlighting what they perceived to be inefficiencies at Council-run recycling and compost plants that often resulted in people dumping rubbish or placing recyclable goods in landfill. In particular, the cost of goods at the Reviva Centre was believed to be causing a backlog that put a halt to the centre's ability to accept and repurpose goods. A similar issue was raised in regard to local composting and green waste at the Resource Recovery Centre, where the cost of resale was resulting in a low demand for the product and an inability to accept further green waste.

Addressing barriers to household sustainability

Cost

The community engagement uncovered several key barriers to residents living more sustainably, which participants believed Council were well placed to help address. The additional costs of purchasing sustainable materials/foods/products and adopting more renewable energy sources into their homes and car purchases was the number 1 barrier that survey participants listed. Cost was also a key talking point throughout all workshops, as participants explored key barriers and opportunities for their nominated priorities. While it was widely accepted that these costs would need to be absorbed by the household, in order to protect the environment, participants did feel that Council had a role to play in advocating for greater state/federal concessions on these products, as well as creating a local economy wherein sustainably produced/grown products could be sold at a more affordable price – the planned local EV factory was a widely referenced example.

Information

Following the barrier of cost, the lack of information and inability to identify a single point of truth was the second most common barrier to adopting more sustainable practices. Survey participants who nominated this barrier often commented that a lack of understanding of emerging technologies/products, a fear of making incorrect choices, and an inability to identify a trusted source of information (often receiving conflicting information) led to them taking no action at all. One example includes a discussion with a pop-up participant who, believing that overseas recycling plants were no longer accepting Wingecarribee's waste, felt they would be better off placing waste in local landfill.

Further to this, survey participants highlighted the time and energy of taking action as the third most common barrier to living more sustainably. Participants noted that their limited understanding of new technology meant that taking 'large action' (such as installing solar panels, or utilising composting) required too much time and energy.

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Council to set a target date for achieving 100% renewable energy for all Council assets, events, and fleets.
- Council to adopt renewable energy for all Council buildings and transition the Council fleet vehicles to low carbon alternatives
- More easily accessible educational information on reducing household waste, living sustainably, and getting involved in making a change
- Explore opportunities to drive a commercial benefit from recycling household and industrial benefit
- Undertake an audit of existing waste management systems within the LGA, identifying inefficiencies, bottlenecks, and opportunities for improvements
- Develop a regional transport plan that prioritises building a sustainable city and green economy
- Break-up the Bicycle-lane implementation program into smaller projects, to help facilitate the securing of smaller funding amounts (currently the larger program is often rejected due to it being too capital intensive in a single reporting year)

Theme 7: Adaptation and Resilience

“Climate change is underway. We need to build resilience to it and prepare our population for the full impact...through habitat corridors, better building practices and raising awareness”

-Survey Participant

In the aftermath of the 2019 bushfire season, the Wingecarribee community are more aware than ever of the risks that the changing climate has on a Shire that is surrounded by natural bushland. As noted in the Quantitative Survey Data analysis section of this report, *Natural Hazards (like bushfires and floods)* was the number one concern for survey participants (87%), while the second highest was *Water security and impacts of drought (85%)*, further acknowledging the stress that the risks of these events is placing on the community’s wellbeing.

Water as a valuable resource

The impacts of the recent drought have shaped the habits of Wingecarribee residents and placed greater value upon the use of water than just the dollar figure on the quarterly bill. When asked *what are you currently doing in your own life to help live more sustainably?* 235 separate survey participants (of 398 participants) selected that they *Have installed a water tank and/or other water saving devices*. Further to this, both the Youth and Community workshops participants expressed a desire for the Council to explore opportunities for greater water efficiency in households and primary industries, as well as exploring additional benefits and/or uses for grey water.

Community members also commented that the need for greener neighbourhoods in urban settings should carefully consider water requirements and water management to retain canopy cover (e.g. seeking to maintain a "green-blue balance").



Bushfire management

While a few engagement participants did not acknowledge a direct link between climate change and bushfire risks, all participants agreed that bushland and fuel management is now of increased importance, as discussed in Theme 1 of this report. Groups from both the stakeholder and community workshops expressed a sentiment good bushfire management practices were not mutually exclusive from increasing the biodiversity in the region, and that greater collaboration was needed between the RFS and Council to develop holistic approaches to protecting both people and the environment.

