# North Wagga Flood Risk Mitigation Community and Stakeholder Engagement Study

Research report prepared for Wagga Wagga City Council

August 2023



Woolcott Research and Engagement is an Australian privately owned research and engagement agency that provide professional, independent and timely market research and engagement services. Our professional staff arrange, undertake and publish commissioned research and community engagement projects for industry, corporations, governments, integration agencies and individuals.

#### © Woolcott Research Pty Ltd 2023

This work is copyright. Individuals, agencies and corporations wishing to reproduce this material should contact Woolcott Research at the following address.

Woolcott Research and Engagement Level 6, 104 Mount St North Sydney NSW 2060

Telephone:+61 2 9261 5221Email:info@woolcott.com.auWebsite:www.woolcott.com.au



# **Table of Contents**

- 1. Executive Summary
- 2. Background and Objectives
- 3. Engagement Program Design

3.1 Overview of the Engagement Program

3.2 Phase 1 Workshop with Council and Influencers

3.3 Community Engagement Forum and In-depth Interviews with Stakeholders

3.4 Planned Wider Community Survey

- 1. Livability and Potential Risks of Living in Wagga Wagga
- 2. Reactions to VP and VHR
- 3. Reactions to Upgrading the Levee
- 4. Reactions to the Combined Options
- 5. Preferred Option for Flood Mitigation
- 6. Conclusions

Appendix A: Community Forum Agenda

Appendix B: Recruitment Screener

Appendix C: Expression of Interest Letter



# 1. Executive Summary

### 1.1 Background

Flood events are traumatic and those living in the floodplain area in North Wagga are concerned over their current level of protection which is at 12% AEP when the next large flood occurs.

For many years, there have been requests from those in North Wagga for the levee to be raised to offer greater protection (ideally to a 1% AEP), however its raising will impact up and downstream communities outside the floodplain that will need to be considered.

In that regard, after several independent studies on floodplain events and their impact, three options are now being considered by Council that will alleviate some of the risks and increase protection for residents.

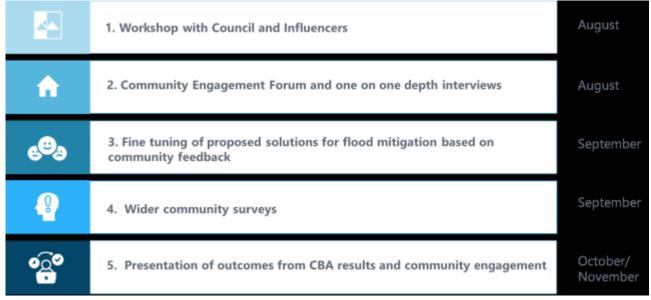
Woolcott Research along with the Centre for International Economics (CIE) were asked to conduct a program of engagement to assess community attitudes and preferences for the three flood mitigation options being put forward.

### 1.2 Engagement Program

The program of engagement involved several stages. This report details the feedback from the Community Engagement Forum and the one-on-one in-depth interviews.

A summary of the program is set out below.

Figure 1: Community Engagement Program



#### Community Engagement Forum

The forum was conducted amongst Wagga Wagga residents. The targeted distribution of participants was based on the number of 'properties' impacted by a 1:100 year flood so those most effected by flooding could have a stronger voice. Therefore residents of North Wagga, Oura and Gumly Gumly were overrepresented based on population statistics for the whole of Wagga Wagga.



Sixty four residents were recruited for the forum with a total of n=50 attending on the day. The final demographics of attendees is set out below:

Table 1: Locations and number of participants

Location	Participants
North Wagga (inside the proposed levee)	30
North Wagga (outside the proposed levee)	4
Oura	2
Gumly Gumly	4
East Wagga	2
Rest of Wagga Wagga	8
TOTAL	50

The forum ran from 6:00-9.00pm and was held at the Wagga Wagga RSL Club. A copy of the agenda for the evening is appended.

Executives from Wagga Wagga City Council and the NSW State Emergency Service (SES) were in attendance as observers. The General Manager of Council, Peter Thompson, presented the information on the options at the forum.

#### In-depth interviews

A series of n=6 in-depth interviews were conducted amongst various key stakeholders, including:

- Donna Argus Gumly Gumly Village Representative
- Nick Stephenson Floodplain Protection Association
- Aunty Mary Atkinson First Nations Community
- Michael Friend Co-Opted Member for North Wagga
- Joe McGirr Independent Member for Wagga Wagga
- Scott Sanbrook and Sophie Mackay Committee 4 Wagga

#### 1.3 Summary of Feedback

#### 1.3.1 Reactions to Voluntary Purchase (VP) and Voluntary House Raising (VHR)

Participants were presented with an option that would involve a combination of voluntary house purchasing and house raising.



Reactions to this option were quite specific across the areas. North Wagga residents were generally opposed to VP but supported VHR, while those from outside North Wagga were more positive towards both as it provided options for those who wanted to remain in the area and for those who wanted to move without adversely impacting residents outside the floodplain.

The arguments for and against these options were clear:

#### Reasons For VP

- Possibility of North Wagga residents receiving more for their house than they would otherwise
- Better option than raising the levee for those who would be affected outside the floodplain by the levee raising
- Provides an option for the elderly or others where VHR is not an option

#### Reasons Against VP

- Does not reduce the likelihood of flooding to occur
- Will potentially ruin the village feel
- Leaves abandoned blocks in between those houses that are still there
- Concerns over how the land would be repurposed
- Impacts people's current lifestyle
- Upheaval of moving
- Question over housing availability in other areas
- Mistrust of Council in the valuation of properties

#### Reasons **For** VHR

- More appeal to those in North Wagga, with some having done so already to their house at their own expense
- Can stay in North Wagga and remain part of the community
- Does not impact others outside North Wagga

#### Reasons Against VHR

- Not all houses are able to be raised
- Impacts access to their house amongst the elderly and those with young children or disabled household members
- It is part of a statewide program that does not guarantee your house will be selected



- It is a long term project so could take years to happen
- Not mitigating the risk of flooding

North Wagga residents and those in favour of this option were generally comfortable with the prospect of a Special Rate Variation (SRV) to help cover the costs of this option as they saw it as benefiting themselves and felt that it was acceptable given they had contributed in the past to the building of the Wagga Wagga levee.

Others who were against this option were less in favour of a SRV.

Stakeholder reactions were fairly similar to participants with some in favour and others less so. Overall, it was seen to be a valid option to consider, however it was not seen as mitigating the risk of flooding to the area. It was thought to be more of a complementary option than a standalone option.

#### 1.3.2 Reactions to Upgrading the Levee

Participants were presented with an option that involved raising the levee to a 5% AEP and raising Hampden Avenue between Wiradjuri Bridge and Gardiner St to ensure the safety of residents during an evacuation, while allowing more time and flexibility during a flood compared to the current road height. The escape road would be at the freeboard height.

Participants were also told that the construction could occur in two stages – the levee upgrade first and then the other works including the road height increase.

Those from North Wagga who would be inside the levee tended to be strongly in favour of this option and those from other areas, including those from outside of the current North Wagga levee were less favourable to quite negative about the idea.

Those in favour saw the levee upgrade and road raising as:

- answering a long-term request for something to be done to protect the people of North Wagga
- providing peace of mind and psychological benefits to those in the floodplain
- a 'quick' fix if the levee is built as a first stage
- potentially providing financial benefit to those in North Wagga through increased house prices and reduced insurance costs
- reducing risk to property, lives and livestock

Residents **against** this option were concerned that:

- the levee was not high enough to (not 1% AEP)
- it would negatively impact those up and downstream outside of North Wagga
- it was expensive, especially the road raising and excavation needed
- it would be detrimental to the environment



Stage 1 which was the raising of the levee only seemed manageable in a cost sense, given that the need for a SRV would be limited.

Stage 2 on the other hand was seen as extremely costly and those against the levee were also strongly against a SRV to help fund it. In fact, most felt that this would be unlikely to be supported by the rest of Wagga Wagga.

Again stakeholders were similar in their response, with most agreeing with a staged approach as a more immediate resolution to the issue. Starting with Stage 1 was also seen as likely to be more palatable to the rest of Wagga (except to those in areas like Gumly Gumly and Oura who would be affected).

