

Main City and North Wagga Levee Upgrade Project



Agenda

- Welcome
- Presentation on levee upgrade project, potential impacts, how to review information and share your views
- Open discussion



Brad Jeffrey

Levee Upgrade Project Manager



Presentation outline

What is the levee upgrade project?

What work has happened to date?

How will the proposed upgrade impact on me?

How do I review the documents?

How can I share my views?

How can I get further information about my property?



What is the levee upgrade project?

- Increasing the height of the Main City Levee to provide protection against a 1 in 100 year river height
 - Currently 1 in 60
- Increasing the height of the North Wagga Levee to provide protection against a 1 in 20 year river height
 - Currently 1 in 17



Flood heights and history

Occurance	Year	Height	
1 in 100 Yr	-	11.30m	
1 in 60 Yr	1974	10.75m	
1 in 40 Yr	2012	10.56m	
1 in 17 Yr	2010	9.70m	
1 in 10 Yr	1956	9.58m	Major Flood Above 9.6m
1 in 8 Yr	1976	9.40m	
1 in 5 Yr	1978	8.92m	Moderate Flood Above 9.0m
1 in 4 Yr	1993	8.80m	Minor Flood Above 7.3m

No Change



History of the Levees

North Wagga Levees

- Temporary levees built since 1930's
- Levee formalized in 1990 to what was then thought to be a 1 in 20yr level of protection

Main City Levee

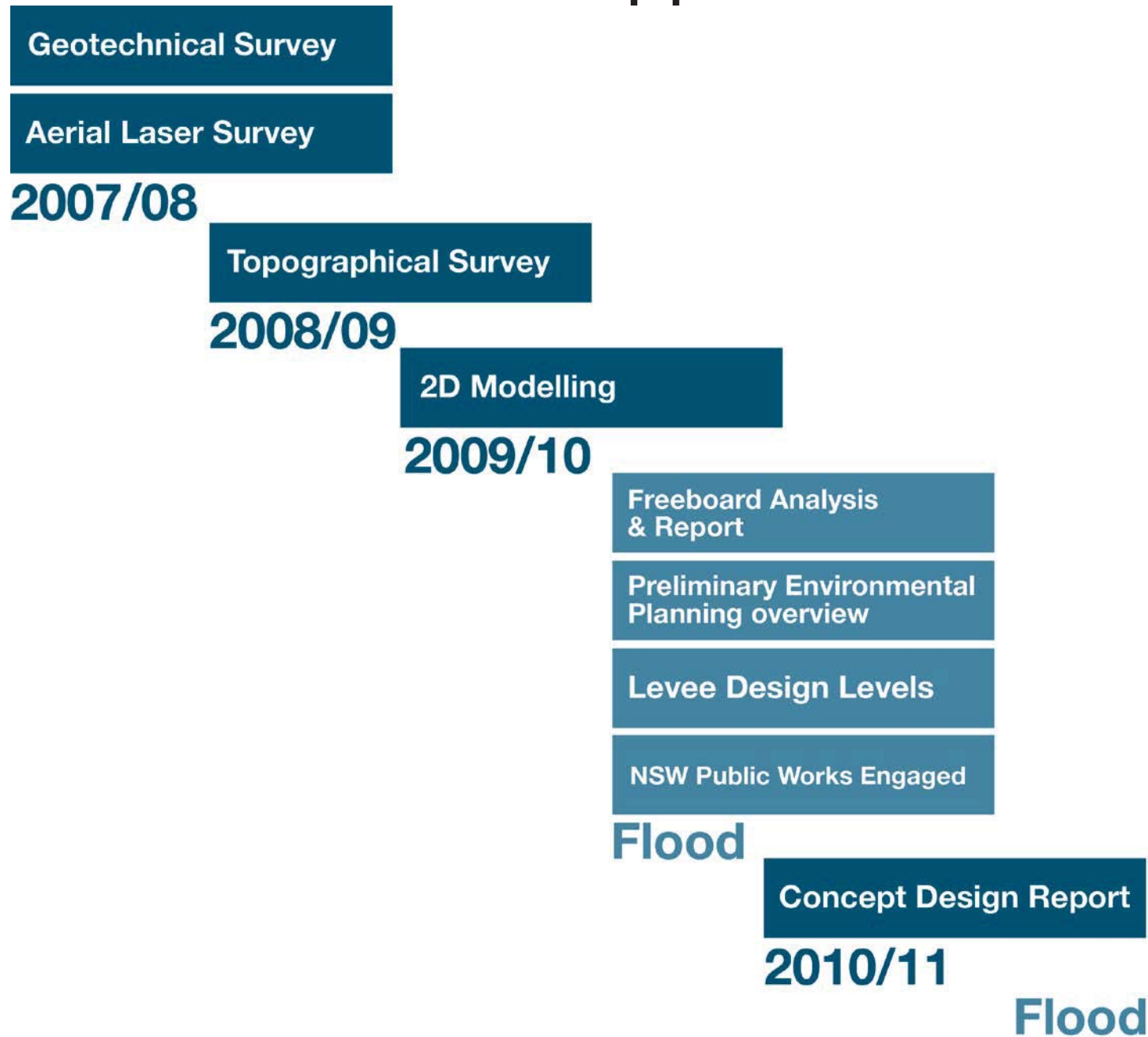
- Following the 1956 floods, planning started
- Levee constructed in 1960
- Levee height increased following 1974 flood

Gumly Levee

- Temporarily constructed by Kyeamba Shire during the 1974 flood.
- Formalized in 1992 to a 1 in 10yr level.
- Provides protection against a 9.6m river



What work has happened to date?