Further to this, local residents from all engagement activities expressed a desire to see Council work closely with local Aboriginal people and incorporate the wisdom of Caring for Country into bushfire management and land care practices.

Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Greater collaboration with local Emergency Response Stakeholder Group
- Ensure future tree planting strategies address environmental context for both El Nino and La Nina weather patterns
- Investigate innovative grey water recycling initiatives for possible roll-out in Wingecarribee
- Council to commit to planting drought resistant natives in all public spaces
- On-going collaboration with local Aboriginal community, to ensure Caring for Country is a foundational component in local land care and maintenance practices

Theme 8: Council Operations

“The Wingecarribee Shire needs a proactive, leading Council that places the climate crisis front and centre of all of its policies and actions”

-Survey Participant

Across the engagement, participants expressed a desire for Council to lead by example, namely in showcasing sustainability in the design, build and management of Council assets; promoting the good work Council already is doing (especially around waste management); and ensuring greater coordination between environmental and sustainability planning and strategic land use planning and DA processes.

This section of the report provides a synopsis of key Council operations, acknowledging the overlaps between this theme and the other seven emerging themes.

Showcasing sustainability

Across all engagement activities, community members expressed the view that Council’s public projects needed to be completed to the highest standard of environmental sustainability, and their positive environmental impacts widely promoted as "good news stories" in setting visible examples for the community to follow.

Promoting the good!

Community members, particularly at the pop-ups, acknowledged that Council already is doing a lot of good work in protecting the environment and responding to climate change. In particular, Council's recent investments into waste recycling was widely acknowledged. There was also widespread support for the Declaration of Climate Emergency. However, during the engagement there was also a general sentiment of: "why did we not know about this?!" - that the good efforts and initiatives are not coming through to the public, at least not in a consolidated way. This sentiment was the driving force behind the common participant recommendation that Council needs to play a key role in providing greater information for people to take action (as discussed in Theme 6 of this report).

Better internal coordination and collaboration

Several key stakeholders and community members highlighted a need for better internal Council coordination and collaboration, to ensure that environmental plans, directions and policies are considered as an integral aspect of all strategic land use planning and development assessments. Some participants noted that the existing planning controls would allow significant land clearing and development which are in contradiction with overall environmental direction and established corporate priorities and strategies and as per the Community Strategic Plan. Further, concern was expressed that development assessments did not adequately consider environmental considerations.



Emerging considerations for the Environment and Climate Change Strategy

The following draws together findings from the engagement into suggested actions that reflect the community's aspirations and priorities. These suggestions from the community would require further consideration by Council in the context of their overall research when drafting the Strategy:

- Lead by example and showcase sustainable building practices and principles on Council assets and projects (e.g. starting by establishing a Sustainability and Ecologically Sensitive Design policy to be implemented and promoted throughout Council)
- Build the environmental profile of Council by creating and maintaining a web-based platform for consolidated promotion of Council "good news" stories
- Better promote the action of local environmental "champions", innovative businesses, and environmental programs
- Establish collaborative forums and mechanisms (e.g. a working group) for better integration of environmental directions in land use planning and DA process

Conclusion

The engagement clearly showed a community that is passionate about protecting the environment and promoting sustainability in all areas of living in the Shire. The nuanced discussions that took place across all engagement activities uncovered a community sentiment that it was everyone's responsibility to be taking urgent action to protect the environment, and not simply a mandate for Council's Environment and Sustainability team. Furthermore, these words were mirrored by actions, with every single engagement participant listing some action that they had been taking to live more sustainably.

However, this wide-spread individual action by participants for this engagement may not be evident at a larger scale in the wider community. The vast majority of engagement participants who highlighted the actions that they were taking, also acknowledged that these actions were not carried out by many other community members, nor were they currently being facilitated by Council in a coordinated way. In fact, while reducing household waste was the most common of these actions, none of the participants identified that Wingecarribee was a leading Council in per capita Recycling volumes, evidently because they did not know this as the "good news story" was not widely broadcasted.