#### 1.3.3 Reactions to the Combined Options

In a final round of discussion, participants were presented two further options:

#### • Combined Option A

This involved upgrading the levee around North Wagga (Stage 1), increasing the height of escape road including bridges an excavation (Stage 2), and voluntary house purchase and house raising in areas of Oura, Gumly Gumly and East Wagga.

The costs associated with this option would be the same as those presented earlier.

#### • Combined Option B

This option was largely an extension to Combined Option A by extending the voluntary house raising and voluntary purchase to North Wagga residents.

Reactions to Combined Option A were generally positive amongst those from North Wagga. It retained the building of the levee, with the promise of the construction of escape roads in the future and addressed the impact to those outside the levee. However, it was regarded as an expensive option, and many questioned if it would be achievable.

The inclusion of voluntary house raising and voluntary purchase to Option A to produce Option B was met with strong criticism by some participants. Firstly it was not seen as a feasible option currently due to rules around VP and VHR for North Wagga if there is already a levee in place. For some, particularly those outside the levee, it was seen to be offering everything to North Wagga, at the expense of the rest of Wagga Wagga.

Even some of the residents in North Wagga did not totally understand the need for VHR or VP if the levee was built. As mentioned previously there was also quite strong negativity towards VP anyway amongst North Wagga residents.

Stakeholders agreed that Option A offered a good solution to many and although Option B was potentially ideal in the longer term, most did not see how Option B would be feasible in the circumstances.

#### 1.3.4 Preferred Option

Residents within the forum were asked to suggest which of the options presented was their preferred.

Option 2, Upgrading the Levee and Road Raising was the most popular (21/50 participants), however this was mostly amongst North Wagga residents (19/50 participants).



On balance, Voluntary House Purchase and House Raising as a standalone solution, appeared to be the least preferred (9/50 participants).

The Combined Option B was selected as first preference by 12 of the 50 participants, again more often by those from North Wagga, with Combined Option A preferred by 8 of the 50 participants.

#### 1.3.5 Conclusions

From the forum and the in-depth interviews with stakeholders, it emerged that there are competing motivations amongst those from North Wagga to those from outside the floodplain area.

- North Wagga residents are clearly in favour of upgrading the levee and to a lesser degree the subsequent road raising, however those in other areas are concerned about the impacts to their own property and those properties up and downstream.
- Given the skew of participants to North Wagga residents, it resulted in Option 2 (upgrading the levee followed by surrounding works) being the preferred option overall.
- Doing part one (raising the levee) of the staged approach is well received as it is seen to have the advantages of offering a fast solution to the issue, providing added protection to houses within North Wagga, and being the least costly option (not requiring a hefty SRV).
- Residents outside of North Wagga prefer options that include voluntary house raising and voluntary house purchase. They are seen to provide those outside the floodplain with a solution to the possible impacts of the higher levee.
- The expense of the road raising and excavation is likely to be a major drawback to gaining support for the total upgrade to the levee package. It is argued that having to maintain the current timing for evacuation is acceptable and a positive trade off given the peace of mind an upgrade to the levee would provide for those in North Wagga.
- There is a concern about whether voluntary house raising and purchase would be available to all (given it is a statewide program) and that it would be a drawn-out solution.
- The combined option (Combined Option 3b) to extend voluntary house raising and purchase to North Wagga residents is welcomed by some of those in North Wagga, however it is likely to be seen by others as 'double dipping' and therefore, unpopular. There are also concerns by some of those in North Wagga that it could hold up the levee raising if it is included in the final solution.
- The need for a SRV is not a significant barrier as residents have been requested to contribute to levee upgrades previously, however there is likely to be pushback if the impact to rates is significant and if it is seen as favouring just one community to the detriment of others.



# 2. Background and Objectives

## 2.1 Background

Wagga Wagga has experienced riverine flooding on numerous occasions requiring large scale evacuations and causing considerable damage, loss of property, loss of revenue, disruption of services, disruption of lifestyle and significant inconvenience. Following significant flooding in the 1950's the CBD Levee was constructed to provide flood protection to the township of Wagga. The CBD Levee has recently been upgraded to a 1% AEP level of protection. There are a number of other levees on the floodplain, including one encircling North Wagga and providing a level of protection of approximately an 12% AEP event and one at Gumly Gumly protecting for flood breakouts north of Lamprey Avenue (up to a 10% AEP level of protection), as well as the Riverina Water Country Council (RWCC) that protects Wagga Wagga's potable water supply.

Flood events are traumatic and those living in the floodplain area in North Wagga are concerned about their current level of protection when the next large flood occurs.

For many years, there has been requests from those in North Wagga for the levee to be raised to offer greater protection, however its raising will have impacts up and downstream on communities outside the floodplain that need to be considered.

In that regard, after several studies on flood plain behaviour and their impact, three options are now being considered by Council that will alleviate some of the concerns and increase protection for North Wagga residents.

Woolcott Research along with The CIE were asked to conduct a program of engagement to assess community attitudes and preferences for the flood mitigation options being put forward.

This report outlines the community engagement element of the program conducted by Woolcott Research & Engagement. Following this, there will be a community wide survey on the options.

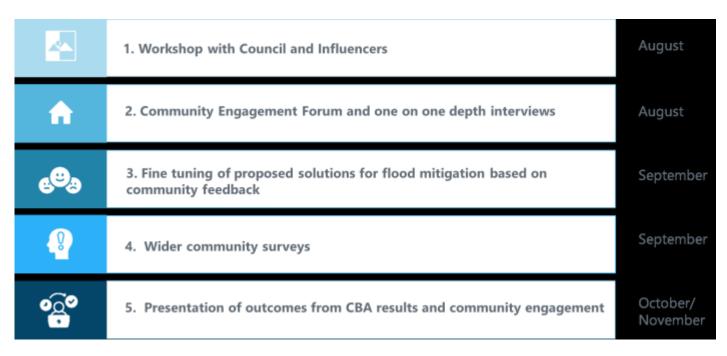


# 3. Engagement Program Design

## 3.1 Overview of the Engagement Program

The program involves several stages as detailed below. Throughout the development of the program, there were several meetings with Council and the Floodplain Risk Management Committee (FRMAC) to discuss and agree on the Engagement plan.

Figure 2: Overview of the Community Engagement Program



# 3.2 Phase 1 Workshop with Council and Influencers

On August 14<sup>th</sup> a workshop with Councillors and FRMAC was held from 5.00-9.00pm in the Council Meeting Room. This meeting presented the proposed content and an outline of the Agenda for the Community Forum to be held the following day.

Attendees at the Meeting included:

- Councillors
- Council Executives
- Community FRMAC members
- Members of the SES
- Council Staff
- The CIE



• Woolcott Research & Engagement

The outcomes from the meeting included suggestions on how to present the options more clearly to residents and generated a suggestion for a two staged approach to upgrading the levee which had not previously been thought possible.

### 3.3 Community Engagement Forum and In-depth Interviews with Stakeholders

### 3.3.1 Community Engagement Forum

The forum was conducted amongst Wagga Wagga residents. To ensure that those most effected by flooding could have a voice, residents of North Wagga, Oura and Gumly Gumly were slightly overrepresented. The targeted distribution of participants was based on the number of 'properties' impacted by a 1:100 year flood.

Participants were recruited using Woolcott Research's telephone interviewing room and a professional recruiter. An expression of interest letter (see appendix) was sent to a selection of residents within the North Wagga and Oura/Gumly Gumly areas initially to generate a list of those interested in attending.

Interested residents were then selected using a random stratified sampling approach to ensure that the forum was representative in terms of age and gender, and that all participants were owners, living in Wagga Wagga (screening questionnaire attached).

Sixty four residents were recruited for the forum with a total of n=50 attending on the day. The final demographics of attendees is set out in the table below.

Location	Participants
North Wagga (inside the proposed levee)	30
North Wagga (outside the proposed levee)	4
Oura	2
Gumly Gumly	4
East Wagga	2
Rest of Wagga Wagga	8
TOTAL	50

Table 2: Locations and number of participants

The forum consisted of a presentation from The General Manager of Wagga Wagga City Council, and discussions at the table level with a Woolcott facilitator at each table to ask questions and capture feedback. There were 6-8 participants at each table, with participants from North Wagga on separate tables from Oura and Gumly Gumly who were on a table together and the rest of Wagga Wagga who were also on their own table.



