



Wagga Wagga  
City Council

# Flood Futures

## Oura Community Meeting

6 December 2012

Start Time: 6:10pm

Finish Time: 8:00 pm

Location: Oura Hall

### Main City and North Wagga Levee Upgrade – Oura Community Information Session

#### Councillors present:

Mayor Rod Kendall, Councillor Dallas Tout, Councillor Yvonne Braid

#### Apologies:

Councillor Greg Conkey, Councillor Julian McLaren, Councillor Kevin Poynter

#### Present:

Keith Favell – State Emergency Service

#### Council Officers:

Heinz Kausche, Lindsay Tanner, Luke Grealy, Vanessa Keenan, Belinda Maclure, Kate Amos, Brad Jeffrey

**Opening** Vanessa Keenan

**Welcome** Councillor Yvonne Braid

**Outline of Presentation** Vanessa Keenan

**Presentation** Project Manager - Brad Jeffrey

- What is the proposed upgrade of the levees project?
- Historical flood heights
- History of the levees
- What has happened so far with the proposed upgrade of the levees project?
- What is planned for the proposed upgrade of the levees project?
- Project Funding - Since 2007 Council has been successful in obtaining funding for this project from the NSW State Government and the Commonwealth Government.

Based upon the concept designs the estimate for the project is \$18.8 Million. This includes \$11.5 Million to be spent on the Central Wagga levee and \$7.5 Million to be spent on the North Wagga levee.

- Review of Environmental Factors - Rueben Robinson  
Social, environmental and economic impacts assessed including specialist studies for indigenous and non-indigenous heritage, noise and vibration and ecology.

## Questions

### What is Flood Modelling?

We are planning for a bigger flood than 1974

The 1 in 100 yr flood has been modelled as an 11.3m river at the Hampden Bridge. The model improves flood studies that were previous done and includes over 200 flood levels taken from the 1974 flood to improve its accuracy. The model is based upon survey data accurate to within +/-0.15 metre which was taken in 2008. The modelling is 2010 data. The model itself is accurate to within +/- 0.25 metre. Brad Jeffrey.

### What impact will the upgrade of the levee have on the floodplain?

There will be an increased depth of water upstream of the Gobbagombalin Bridge as a result of the levee upgrade. The depth varies depending upon where you are located in the floodplain as well as the distance from the point of restriction in the floodplain near the Gobbagombalin Bridge. For North Wagga, there will be an approximate increase of 0.15 metre. For East Wagga, there will be an approximate increase of 0.12 metre. For Gumly Gumly, there will be an approximate increase of 0.02 metre

The natural upstream restriction of the Braehour ridgeline restricts any impact upstream of this choke point in the floodplain so there will be no impact for Oura residents or property owners upstream of the Braehour gap. Brad Jeffrey.

### What will a 1 in 100 year flood look like at Oura?

At the intersection of Oura Rd and Wagga Wagga Rd there will be an approximate depth of 1.02 metres.

On the tennis courts adjacent to the community centre there will be an approximate depth of 1.14 metres.

At the intersection of Davidson St and Wagga Wagga Rd there will be an approximate depth of 1.09 metres

At the intersection of Davidson St and Jarvis St there will be an approximate depth of 1.28 metres

At the intersection of Davidson St and Mitchell St there will be an approximate depth of 1.31 metres

At the intersection of Oura Rd and McIntyre St there will be an approximate depth of 1.17 metres

### How do I interpret the concept designs?

There is a fact sheet available on our website which shows you how to interpret the designs. [www.wagga.nsw.gov.au/floodfutures](http://www.wagga.nsw.gov.au/floodfutures)  
If people need assistance please call 1300 292 442 or email [leveeupgrade@wagga.nsw.gov.au](mailto:leveeupgrade@wagga.nsw.gov.au) and ask for assistance. Brad Jeffrey.

[www.wagga.nsw.gov.au/floodfutures](http://www.wagga.nsw.gov.au/floodfutures)  
1300 292 442

### **How do I get further information?**

One on one appointments can be made with a Council officer at your home or at Council by calling 1300 292 442 or emailing [leveeupgrade@wagga.nsw.gov.au](mailto:leveeupgrade@wagga.nsw.gov.au) All information is available on Council's website [www.wagga.nsw.gov.au/floodfutures](http://www.wagga.nsw.gov.au/floodfutures) Brad Jeffrey.