Both Council and the community are already doing a lot to better look after the environment and minimise exposure to climate change risks. The engagement revealed significant strengths and opportunities that could be leveraged and scaled into collective community action, to produce lasting and significant change:

STRENGTHS

- Passionate grassroots level organisation and initiative
- Extensive volunteer base
- Well-established network of key environmental and industry groups
- Abundant and pristine natural bushlands
- Locational advantages - close to Sydney but far removed from its hustle and bustle
- Strong industry interest in investing in sustainable businesses and new industry practices in Wingecarribee
- Agricultural lands, food production and a matching renowned food and restaurant industry

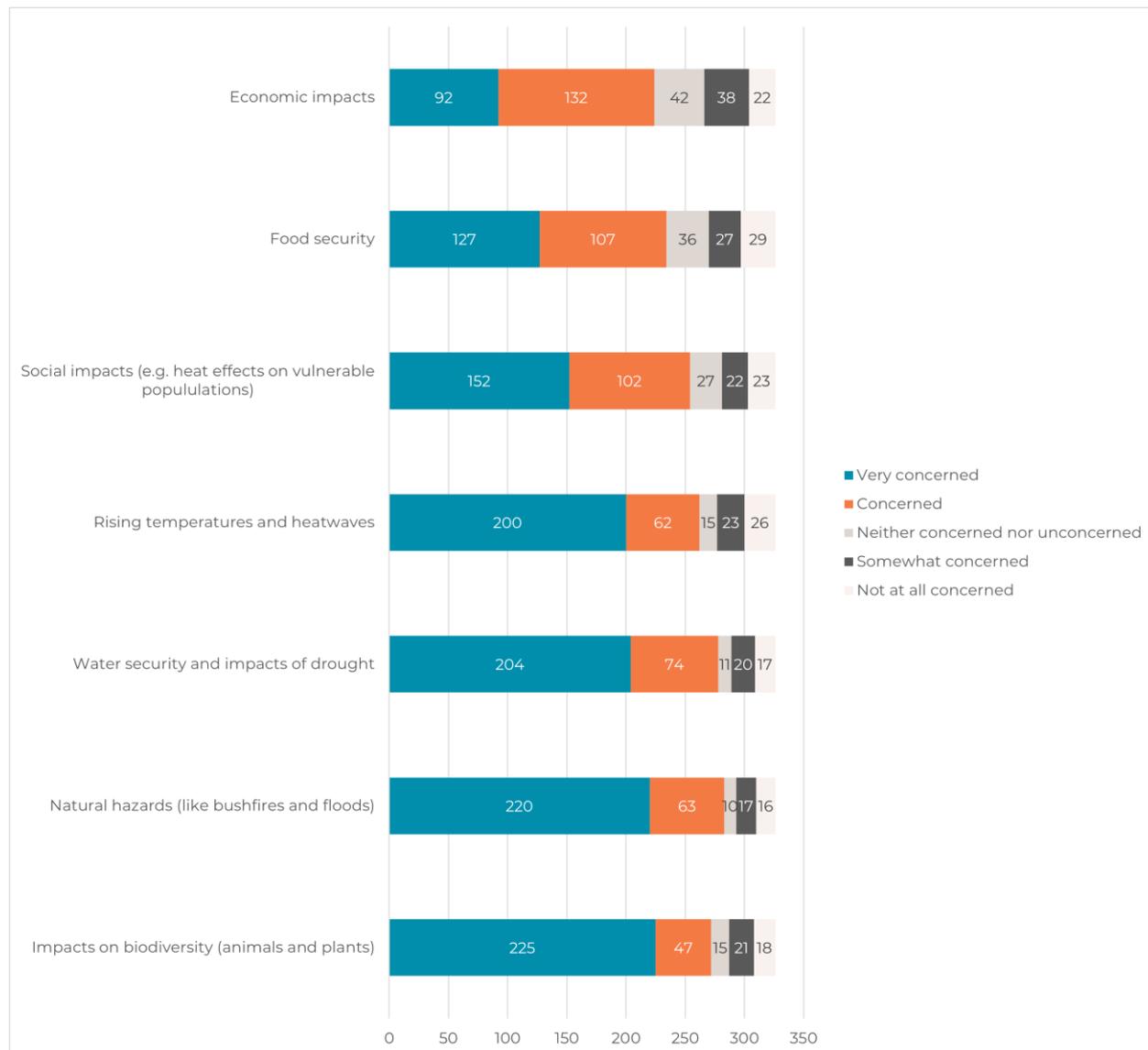
OPPORTUNITIES AND QUICK WINS

- Consolidated promotion of existing initiatives and project (especially waste)
- Ability to attract and retain talent (given lifestyle and location)
- Roll out the red carpet for green business! - making it easy for green businesses to establish themselves in Wingecarribee
- Leverage the expansive land areas suitable for large-scaled investments in renewable energy
- Achieve synergies in planning through greater internal collaboration