The forum ran from 6:00-9.00pm and was held at the Wagga Wagga RSL Club. A copy of the agenda for the evening is appended.

Executives from Council and the SES were in attendance as observers.

### 3.3.2 In-depths with Stakeholders

A series of n=6 in-depth interviews were conducted amongst various key stakeholders, including:

- Donna Argus Gumly Gumly Village Representative
- Nick Stephenson Floodplain Protection Association
- Aunty Mary Atkinson First Nations Community
- Michael Friend Co-Opted Member for North Wagga
- Joe McGirr Independent Member for Wagga Wagga
- Scott Sanbrook and Sophie Mackay Committee 4 Wagga

Each respondent was taken through the same presentation that was given at the forum and asked to provide feedback and their preferences for the Flood Mitigation options.

### 3.4 Planned Wider Community Survey

Following receipt of this report, it is planned to present potential solutions to the wider Wagga Wagga community through a survey.

This survey will help to understand the support for the developed options from the wider Wagga Wagga community, given the economic, social, environmental and cultural impacts.

The Woolcott team will draft a questionnaire which will be provided to the WWCC project team for review and further input prior to finalisation.

- The aim is to obtain a representative sample of around **n=400 residents.**
- An online link to the survey will also be available on **Council's Website**, to enable all community members to have input who want to.

### 3.5 Closing the Loop

Following the survey, it is planned that a presentation of results will be offered to Council and FRMAC, along with results from the Cost Benefit Analysis which will be conducted by The CIE.

These results will then be presented to the key community stakeholders and a summary will be sent to the forum participants.

Council also plans to provide an information pack via an open drop-in day at the Council Library.



# 1. Livability and Potential Risks of Living in Wagga Wagga

#### 1.1 Forum Participants

#### Advantages of living in Wagga Wagga

North Wagga Wagga residents indicated a wide range of reasons as to what they like about where they live. Many residents commented on the sense of community, describing North Wagga Wagga as a village with strong community spirit. They also value that the area has retained a rural feel.

"A sense of community, it is like a little village and hasn't changed – has a rural feel and a good lifestyle." North Wagga resident

"You can send your kids to school on their bikes and know that at least half a dozen people will keep an eye on them on their way." North Wagga resident

While maintaining the rural feel and being tucked away from the busier areas of Wagga Wagga, North Wagga residents commented on the area's proximity to the town centre as a significant advantage, as it allowed for easy access to essential services, shops, and schools.

"Location affordable and close to the city, but still has a country feel." North Wagga resident

"You're walking distance to the shops which I really like." North Wagga resident

Residents of North Wagga Wagga also mentioned that there was a wide range of recreational activities available in the area, especially outdoor activities that weren't all either allowed or as easily accessible in other areas.

"You can have fires in your backyard that the rest of Wagga can't do." North Wagga resident

"Very recreational, you can take your dog for a walk, go fishing or swimming, anything you want." North Wagga resident

Some residents of North Wagga Wagga also had strong familial ties to the area, either growing up there or having inherited homes from family members which added to their emotional attachment to the area.

"We all know each other and some of us have been here for years. I inherited my house from my family, other family members also live close by." North Wagga resident

*"I grew up here. Many people in the area have purchased their homes from their parents or other family members. I wouldn't want to live anywhere else."* North Wagga resident

Residents of the rest of Wagga Wagga, including areas in East Wagga Wagga, Gumly Gumly and Oura mostly shared the same reasons for living where they do. They agreed that they valued the rural feel of the area, while being able to still maintain close proximity to the central area of Wagga Wagga. They also valued the recreational activities available in the area.

"I have acreage and I like that." Gumly Gumly resident



*"While you have enough space to move around, you're also close enough to town to go in and get things if you need."* Gumly Gumly resident

"There is nature all around you, I often have kangaroos coming onto my property." Oura resident

#### Impacts of the last flood in Wagga Wagga

Forum participants were asked to think about the last main flood that occurred in Wagga Wagga, what happened during the flood, and how they were impacted regarding themselves and others, property, and the length of time they were impacted.

For all participants, 2012 was the most recent significant flood in Wagga Wagga they could recall. Participants recounted that the community was greatly affected, leading to evacuations and road closures. Families lost homes and businesses, resulting in financial losses and disruptions. Some also highlighted that the flood had lasting psychological and physical impact through the loss of their homes and the physical demands of assisting others, packing and protecting their own house, and evacuating family.

"2012 reached a peak 10.5 metres I think. There were huge impacts to the community and evacuation had begun 2 days prior." North Wagga resident

"2012 – 100 ml of water went through the house, wrecking carpets, everything. We had to gut the whole house. Insurance paid for it, but we had to move out and it took 2 years to move back." North Wagga resident

*"I was pregnant in 2012. I was in town, so I wasn't affected as much, but I remember just feeling stranded because I wasn't able to go home. It was really stressful."* North Wagga resident

"Watching people after the flood dragging their stuff out of their house and leaving it there or taking it to the tip is something I will always remember. It was really distressing." Wagga resident

A disaster like flooding was seen to cause a great deal of emotional stress, financial difficulties, and health concerns. Observing neighbours struggling and discarding belongings after the flood was extremely distressing. There were security issues and negative effects on property prices, which impacted resale values and perceptions of the area.

"Someone's lounge ended up on the levee. Bins were floating around leaking rubbish. Someone's large water tank ended up in my garden." North Wagga resident

"There was a period when you just couldn't sell. People who had plans to move to the area were convinced not to move. I felt like I couldn't sell my house and get out at that point." North Wagga resident

One participant also remembered the 1974 flood, highlighting that it caused extensive damage to his house.

"1974 was huge. My house was damaged, and it took us a long time to repair it." North Wagga resident

In summary, residents highlighted the emotional, financial and physical impacts on themselves and the community in times of floods. The challenges of evacuation, rebuilding, property damage, and ongoing anxiety stood out as common themes. Despite this, the resilience and support within the community during floods was said to strengthen community spirit.



"Everything was so sad, but the community really pulled together and helped everyone. I'm proud of living in North Wagga and I think the fact we all have had similar experiences with the floods brings us closer." North Wagga resident

#### Perceived Future Risks

Participants were asked about their perspectives on the risks involved in future flooding, whether the potential for flooding will change and the likely impact a future flood would have on people and property. There seemed to be less concern about possible loss of life, more about property damage and the stress associated with that. Above all, a future flood was seen as being inevitable, with North Wagga Wagga residents in particular feeling there was a high likelihood of them being affected.

*"It is inevitable that it is going to happen. You always check dam levels because you know it will happen."* North Wagga resident

Participants noted that there had been a change in flood patterns with the more recent floods which made predictions on flooding more difficult. Variability in water sources and vegetation were also felt to be contributing to the worsening flood conditions.

"Potential for flooding has already changed – used to be able to navigate what will be closed first, second etc, no-one knows why – SES couldn't predict it." East Wagga participant

"All different – don't understand why/how. Water is coming from different areas, time of year which changes the flooding implication." North Wagga resident

The uncertainty around the timing of the next flood was seen as a significant concern for residents. The unpredictability of when, how, and where the next flood will occur was worrying.

"We've got no idea how high or when the water is going to run. Last year it was in different spot to previously, and that wasn't even a 'large' flood compared to others we've had." North Wagga resident

Participants recounted past experiences of floods in which impacts on property and people were significant, as well as the resulting financial ruin and increase in insurance premiums.

"Another major concern is our insurance premiums, they are so high, some companies won't even insure us." North Wagga resident

*"I'm not concerned for ourselves as we aren't in the flood area, but for others as there is the financial ruin."* Wagga Wagga resident

While some residents (particularly those in North Wagga Wagga) expressed preparedness and adaptability in the event of a future flood, there was a shared concern about the extent of the potential devastation.

"We know the risks. We are more prepared than others. You make choices based on what you know but scenarios change and you need to be ready." North Wagga resident



# 2. Reactions to VP and VHR

### 2.1 Forum Participants

Participants were presented with an option that would involve a combination of voluntary house purchasing and house raising.

Voluntary house purchasing would involve the State Government and Council purchasing eligible homes at market value if the house was not located on a floodplain. Once purchased, the house would be sold off and relocated by the buyer to another location outside of a floodplain, otherwise it would be offered for free for relocation or demolished as a last resort.