### **How can I share my views?**

Submissions will be received up until 18 March 2012. Submission can be in the form of letters or emails

Please post to PO Box 20, Wagga Wagga NSW 2650

Or email us at [leveeupgrade@wagga.nsw.gov.au](mailto:leveeupgrade@wagga.nsw.gov.au)

Vanessa Keenan

## **Open Discussion - Comments, Statements, Questions and Answers**

### **Question**

How much deeper is the 1 in 100 year modelled event for Oura than the actual 2012 event.

### **Response**

Following the March 2012 the SES engaged the services of a Sydney firm to collect information about the flood event so that it can be used to help better prepare for future flood events. The firm that was engaged by the SES is the same firm that has performed all of Council's flood modelling to date. It is Council's intention to utilise the information collected to calibrate the existing flood models in order to improve its accuracy.

Once the NSW Office of Water release the revised rating tables for the Murrumbidgee River in or around February 2013 Council will be in a position to remodel the floodplain and compare the actual March 2012 flood event to the modelling. Brad Jeffrey.

### **Question**

With the stuff built up (development) on Hammond Avenue does that affect heights?

### **Response**

Yes. Any changes that occur on the flood plain including development does affect the depth, velocity and direction of flood water. Any development that occurs in the flood plain is required to submit a development application and they are asked to undertake a flood impact assessment as part of that process. Brad Jeffrey

### **Question**

I'm guessing there will be big changes with Marshall's Creek if the proposed trade centre in Copland Street goes ahead?

### **Response**

The proposed trade centre in Copland Street is actually inside the Main City levee boundary so it will be protected against a 1 in 60 year flood event now, and if the levee upgrade goes ahead that property will be protected against a 1 in 100 year event. Currently that parcel of land acts a detention basin for overland flow coming off Rocky Hill and parts of Koorringal. The developer will need to demonstrate through a stormwater plan how they intend to manage stormwater. Council will need to develop a strategy to manage stormwater, particularly the detention of localised overland flow in that particular area. The area drains to river via Marshalls Creek. There are no planned works for Marshalls Creek. Brad Jeffrey

### **Question**

When you collect all the data and get new levels from locals will you do another consultation update with us?

### **Response**

Every time Council produces a new model we are legislated to place the report on public exhibition for comment. It is typically a good process to put the information out through the various progress associations for comment. Brad Jeffrey

There is no reason why we couldn't bring an update back to meeting like this one if that's what the community wanted us to do. Heinz Kausche.

### **Question**

Are you only concentrating on the villages? What about everywhere in between?

### **Response**

Council has a coarse flood model for the entire stretch of the Murrumbidgee River between the Local Government Area boundaries. Council's detailed flood model covers the flood plain between the Braehour and Malebo ridgelines. Council is in the process of also producing overland flood models for the villages of Tarcutta, Ladysmith and Uranquinty. Brad Jeffrey.

### **Question**

During the flood there were rumours that the levee bank was honeycombed, that there was a plan to blow up the levee in Moorong Street and also, is there a maintenance program for the levees?

### **Response**

The existing levee is 40 years old and in March 2012 it was the first real time that it was loaded up since 1974. During the flood we had our staff walking the levees 24/7 keeping an eye on it and looking for leaks or any other issues. Council has undertaken work in the last two years to replace the worst section of the levee in Higgins Avenue which was structurally unsound due to ants nests and dead tree roots. Council has an ongoing inspection and maintenance program for the levees. Heinz Kausche.

### **Question**

Any plans to fix the levees that were damaged during the flood, including the Kurrajong levee?

### **Response**

Council has made an application under the Natural Disaster funding program to repair the damage caused by the floods. Council is currently repairing the North Wagga levee. I'm not sure about the Kurrajong levee and will need to seek advice and report back to you. Heinz Kausche

I have spoken to Bryan Short from Council about the Kurrajong levee. NSW Public Works have also contacted me and it is on the list for repair. Keith Favell

NOTE: The Kurrajong levee has been assessed for damages and is included in the application for funding. Council is yet to be informed by the Minister's office whether that part of the application has been successful.

### **Question**

Please explain again about the choke at Gobba Bridge and why we will not be impacted at Oura.

### Response

If the proposed upgrade of the levees does go ahead we will be stopping the amount of water that would normally fill the city and displacing it into the floodplain. This means that the same amount of flood water now has to pass through a smaller area which is the width of the Gobba Bridge. The displacement of water means for the floodplain upstream of the Gobba Bridge there will be an increase in depth. The closer to the Gobba Bridge you are the greater the depth impact. The Braehour ridgeline between Wagga and Oura is a natural restriction in the floodplain. The choke point also means a change in the pressure of the water at this point and therefore the displaced water cannot extend any further upstream because of that pressure change. Therefore there is no impact upon Oura because it is upstream of the Braehour ridgeline. Brad Jeffrey.