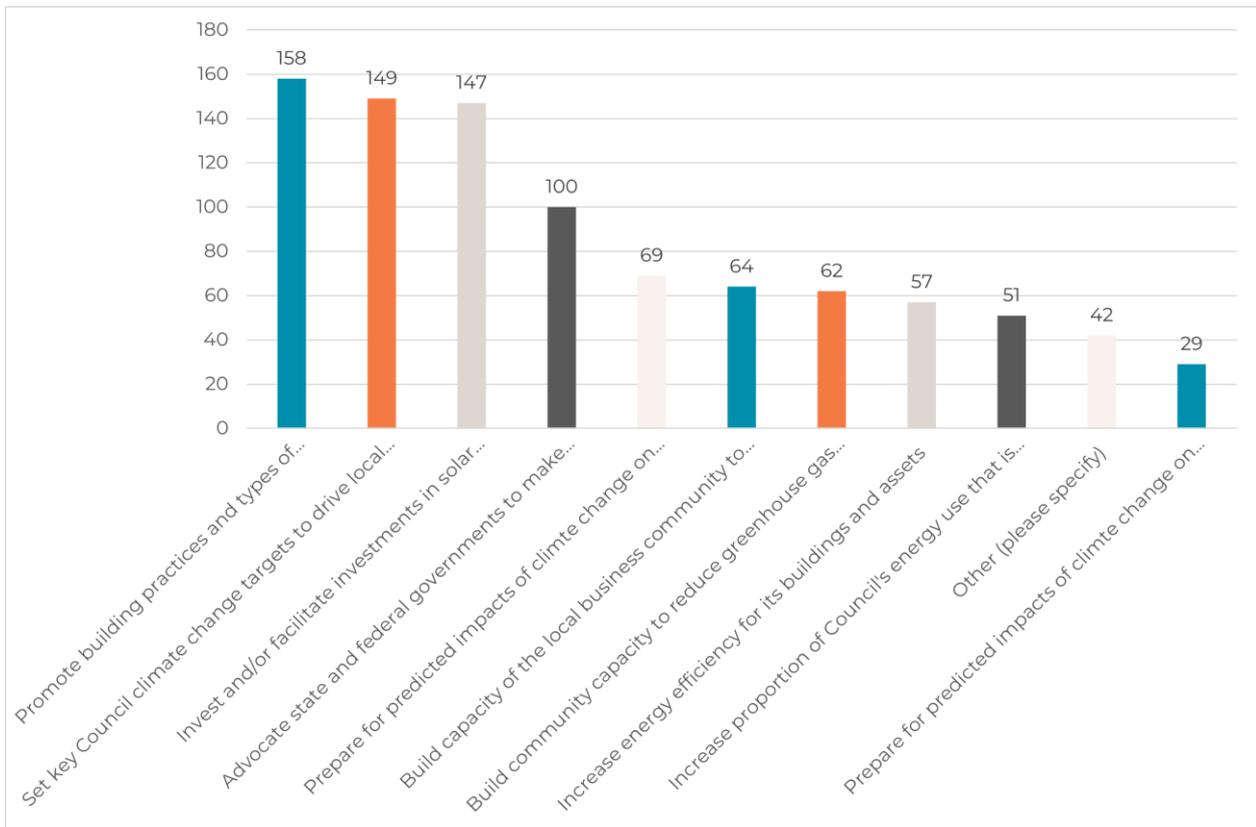
Appendix A – Survey Data

Quantifiable survey data results