This option was presented in conjunction with voluntary house raising, which would provide funding to some eligible homes to protect against a higher level of flooding. Based on recent data from Lismore, house raising was estimated at \$120,000 per house. This would be accessible to homes constructed prior to 1986, with some exceptions, and funding would be evaluated based on the positive net benefit relative to its cost. While not all homes would be suitable for this method, it was estimated that 267 properties may be eligible; 217 were in North Wagga, 25 in Oura and 25 in Gumly Gumly and its surrounds. This would not change current evacuation trigger points as roads and infrastructure would not be upgraded.

Wagga Wagga City Council assumed that these options would cost \$69 million dollars, with a 50% uptake of both voluntary house purchasing and house raising (\$53 million for voluntary house purchasing, \$13 million for voluntary house raising). The total cost would be shared by the NSW Government and Council, with an estimated cost to Council of \$23 million. A special rate variation (SRV) would be required to raise \$17 for this option, would be passed along to households across 7 years at \$155 for urban areas and \$55 for the villages.

Following on from the presentation, participants were asked for their opinions or feedback on this option presented.

Reactions to this option was very specific across the areas. North Wagga residents were generally opposed to VP but had some support for VHR, although it did not minimise the likelihood of future flooding in their area, while those from outside North Wagga were more favourable as they felt that it provided options for those who wanted to remain in the area and for those who wanted to move without adversely impacting those outside the floodplain.

#### Reactions to Voluntary House Purchasing

Overall, participants agreed that this should not be the only option as it would not be accepted by most of North Wagga. Those in favour of voluntary house purchasing tended to come from other areas of Wagga. Some felt it was a good option to have in the mix, as North Wagga residents would receive more for their property than its current value.

*"It's good in that it doesn't disadvantage you to sell as you are getting more than fair value."* Wagga Wagga resident

"That's a good point but if they are paid the money for a house not in a flood zone, they could get more." East North Wagga resident

"In some cases, they would get more than what it's worth." East North Wagga resident



For some, this was seen as a more viable long-term option as the risk of flooding was likely to continue to increase in the future.

*"If we lift the levee is it going to keep having to be raised? We can lift houses but what if it floods again and gets worse overtime."* North Wagga resident

The Gumly Gumly participants tended to be in favour of voluntary house purchasing, as they were extremely opposed to raising the levee. They felt that it would be beneficial to those in North Wagga to move to a safer area and it did not negatively impact anyone in downstream areas.

"It would be positive for those who want to sell and move and have financial capability to move somewhere else where they want to live." Gumly Gumly resident

Some, however, felt that this needed to be done in tandem with voluntary house raising and perhaps also raising of the levee.

"I really feel we should have the option to do all of the three solutions - people need to make their decision based on their own situation." North Wagga resident

Many participants from North Wagga were not positive towards this option for themselves indicating that they would not be happy to sell. However, some thought this could be a useful option for residents who were less mobile or elderly as they were unable to easily evacuate in the event of a flood. It was also seen as a potentially good option for those who were less connected to the area.

*"If I was 70 years old, I would think about it. Elderly people can't move or evacuate quickly in flood times."* North Wagga resident

*"Maybe OK for some people who have only just moved here or don't mind going elsewhere, good to have different options for different people."* North Wagga resident

It was argued that there were many community members in North Wagga who would not want to leave the area as they had lived there for all, or most, of their life and had strong emotional ties. This sentiment was echoed by other Wagga residents who recognized that many in North Wagga were long term residents.

"A lot of them have lived in North Wagga for a long time and may not want to move - they have lived through many floods over their lifetime." North Wagga resident

"It feels like a slow way to kill a village, it's a bit sad." North Wagga resident

"Not sure how the elderly ones would be – it's that sense of community, it's close knit and together, my mother grew up there and bought there she's lived there her entire life she wouldn't want to go anywhere." East North Wagga resident

"It's death by a thousand cuts." North Wagga resident

Another significant concern amongst North Wagga residents was the lack of available housing in Wagga. Many could not see how they could remain in Wagga or maintain a similar lifestyle, even if they received the appropriate market value for their house.

"Where can we go to??? All estates around Wagga are quite small in terms of land." North Wagga resident



"I can't live the lifestyle if I was to move." North Wagga resident

*"Has the council looked on Domain lately? There's no way there would be enough to buy back anything similar in the area."* North Wagga resident

Many participants expressed concerns as to how the land would be repurposed and managed under this option. Specifically, residents were unsure if land would be left vacant, if it would be rezoned for industrial use, and if Council would maintain it (e.g. mow the grass etc.). A minority of North Wagga residents had specific questions about the option, such as what would happen to residents who own additional parcels of land without a property on it, and what would happen to the facilities.

"Another concern would be that once everyone sold their house in North Wagga – what happens to all of that land there – would they dam it, would they farm it?" Wagga resident

"For a community it is not a good idea. Empty blocks are not positive, particularly if there are a lot of them. It will take away the attraction of what is there currently. Buy it off them for not very much then it is the death of the village. It will turn North Wagga into an industrial site." North Wagga resident

"It will lower house prices and sales for the people who choose to remain. And a risk of reducing maintenance of facilities in North Wagga. Council will just leave things to decline as there will be fewer people living there." North Wagga resident

*"If your neighbour sells up then you may end up with overgrown bindy patches next door, not a nice view or feel for the village."* North Wagga resident

"Feel like with a buy back - that it could turn into an industrial development." North Wagga resident

*"I own an empty block next door to my home, if I sell and move away, I am stuck with an empty block because council only buys land with a home on it."* North Wagga resident

"Who maintains the land?" East North Wagga resident

There were also concerns about how valuations would occur, which were related to the general distrust of Council.

"How can they ensure that they are valued as if they are not in a flood zone?" Gumly Gumly resident

"I feel they are unreliable and untrustworthy." Wagga Wagga resident

"It's hard to value something that is not valuable." Wagga Wagga resident

"I've got 5 acres on my property, how are they going to value it? Houses in Gumly are much larger on average than those in North Wagga, I need to know that my house will be valued appropriately." Gumly Gumly resident



#### **Reactions to Voluntary House Raising**

North Wagga residents were overall more positive towards this option than voluntary house purchasing. Some felt that it was a practical solution for other houses; a few had proactively done it for their own home.

"I don't see a negative about the house raising. My house is already raised up and so I wouldn't stop others raising theirs up." North Wagga resident

"Some have already taken the plunge to raise their house at their own expense." North Wagga resident

Some felt that this option would revitalize the area and could allow people to stay in the area.

"The value is there – people still value the area." North Wagga resident

"There is some attractiveness – there would be more resale value." North Wagga resident

Other residents also saw benefits associated with this option, as North Wagga and other eligible residents could stay in their communities without the additional downstream impacts associated with upgrading the levee.

"People need the option to be able to live in their homes." Wagga Wagga resident

"If there is a flood, the house wouldn't flood at the bottom, wouldn't have to leave and stay out for a long time." Wagga Wagga resident

Residents from Gumly Gumly thought it was the most viable option overall, as they were opposed to a levee upgrade. However, they indicated that they generally could not raise their properties as they were too new or made of unsuitable material (e.g. stone).

"At least I would get to stay in my house. But at the same time, this option isn't too great." Gumly Gumly resident

"What happens if my house can't be raised? Am I pushed into the purchasing option?" Gumly Gumly resident

However, similar to voluntary house purchasing, North Wagga residents in particular were concerned that this option only minimised some of the impacts of flooding without mitigating the risk of flooding in the first place.

"And you will still get flooded one day." North Wagga resident

"This does not relieve stress." North Wagga resident

*"But this doesn't fix the problem. It just allows North Wagga to be flooded every couple of years."* North Wagga resident

"Not sure this is a fix - as even if you are raised you still need to evacuate!" North Wagga resident

"You still have to fix landscaping and lots of other elements, apart from the initial cost." North Wagga resident



"Yard and sheds are still vulnerable, spent lots of money on my garden and this scheme wouldn't help with that." North Wagga resident

Numerous residents expressed that this was not suitable for many houses or residents in the community, which may pressure them to consider voluntary house purchasing. Voluntary house raising was also thought to have additional impacts on a household, especially the elderly and those with young children.