### Question

What's the difference in height at the choke point?

### Response

Sorry, I do not know that off the top of my head and will need to look specifically at the data and report back to you.

NOTE: The difference in terrain level between the Braehour ridgeline and the gap at the Gobba Bridge is approximately 10 metres. The floodplain terrain at the Braehour ridgeline is approximately 184 metres above sea level and the floodplain terrain at the Gobba Bridge is approximately 174 metres above sea level. Brad Jeffrey.

### Question

Is there any intention to install more gauges?

### Response

Basically the answer is no. The provision of gauges on the river is owned by NSW State Water. The Murrumbidgee River is already the most gauged river in NSW. Flood forecasting is the responsibility of the Bureau of Meteorology and they rely on the river gauges to make their predictions. In one day the river height forecast for Wagga went from 10.0m to 10.9m but only reached 10.56m. Keith Favell SES.

### Comment

It was a hard thing to plan for that variation.

### Response

The March flood was most likely the largest rainfall event since 1974. Particularly towards the east where a record 197mm of rain fell in 24 hours.

The large sudden rise in the Murrumbidgee River was due to the record inflow from the Goobragandra Valley via the Tumut River. Keith Favell SES.

### Question

In all, East Wagga and Gumly Gumly there is only a small effect from the levee on flood heights. But will Council have a limit on evacuation orders?

### Response

The SES is the organisation responsible for issuing evacuation orders. We need input from the community to improve how that is done. In March we couldn't get out to Oura so we relied heavily on the Junee SES to assist. What we need is a system in place so that communication is improved between the SES and locals. Keith Favell SES.

### Question

During the last event Oura seemed to be the forgotten place.

### Response

There are about 50 other villages who feel the same regarding the last event. The SES is a voluntary organisation with only 6 paid positions for the entire region between Burrinjuck and the Hay plains. The floods in March 2012 were huge. Our resources were stretched so tightly. We need more volunteers and assistance from people in communities like Oura. Keith Favell SES.

### Comment

During the floods in 2010 we only need to pick up a phone to get an update and on mobile phones there were the SMS alerts.

### Comment

ABC radio could only take calls from an official person

### Response

We'd like to have an official contact here at Oura. Keith Favell SES.

### Question

When we built our house we were given the 1974 flood level to build to and we still got flooded.

### Response

The level that you were given depends on the information Council has at the time. Anything built prior to 2006 would be built to the 1974 flood level because that's what was determined to be the 1 in 100 year flood event. Every time Council updates the flood modelling a new flood planning level will be adopted as the data changes and becomes more accurate. Brad Jeffrey.

We strongly suggest that you make an appointment with Brad to discuss issues specific to your property. Heinz Kausche.

### Question

If you put a second bottleneck in it must have some effect on the flood pace or movement.

### Response

A bottleneck or restriction in the floodplain does slow down the flood water. Brad Jeffrey.

Council is not planning to make a new bottleneck. The bottleneck already exists for any flood equivalent to the 1974 flood event. Keith Favell SES.

### Question

In layman's terms the North Wagga levee will have more affect on us as it will extend the length of the flood in Oura.

### Response

The upgrade of the North Wagga levee alone will not have any impact upon Oura. The combined upgrade of the North Wagga and Central Wagga levees will impact in the delayed recession of flood water however there will not be an increased depth of water. Brad Jeffrey.

### Question

Why don't they build the North Wagga levee to the same height as the Central Wagga levee?

### **Response**

The walls of a 1 in 100 year levee surrounding North Wagga would be around 3 to 3.5m high. State Government agencies would not support the upgrade of the North Wagga levee as the risk is too high. Likewise, the SES would not support this either. The community of North Wagga gets completely cut off and an increased levee height would build complacency and increase the risk for the community. Brad Jeffrey.

### **Question**

\$20 million is a lot of money to pay for a levee. Why not do like they do in some European towns and make the emphasis the river with some creative design and make the city infrastructure such as housing, walkways, community buildings, etc the levee system and make Wagga more interesting?

### **Response**

This is the aim of the Riverside Masterplan. To further link the city and the community to the river. Vanessa Keenan

There are different ways we can try and match the levee design with the local environment, walking track, etc. Heinz Kausche.

The Wiradjuri walking track is included as a major component of the levee concept designs. Brad Jeffrey.