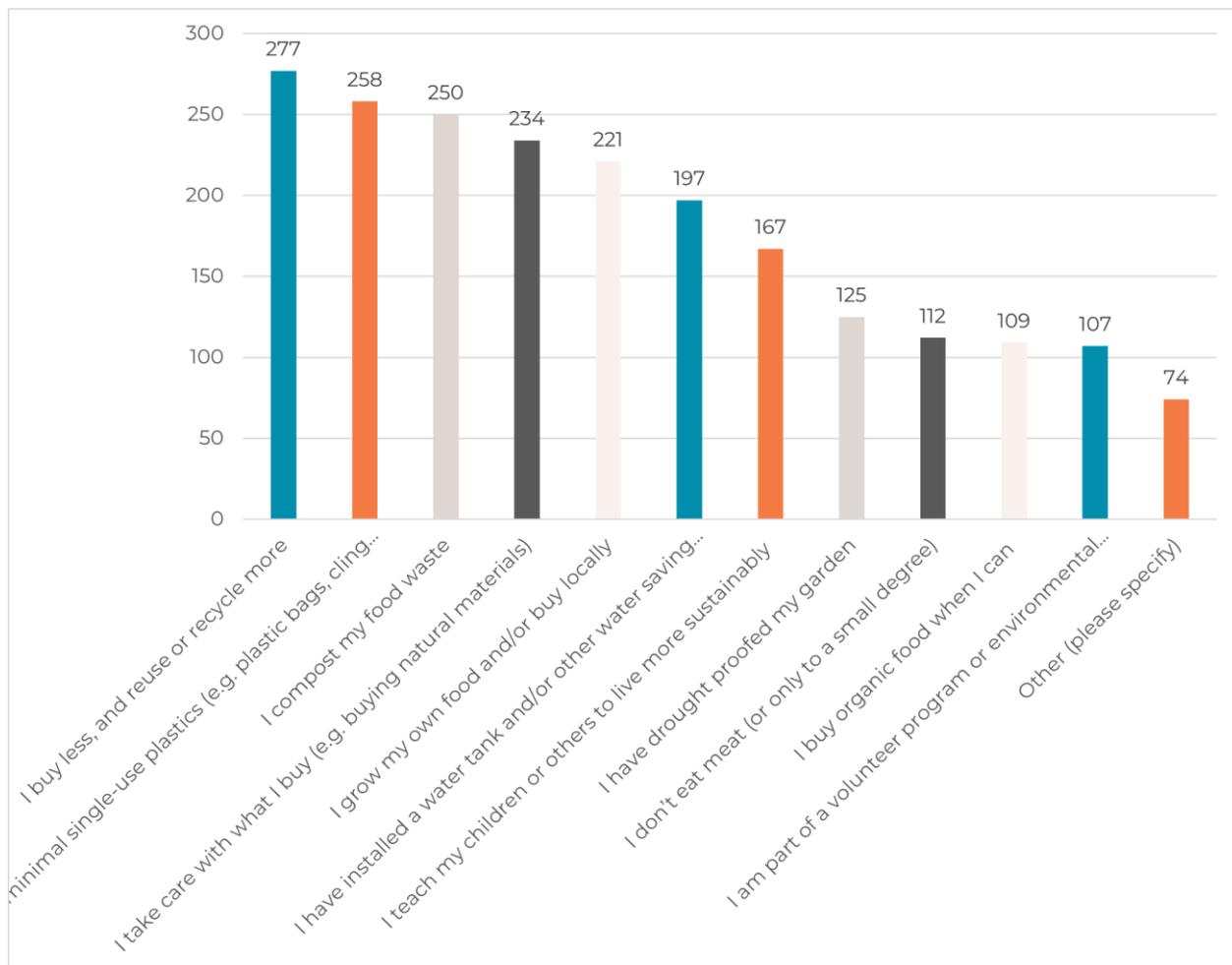
How concerned are you about the following impacts of climate change?