"I am already elderly and not great with stairs. I don't think I would be able to get up there myself, and I'm not sure I'd be able to pay for more accessibility." North Wagga resident

"There are a lot of homes in North Wagga that are brick – so can't be raised and people that live in them can't afford all the extra costs associated." North Wagga resident

"My house would not qualify. Raising houses for me is not a solution." North Wagga resident

"I don't want to live up on stilts, young kids, climbing up with groceries." North Wagga resident

"Not good for the elderly – my pop can't visit." North Wagga resident

There was some confusion and distrust associated with how the program would be managed, similar to earlier concerns associated with valuations. Some were distrustful of the estimated costs, while a minority were concerned that this would be a state-wide program, which may prioritise the recently flood-impacted regions such as the Northern Rivers. Others were unsure how the program would consider different areas of North Wagga and surrounding regions.

*"I don't believe the \$120K. The info isn't clear enough for us to make a decision. Mine is renovated. Does it include decks and balconies and sheds, granny flats etc?"* North Wagga resident

"What happens to my shower and things that are connected? Is that included in the cost? I think \$120K is a bit too low if I'm being honest." Oura/Gumly resident

"Making sure this is valid for all of North Wagga. Where would our priority be compared to other areas?" North Wagga resident

"Eligibility is also an issue – Lismore is given preference, what will happen between now and when the time comes for Wagga to be raised/purchased." North Wagga resident

Wagga residents were concerned about the long-term suitability of this option, in the absence of additional flood mitigation strategies.

"The soil is probably pretty crap so not the most stable foundation – so this is one of the least viable options." East North Wagga Wagga resident

"Where are we next time it floods bad? As a rate payer are we going to have to pay again to alleviate it." Wagga Wagga resident

*"How long will that structure last if raised – what happens in 10 years when it requires maintenance – is the community liable for more costs?"* Wagga Wagga resident

"How does it improve the saleability of the house. It's still in a flood zone and with floods getting worse you will still have the high insurance rates and difficulty selling." Wagga Wagga resident



Overall, there was little that could manage North Wagga residents' opinions or concerns about these options. Residents from North Wagga were very knowledgeable about the subject; most did not want to move and separately felt that house-raising was not suitable for their house or the community broadly.

Similarly, Gumly Gumly residents had few suggestions to alleviate their concerns around house purchasing as they did not want to leave the community and were doubtful that North Wagga residents would either.

*"It doesn't help my house – it can't be lifted. It can't happen to the church, the preschool etc. The timbers in some houses are too brittle to be lifted."* North Wagga resident

"Council would need to provide more information around how houses will be valued and what type of property will be there once the house is purchased." Gumly Gumly resident

Many residents had minimal trust in the information they were being presented with and the actions Council may take in the future. Transparency around the projected costs, assumptions and future implications of each option was felt to be key.

*"I feel that Council are not reporting the correct information - people really want transparent and correct information."* North Wagga resident

"They need to explain clearly what happens to the land once it's sold and guarantee us that it's not going to be inappropriate." North Wagga resident

"Costs were a major issue to some to digest - not understanding where the dollars are going." North Wagga resident

"They need to give us more information on how it will actually work." Oura resident

For some, clear changes to local environmental plans (LEPs) and comprehensive development plans may alleviate concerns associated with voluntary house purchasing.

"They need to be changed so they won't industrialise the area. Can't have storage sheds. I was a person who kicked up a fuss about the shed. It will not remove any other industrial uses. The community would want restriction in development." North Wagga resident

#### Reactions to the cost and SRV

Despite their general opposition to the option, North Wagga residents were happy with the proposed cost and SRV. While they were conscious that other Wagga residents may not agree, some noted that North Wagga residents contributed to the Wagga levee which did not benefit them.

*"Happy to pay a bit extra if it helps people be safe."* North Wagga resident

"How will that go down with people outside North Wagga? I'm not sure they will agree to that. They will think, 'You chose to live in North Wagga then you can deal with it.'" North Wagga resident

"We they had to pay for the Wagga Levee, so it's payback time, they can contribute to our levee." North Wagga resident

"I don't care about special rate variation. We had to pay for the Wagga levee." North Wagga resident



Some residents raised general concerns with the SRV, typically associated with cost-of-living pressures, while others were comfortable with the figure if it were chosen as the best option.

"It's hard to put pressure on others who are already struggling." Wagga Wagga resident

"Happy for a rate rise – \$150 is fine." Wagga Wagga resident

A minority were opposed to contributing to flood mitigation strategies for North Wagga and its associated SRV.

"Personally, I wouldn't want a SRV to help people in North Wagga, I feel it is their problem, and if they want this as a solution then they should have to pay for it." Gumly Gumly resident

"Why do we have to pay if we don't want it or it doesn't work for us?" Gumly Gumly resident

"All we've heard tonight is North Wagga, North Wagga, North Wagga. What about the rest of the people that live here? Why do we have to pay because you decided to live there? It's not our problem." Oura resident

Others indicated that generally the SRV should be more equitable between urban areas and the villages, as it was not seen as comparable to their access to council services.

"It might be better to spread it out more, so that it's not as big of an impact." Wagga Wagga resident

"Why would the villages be paying less?" Wagga Wagga resident

*"If everyone paid \$155 everywhere or it's equal - Oura is at risk of flooding too. That might solve the problem."* Gumly Gumly resident

#### 2.2 Stakeholder Depths

Voluntary house raising or purchase appealed to some stakeholders, but not to all. It was regarded as expensive, not a solution for all, and something that would take a long time to implement.

#### Voluntary House Purchase

Again, there was concern as to whether people would be able to purchase an equivalent house in a non-risk area, given the housing shortages and the increasing prices. There was also a concern that being in a Statewide pool meant that houses in North Wagga would be competing with those in Lismore and other areas.

Many stakeholders felt that people within North Wagga would be unlikely to take up the opportunity to sell their house.

"I think it is a lot of money and we are in the pool across the state competing with all the other houses" Stakeholder

*"I've not heard many people say they want Voluntary Purchase. I would be very surprised if it would be widely supported."* Stakeholder

"It reduces the number of people at risk but not the objective, which is reducing the risk of flooding to occupants of the villages." Stakeholder



"VHP would need to be done on a grand scale to make any difference and that's not going to happen." Stakeholder

A further concern raised by stakeholders was the impact of purchase on the community and the fabric and character of the village.

*"There is a large risk to the community with this option – risk to the character of the community. Vacant lots are one thing. Large scale storage depots are not desirable."* Stakeholder

#### Voluntary House Raising

There were similar pros and cons raised by stakeholders to residents. On the one hand, it was a solution to save people's property without impacting people downstream, however, not all houses can be raised and then there was the question of the elderly and allowing them easy access to their homes.

"VHR is the best option because there is a level of anxiety for Gumly that the levee is pushing the water upstream." Stakeholder

"This is a good option. It provides another alternative to the Voluntary House Purchase. If you can raise your house then it might increase its value in the future." Stakeholder

Overall, Voluntary House Raising and Purchase were valid options stakeholders were willing to consider, however, they were not seen to be totally solving the problem as it was argued that houses would still be affected by future floods and there would still be risk to lives and the need to evacuate.

"Neither of them really sort the issue out. So having them as part of the package is important." Stakeholder

"You'd still have the SES lives at risk unless they can buy back a lot of houses." Stakeholder

"People might be feeling like they are stuck in North Wagga at the moment with no options. This is a good option for them." Stakeholder

However, the need for a SRV was felt likely to be met with objection from those in the rest of Wagga Wagga as they would not be benefiting at all from the SRV.

"The SRV might be a sticking point for these options though. People who are paying for the SRV wouldn't benefit. People in the rest of Wagga may have decided not to buy in North Wagga itself because of the danger of flooding and then they are paying for those people who live there. They decided to buy there! There will be push back on an SRV." Stakeholder



# 3. Reactions to Upgrading the Levee

### 3.1 Forum Participants

Participants were presented an option that involved raising the levee to a 5% AEP and raising Hampden Avenue between Wiradjuri Bridge and Gardiner St to ensure the safety of residents during an evacuation while allowing more time and flexibility during a flood compared to the current road height. The escape road would be at the freeboard height.

The proposal to construct the three bridges and escape roads would require 115,000m<sup>3</sup> of excavation that would need to be disposed of to offset the embankment.

The estimated costs presented were \$10 million for the levee upgrade and \$75 million for the bridges and earthworks.

Participant were also told that the construction could occur in two stages:

- 1. Levee Upgrade
- 2. Road Height increase



It was also made clear that after Stage 1, the evacuation time for residents would remain unchanged until the road height had been increased.