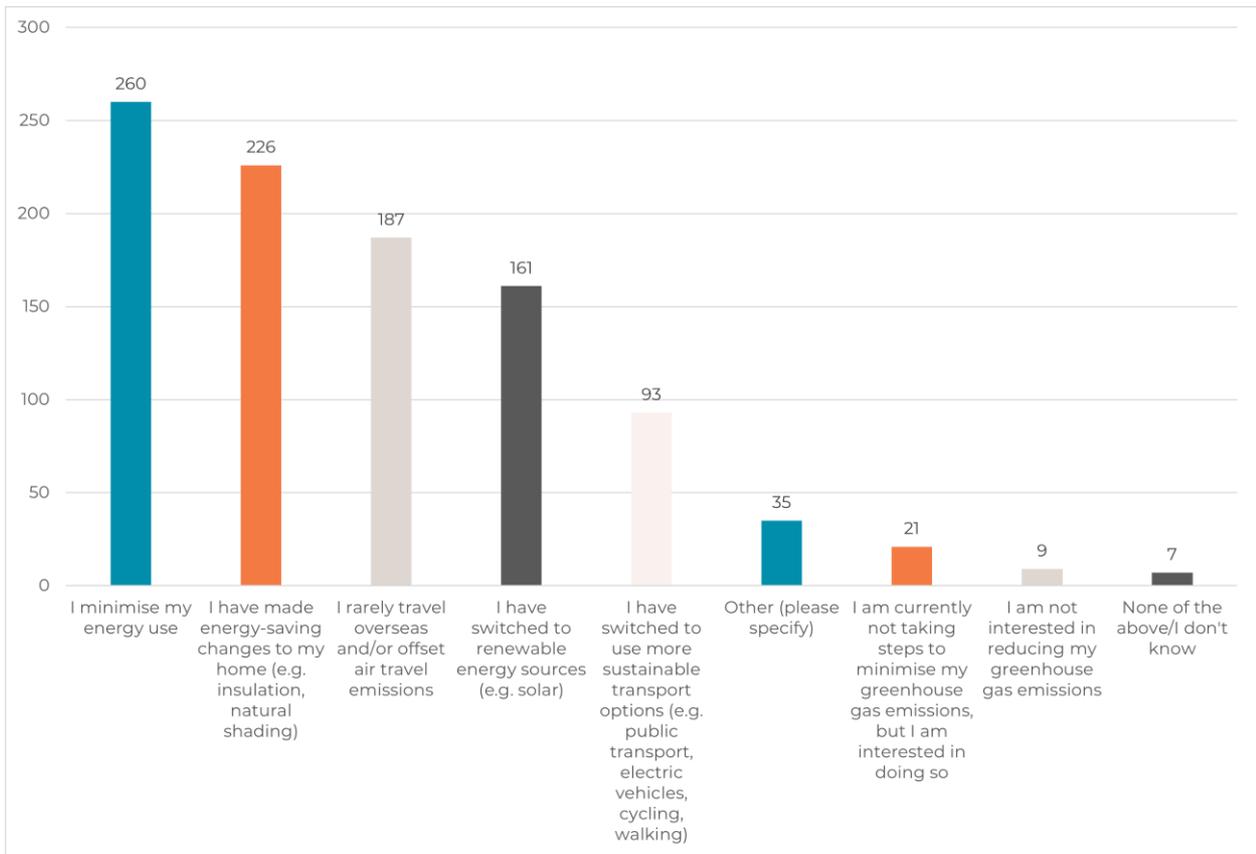
What do you feel Council should focus on to better respond to climate change? (Select your top three priorities only)



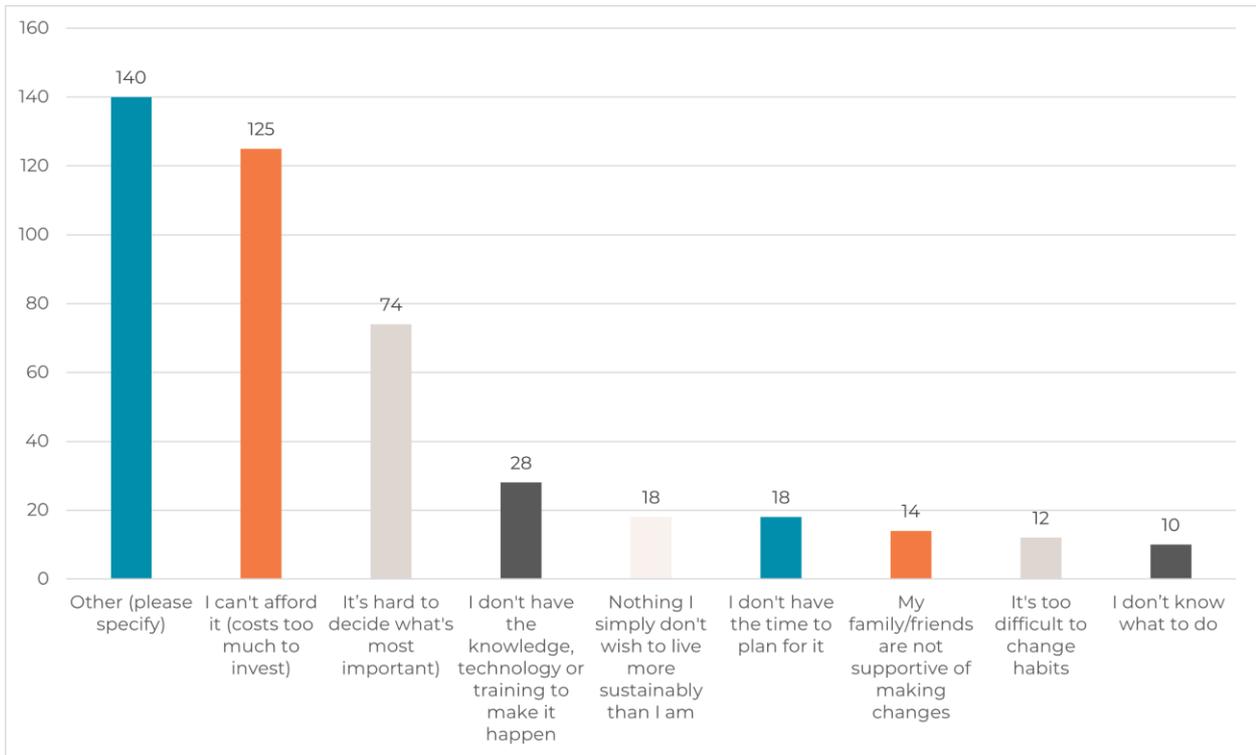
What are you currently doing in your own life to help live more sustainably? (tick all that apply)



What are you currently doing in your own life to minimise greenhouse gas emissions? (tick all that apply)

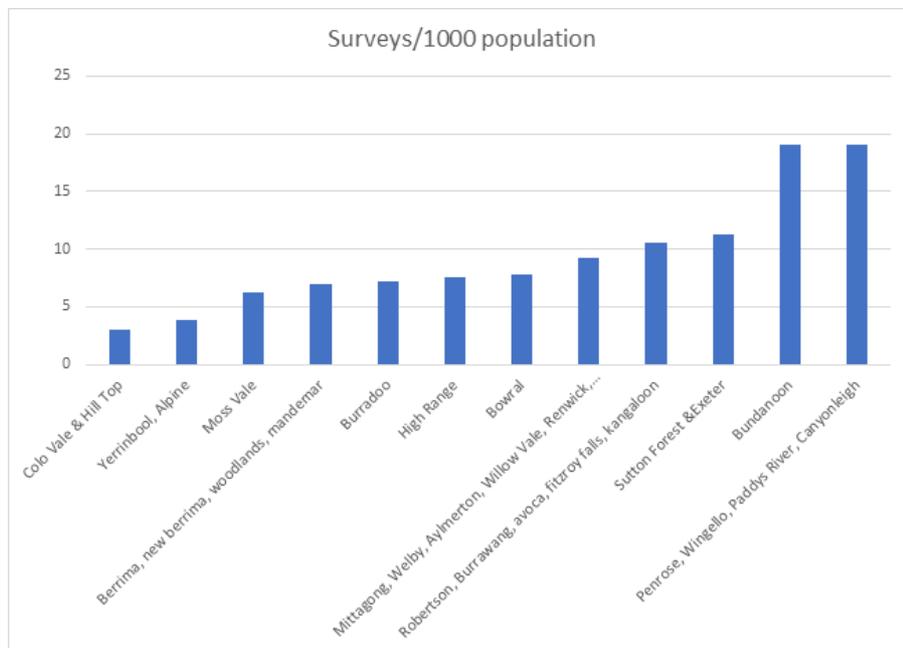


**What prevents you from taking action to live more sustainably or reduce greenhouse gas emissions?
(tick all that apply)**



Demographic summary

The survey respondents were represented across the LGA, as indicated in the graph below.



Just over half (54.2%) of participants identified as female, and 43.9% identified as male.

Participants spanned ages 12 to 75+. The largest age group represented was 65–74-year-olds (30.7%), followed by 55-64 year olds (24.5%) and 45-54 year olds (21.1%).

“There is an opportunity to gain traction from the lessons learned and leverage the current environmental interest”

- Community Workshop Participant

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