The proposed timeframe for the completion of the Levee Upgrade was estimated to be 4 years.

Following on from the presentation, participants were asked for their opinions or feedback on the options presented.

Reactions to the proposal were mixed. Those from North Wagga tended to be strongly in favour of this option and those from other areas, including those from outside of the current North Wagga levee were less favourable to totally negative about the idea.

#### Reactions to the Levee Upgrade

Those in favour saw the levee upgrade as answering a long-term request for something to be done to protect the people of North Wagga. For them a staged approach to this option made sense, as they believed that it would result in a 'quick' fix that would protect their homes in the event of a flood.

"We have been fighting for 40 years for it!" North Wagga resident

*"If I can evacuate knowing that my house will be safe, that is important. Last time I packed the whole house and my three kids."* North Wagga resident

"When you come back from being evacuated, you will have more confidence that your house won't be underwater." North Wagga resident

Participants went on to explain that the peace of mind provided by the levee, would benefit those of North Wagga psychologically and would also generate greater trust amongst residents toward Council.

*"Everyone looks at the river heights 26000 times a day!"* North Wagga resident



"There is a lot of hostility between the Council and the people of North Wagga." North Wagga resident

*"Building the levee will show us that they do care about us and that we are worth protecting"* North Wagga resident

North Wagga residents also saw themselves benefiting financially from the levee upgrade, through a rise in the value of their property due to an increase in protection and a decrease in insurance premiums/ or being able to get insurance.

Another significant benefit to the levee upgrade was the reduction in risk to life and livestock.

"A lot of people have animals and elderly neighbours who don't use mobile phones. They could die if we left them." North Wagga resident

As far as those in favour of this option were concerned, the only major drawback, was that the proposed 5% AEP levee was not high enough for some. A few felt strongly that the levee should be raised to 1 in 100, while others just questioned why other heights had not been considered or if they had, they wanted to understand the pros and cons of different levels of protection.

The argument for many of these participants was that the environment was constantly changing and that a 1 in 20 levee may not be sufficient in the future.

"I have a big issue with the 1 in 20." North Wagga resident

"We need Council to understand that yes, we want a levy, but we need it to be high enough to protect us for future changes as well. In the report they did, they only looked at the 1/20 or 1/100 options and obviously, the 1/100 option was too expensive so we had to choose the 1/20. But that doesn't mean we are happy with that." North Wagga resident

"Why can't we look at other options inbetween? 1/40, 1/60?" North Wagga resident

"I just want a long-term solution so my kids don't have to go through the same fight again in 30 years when the levee has to be raised again and they have to do it all over. Just build it a bit higher now so you don't have to do it again. Let's be safe rather than sorry." North Wagga resident

For those outside of North Wagga, the idea of the levee was not unanimously popular. Some could see the benefits to the North Wagga residents and appreciated that it would make them and their properties safer, however most questioned what impact the upgrade would have on those outside the levee in places such as Oura and Gumly Gumly.

*"It is easy for us not affected – we can be compassionate, but we don't fully understand what they have experienced."* Wagga Wagga resident

Many of those, particularly in Gumly Gumly, were very concerned that the levee would create a greater potential for their homes to be flooded and for them, this was seen to be totally unfair. In fact, many in Oura and Gumly Gumly felt that they had not been consulted and that it was always North Wagga that was being listened to above everyone else.

"I guess it would be good for those in North Wagga, but what about us? It would save them but hurt us. That doesn't seem right." Gumly Gumly resident



"I don't object to North Wagga getting protected. I do object to North Wagga getting protected when it hurts me, however. Especially when I pay the same rates." Gumly Gumly resident

"How is Council going to compensate us for increasing the potential of our homes being damaged? We're being forced to pay for something that hurts us." Gumly Gumly resident

*"The water must go somewhere and it's just going downstream and it's going to be worse downstream. It's serious."* Oura resident

"Our input isn't being taken into account here, it's just the people in North Wagga." Oura resident

The other issue that was raised by a several participants was the impact of the current vegetation on the flood water. The concern was that the vegetation traps debris and creates it own dam blocking the water from flowing. Some argued that this issue had been raised to Council and it had been reasoned that the vegetation could not be removed due to the potential impact to the animals inhabiting the area.

"Apparently there are special possums in there – which is why the vegetation can't be removed - surely human lives are more important, can't we relocate the possums or the frogs or whatever animal it is that we are protecting?" North Wagga

#### Reactions to Raising the Road

The raising of the road was well received by those who were in favour of the levee upgrade, however most recognised that it would be expensive and appreciated the idea of a staged approach in order to get construction moving.

Whilst participants could understand the benefits of raising the road, most felt that it simply meant that evacuation timing could be delayed giving extra time to 'pack up'. They didn't see it as being a 'life-saving' component.

*"The road will allow us extra time to pack up. It's the luxury bit – the cream on top."* North Wagga resident

Others were against the road raising and the excavation as they were concerned about the environmental impacts, the expense, and the impacts to others outside the levee.

"Spending the money on the road is not necessary – they get plenty of notice." Wagga Wagga resident

"Delaying evacuation by x amount of time is not worth the cost." Wagga Wagga resident

"People don't want to leave, what is the value in increasing the time they have to evacuate?" Wagga Wagga resident

#### Reactions to the cost and SRV

For those who were strongly in favour of the levee upgrade, the cost of Stage 1 was seen to be fair and reasonable, with little perceived impact on others as Council already had most of the money. The little impact it was imagined having on rates seemed fair, especially since all of Wagga Wagga had contributed to the Wagga CBD levee for a number of years.

"We have been paying for their levee all these years." North Wagga resident



The cost of the road raising however, was considered expensive and unlikely to be supported by anyone in a request for an SRV.

Those against the levee raising were less positive and were unhappy with the idea of paying any extra to cover the upgrade to protect North Wagga.

"I don't want an SRV. I wasn't happy the last time I had to pay one for North Wagga and I'm definitely not happy this time as it will hurt us."

#### 3.2 Stakeholder Depths

Amongst the depth interview participants, views were very similar, with some favouring the levee upgrade and others not.

Those who wanted the levee upgrade tended to agree with a staged approach, seeing this as a faster way to resolution of the issue. It was considered possibly more palatable for the wider community given that there was potentially no need for an SRV.

*"Upgrading the levee is the priority, however without the bridges. It needs to start quickly – the other stuff is going to take too long."* 

*"It is a no brainer. It helps them and helps everyone. Everyone benefits. And no SRV is needed to build the levee."* 

There was, however, recognition that this would impact people in other areas such as Gumly Gumly and it was felt that a whole of community approach was needed to ensure that Voluntary Purchase and House Raising would be offered to those impacted outside the floodplain.

In fact, the main reasons against the upgrade were largely due to the impact it would have on others but also the impact to the environment. Some also argued that raising the levee was not a long-term solution and that flooding in the future may be bigger and more devasting despite the levee. It was also felt that the levee would create a bigger problem for North Wagga in the event of a flood as it would be more difficult for the water to dissipate.

"We need to consider the impact to Country and the people. The more we take out of the country the more we are degrading the country."

"Upgrading the levee increases the risk to Gumly Gumly. We need to include House Raising for these people."

"There are still floods that will come. It is the worst option. There will still be another one that will be bigger and more devastating."

"There is a Levee Paradox: levees decrease the flood risk for a short period time, but people then develop within the floodplain area and the risk increases. The flood risk will keep going up and up."

"Once the water goes over the top it stays there for days and it will ruin the buildings. It causes more damage and becomes a dam within the flood plain."



# 4. Combined Options

In a final round of discussion, participants were presented two further options:

#### Combined Option A

This involved upgrading the levee around North Wagga (Stage 1), increasing the height of the escape road including bridges and excavation (Stage 2), and voluntary house purchase and house raising in areas of Oura, Gumly Gumly and East Wagga.

The costs associated with this option would be the same as those presented earlier.

#### Combined Option B

This option was largely an extension to the first one by extending the voluntary house raising and voluntary purchase to North Wagga residents.

#### 3.1 Forum Participants

Reactions to Option A were generally positive amongst those from North Wagga. It retained the building of the levee, with the promise of construction of escape roads in the future, and addressed the impact to those outside the levee.

"Good to include Gumly and Oura." North Wagga resident

"The house raising and purchase is a fabulous idea for those in the outlying areas - but the costs may not be correct!" North Wagga resident

However, it was regarded as an expensive option, and many questioned if it would be achievable.

"It would be nice, but in reality, it doesn't seem like it is doable." North Wagga resident

The time frame of 4 years for the levee estimated by Council was seen to be a long time, however if that was the case, most just wanted the decision to made now and for plans to commence. There was a feeling that this issue had been on the table for some time and patience was wearing thin.

#### Combined Option B

The inclusion of voluntary house raising and voluntary purchase to North Wagga was met with a great deal of criticism. For some, particularly those outside the levee, this was seen to be offering everything to North Wagga, at the expense of the rest of Wagga Wagga.

"I think A would be preferred to B. Why does someone in North Wagga get all the options? We should get the purchasing and raising if we're being affected by the levee, which would also be less expensive." Oura resident

"Feel that there is something fishy with this - why would they give that option to North Wagga residents when the levee has been raised - am I missing something?" Wagga Wagga resident



"Why should they also get the opportunity for purchasing and lifting as well as having the levee. The purchasing and lifting should be reserved at the very least for those who will be negatively impacted by the levee." Wagga Wagga resident

Even some of the residents in North Wagga did not totally understand the need for voluntary house raising or purchase if the levee was built. Some even questioned whether their house price would increase in the Voluntary Purchase scheme if the levee was built. There were also the general objections to VP that were voiced earlier.

"If the levee is up then we wouldn't need to sell our house. There used to be houses in North Wagga going for \$680,000. Ours are worth more than houses in town when there is no flooding." North Wagga resident

#### 3.2 Stakeholder Depths

For most stakeholders the combined option A was felt to be a good solution as it provided the levee that was being called for by those in North Wagga and addressed the concerns of those upstream in Oura and Gumly Gumly to some extent.

It was felt that the levee option on its own was not ideal and that offering Voluntary House Raising and Purchase to those outside the levee made sense.

"You can't just have the levee without offering VHR and VP to people outside the levee." Stakeholder

Those against the levee however, were not in favour of this option for the same reasons they offered during the levee upgrade discussion.

Combined Option B was possibly the ideal solution, however some felt that this was not really feasible and that this would be something to consider in the distant future.



# 5. Preferred Option

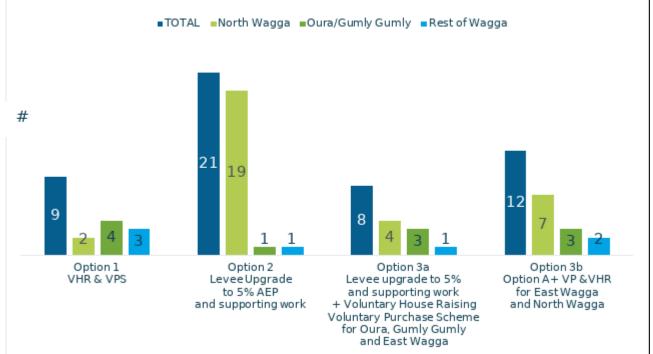
### 5.1 Forum Participants

Residents within the forum were asked to suggest which of the options presented was their most preferred.

Overall, Option 2 (Upgrading the levee) seemed to appeal most (21 people), particularly to those in North Wagga (19 people). The second most popular option was the Combined Option 3b (12 people) on the basis that it included all solutions with in the one option.

Residents of Oura/Gumly Gumly and to some extent, the rest of Wagga were mixed in their overall preferences, although they all agreed (bar one person), that Option 2, the levee upgrade was not their preferred choice.

On balance, Voluntary House Purchase and House Raising as a standalone solution, appeared to be the least preferred. (9/50 participants).



*Figure 3: Number of residents selecting that option as their first preference* 

Which is your preferred option?

Base n=50 forum participants. Please note that votes were anonymous. Participants were asked to identify where they lived on the preference form and a minority did not classify where they lived in the same way as during recruitment.



# 6. Conclusions

From the forum and the in-depth interviews with stakeholders, it emerged that there are competing motivations amongst those from North Wagga to those from outside the floodplain area.

Whilst North Wagga residents are clearly in favour of upgrading the levee and the subsequent road raising, those in other areas are very concerned about the impacts to their own property and those properties up and downstream.

Given the skew of participants to North Wagga residents, it resulted in Option 2 (upgrading the levee) being the preferred option overall. Stage 1 (upgrades to the levee) of Option 2 is well received as it is seen to have the advantages of offering a fast solution to the issue, providing added protection to houses within North Wagga, and being the least costly option (not requiring a hefty SRV).

However, for residents outside of North Wagga it appears that options including voluntary house raising and voluntary house purchase are preferred. They are seen to provide those outside the floodplain with a solution to the possible impacts of the higher levee. Upgrading the levee without allowing for houses to be purchased or raised is not considered to be a sound standalone alternative.

The expense of the road raising, and excavation is likely to be a major drawback to gaining support for the total upgrade to the levee package. It is argued that having to maintain the current timing for evacuation is acceptable and a positive trade off given the peace of mind an upgrade to the levee would provide for those in North Wagga.

Whilst the addition of voluntary house raising and purchased to the mix provides a solution to those outside the levee, there is a concern whether this would be available to all (given it is a statewide program) and that it would be a drawn-out solution.

The combined option (Combined Option 3b) to extend voluntary house raising and purchase to North Wagga residents is welcomed by those in North Wagga, however it is likely to be seen by others as 'double dipping' and therefore, unpopular. There are also concerns by some of those in North Wagga that it could hold up the levee raising if it is included in the final solution.

The need for a SRV is not a significant barrier as residents have been requested to contribute to levee upgrades previously, however there is likely to be pushback if the impact to rates is significant and if it is seen as favouring just one community at the detriment of others.



# Appendices

33EXPERIENCE | INNOVATION INSPIRATION



# Appendix A: Community Forum Agenda

Wagga Wagga City Council Facilitators' Agenda

# WAGGA WAGGA CITY COUNCIL – FLOOD MITIGATION STUDY FINAL RUN SHEET/AGENDA

Venue: Wagga RSL, Corner of Kincaid & Dobbs Street Date and time: Tuesday 15<sup>th</sup> August, 6.00-9.00pm

**Objectives of the forums:** 

### Determine awareness and knowledge of the flood risk Assess and prioritise considerations in making flood mitigation decisions Gain reactions to proposed mitigation options Assess preferences for the options

TIME	Session	Responsibility	Materials required
Pre- forum	<ul> <li>Registration</li> <li>Provide participants with filming/photography permission forms</li> </ul>	WR	Sign in sheet Photo permission form
6.00- 6.10pm	<ul> <li>Welcome by WR Lead Facilitator and Housekeeping</li> <li>Woolcott Research Lead Facilitator to welcome</li> </ul>	WR Lead Facilitator	PPT slides
(10 mins)	<ul> <li>and thank participants for coming</li> <li>Acknowledgement of Country</li> <li>Acknowledge there has been a lot of consultation in the past and how this consultation is different – the need to move forward.</li> <li>Explain purpose of session - stress importance of the Forum and how community feedback will be used.</li> <li>Structure of the forum and agenda</li> <li>Provide guidelines for participation</li> <li>Introduction to first table level discussion session.</li> </ul>		



6.10-	Table Discussion 1: Liveability and Potential Risks	WR Table	
6.25pm (15 mins)	Liveability	Facilitators	
	<ul> <li>Participants to introduce themselves/ where they live/ how long they have lived in the area.</li> </ul>		
	<ul> <li>Why they live where they live – What were the main factors involved in choosing to live in this part of Wagga Wagga? What do they really value about the location?</li> </ul>		
	Potential Risks		
	<ul> <li>Ask them to think about the last main flood that occurred in Wagga Wagga. What happened? How were they impacted (people, property and length of time impacted)?</li> </ul>		
	<ul> <li>What risk do they see for the future? Do they think the potential for flooding will change? How? What is the likely impact to people, and to property?</li> </ul>		
	• What is their level of concern for the future?		
	<ul> <li>Does their household have a strategy/plan to deal with major flood events? What does this involve? What do they do to minimise the impact?</li> </ul>		
6.25- 6.35pm	Presentation: Broad Outline of Options being Considered and Detail on Raising the Levee	Wagga Wagga City	
(10 mins)	Broad overview of options	Council General	
	<ul> <li>Outline of options being tabled (noting that there are only 3 options available)</li> </ul>	Manager	
	• Why Council is only considering three options		
	Why other options are not viable		
	Present Option: Voluntary House Purchase and Voluntary House Raising		
	Present option in more detail		
	• What does this option entail?		



	<ul> <li>Implications if it was adopted (environmental, social, cultural and economic, personal impacts)</li> </ul>		
	Dispel any current myths or misconceptions		
6.35- 6.45pm (10 mins)	Presentation: Broad Outline of Options being Considered and Detail on Raising the Levee	Wagga Wagga City Council General	
	Broad overview of options	Manager	
	<ul> <li>Outline of options being tabled (noting that there are only 3 options available)</li> </ul>		
	• Why Council is only considering three options		
	• Why other options are not viable		
	Present Option: Voluntary House Purchase and Voluntary House Raising		
	Present option in more detail		
	• What does this option entail?		
	<ul> <li>Implications if it was adopted (environmental, social, cultural and economic, personal impacts)</li> </ul>		
	• Dispel any current myths or misconceptions		
6.35-	Presentation: Raising the Levee	Wagga	
6.50pm	Present option in more detail	Wagga City Council	
(15 mins)	• What does this option entail?	General	
	<ul> <li>Implications if it was adopted (environmental, social, cultural and economic, personal impacts)</li> </ul>	Manager	
	Dispel any current myths or misconceptions		
6.50-	Presentation: Combination Solution	Wagga	
7.05pm (15 mins)	Present option in more detail	Wagga City Council	
	• What does this option entail?	General	
	<ul> <li>Implications if it was adopted (environmental, social, cultural and economic, personal impacts)</li> </ul>	Manager	
	Dispel any current myths or misconceptions		



7.05- 7.30pm	DINNER	WR	
(25 mins)			
7.30- 7.50pm	Table Discussion 2: Voluntary House Purchase andVoluntary House Raising	WR Table Facilitators	Handout on Option 1
(20 mins)	• Reactions to the information presented?		
	<ul> <li>What do you think of this option in relation to the main considerations discussed earlier?</li> </ul>		
	<ul> <li>What are your main concerns regarding this option?</li> </ul>		
	<ul> <li>Is there anything that could alleviate your concerns?</li> </ul>		
7.50-	Table Discussion 3: Raising the Levee	WR Table	Handout on
8.15pm (15 mins)	• Reactions to the information presented?	Facilitators	Option 2
	<ul> <li>What do you think of this option in relation to the main considerations discussed earlier?</li> </ul>		
	<ul> <li>What are your main concerns regarding this option?</li> </ul>		
	Is there anything that could alleviate your concerns?		
8.15- 8.30pm	DESSERT (Bring back to the table)		
(15 mins)			
8.30-	Table Discussion 4: Combination Solution	WR Table	Handout on
8.40pm (10 mins)	• Reactions to the information presented?	Facilitators	Option 3
· ,	• What do you think of a combined solution?		
	• What are the pros and cons?		
8.40-	Table Discussion 6: Preferences	WR Table Facilitators	Option
8.50pm (10 mins)	<ul> <li>Given what has been discussed, what is your preferred option? Why? What are the benefits of this?</li> </ul>	Facilitators	preference sheet
	<ul> <li>Give everyone an option preference sheet and ask them to choose their preferred option.</li> </ul>		



	<ul> <li>Encourage participants to select an option. Ask them to hand back to facilitator to collate.</li> <li>Table facilitator adds up the votes for each</li> </ul>		
	option and gives to Sophie		
8.50-	Results of the voting	WR Lead	
8.55pm	Sophie adds up the rankings	Facilitator	
(5 mins)	Lead facilitator to provide result		
	• The lowest score is the winner!		
	<ul> <li>Stress that this is only part of the process- other elements are being conducted and will input into final decision</li> </ul>		
9.00pm	Thank and close	Woolcott Lead	
	Participant end of session survey	and Table Facilitators	
	Pay incentive		



# Appendix B: Recruitment Screener

RECRUITMENT SCREENER (when they click on the register now button above):

Thank you for your interest in being involved in the community forum. We just need to ask a few demographic questions to ensure we have a representative group of the community.

Q1. Do you live or own a property in the Wagga Wagga City Council local government area?

Yes 1 No 2 - TERMINATE

Q2. And do you own or rent the property you live in?

Own 1 Rent 2 - TERMINATE

IF TERMINATE: Unfortunately, we are after those who live and own property within the area. Thanks again for your interest.

Q3. Do you, or does anyone in your household, work for any of the following organisations?

Wagga Wagga City Council A Market Research Agency IPART (the Independent Pricing and Regulatory Tribunal) NSW Environment Protection Authority

Yes 1 THANK & TERMINATE No 2

**TERMINATE MESSAGE FOR Q3**. Unfortunately, we are unable to include anyone with a close connection to Wagga Wagga City Council or market research. Thanks again for your interest.

Q4. Which area of Wagga Wagga do you live? ...

North Wagga	1 (Quota: 36)
Oura	2 (Quota: 14)
Gumly Gumly	3 (Quota: 2)
East Wagga	4 (Quota: 2)
Forest Hill	5 (Quota: 2)
Other Wagga (please specify)	6 (Quota: 4)

5

6



Q5. Which of the following age groups best describes you?

18-34	1
35-49	2
50-69	3
70+	4

Q6. Are you...

Male	1
Female	2
Non-gender-specific	3
Prefer not to indicate	4

Q7. Do you speak a language other than English at home or with family?

No, English only	1
Yes (please specify)	2
Prefer not to say	3

Q8. Are you of Aboriginal or Torres Strait Islander origin?

No	
Yes	2
Prefer not to say	3

Q9. What is your approximate annual household income (before tax)?	
Less than \$41,600 (less than \$800 per week)	1
Between \$41,600 and \$78,000 (\$800-\$1,500 per week)	2
Between \$78,000 and \$104,000 (\$1500-\$2,000 per week)	3
Between \$104,000 and \$156,000 (\$1500 - \$3,000 per week)	4

More than \$156,000 (more than \$3,000 per week)

Thank you for providing that information. Lastly, could you please provide your contact details:

1

TITLE:

FIRST NAME:

SURNAME:

Preferred ph. number to be contacted on:

Prefer not to say

ADDRESS:

SUBURB/POSTCODE:

EMAIL ADDRESS:

Thank you for your time and willingness to participate. We will be in touch to confirm whether you have been selected to participate and with further instructions.

Should you require further information in the meantime please contact Melissa Homann or Liz Sparham of Woolcott Research on 02 9261 5221.



# Appendix C: Expression of Interest Letter

Flood Protection Consultation

Dear Resident,

#### We would like your input to help shape Council's flood planning for the future.

Wagga Wagga City Council have engaged Woolcott Research and Engagement, an independent research and engagement expert, to obtain community feedback to provide input into the decision making for flood protection options for North Wagga.

Flood mitigation is something that impacts the whole community and we would like to invite you to attend a resident forum on the 15<sup>th</sup> August 2023 in Wagga Wagga CBD. We will confirm the venue closer to the date.

The forum will run for three hours 6.00-9.00pm, with dinner and refreshments provided. Participants will receive \$100 for their time and to cover any expenses. The forum will involve a mix of information provision on the options, discussion in small groups, Q&A sessions and voting on preferences. They are a chance to work with others to arrive at shared solutions.

If you are interested in attending, please register your interest at **woolcott.com.au/waggawagga or use this QR code.** 

### (INSERT QR CODE)

#### Please complete the form to register your interest by Saturday 5 August.

After completing the form we will be in contact with you to confirm whether you have been selected to participate - we are seeking a broad and representative group of residents and therefore cannot guarantee selection if certain quotas are full.

We will also be following up this letter with calls to residents to encourage people to come along and to answer any questions you may have. However, should you have any questions or require further information in the meantime please contact me, Melissa Homann on 02 9261 5221.

Yours faithfully,



# Woolcott Research & Engagement

L6, 104 Mount Street, North Sydney 2060



+61 29261 5221



woolcott.com.au

## Engagement for Essential Energy's 24-29 Regulatory

### Contac

Kanun Winne kwong@woolcott.com.au Liz Snarharm Isparham@woolcott.com.au