What work will follow this?

Now - March 2013

Review of Environmental Factors

Community Engagement Plan

March 2013 - March 2014

Detailed Design

2014 - ongoing

Construction

Ongoing lobbying to the State & Federal Governments
and grant applications to existing programs



Review of Environmental Factors

Reuben Robinson
GHD



Environmental issues

- Biodiversity (flora and fauna)
- Soils and water quality
- River flow and flooding
- Land use and property
- Noise and vibration
- Air quality
- Visual impacts



Environmental issues (cont)

- Aboriginal and European heritage
- Traffic and access
- Social and economic impacts
- Waste management





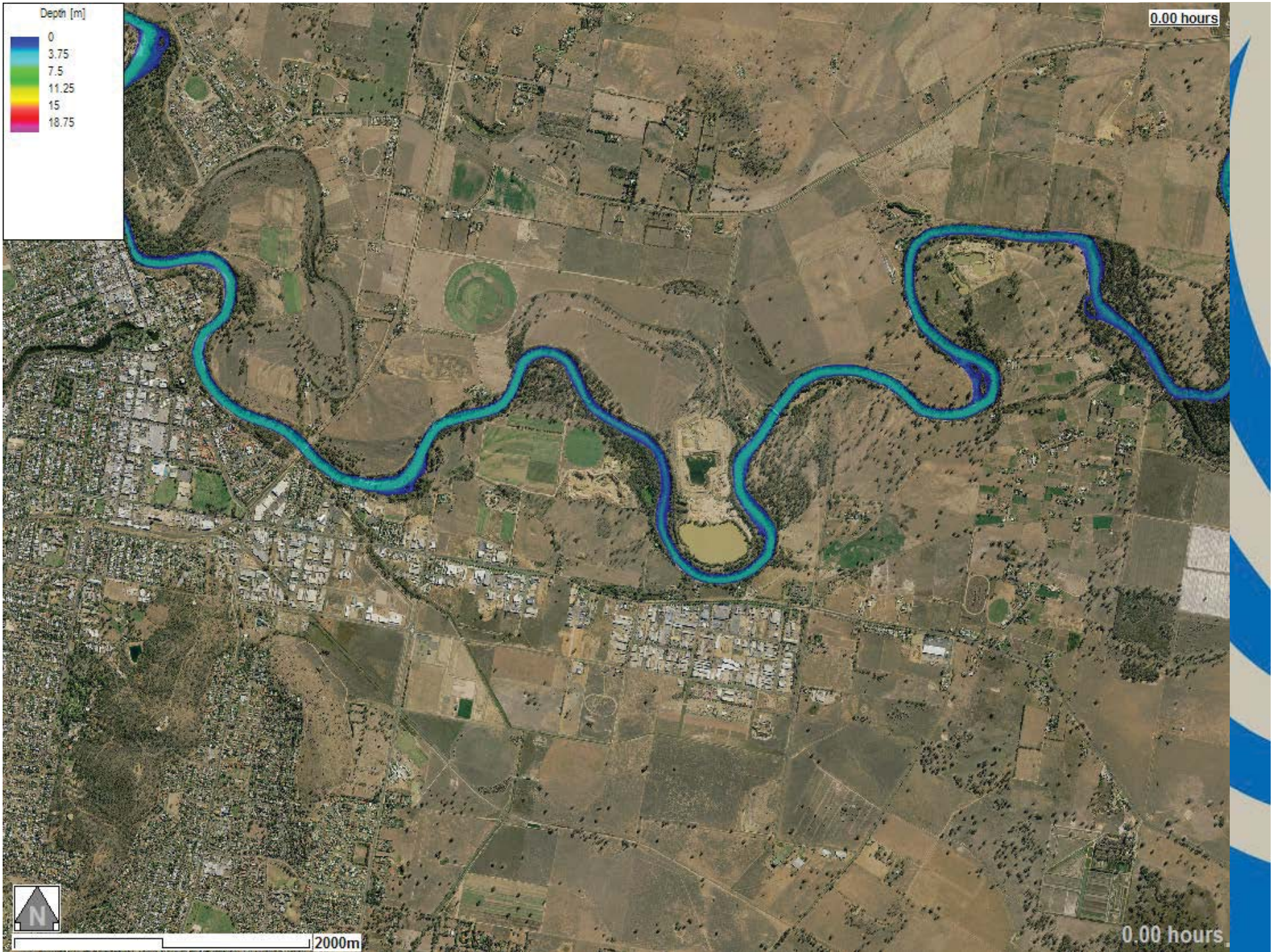
WAGGA WAGGA CITY COUNCIL
MURRUMBIDGEE RIVER MODEL CONVERSION PROJECT
FINAL REPORT



SEPTEMBER 2010

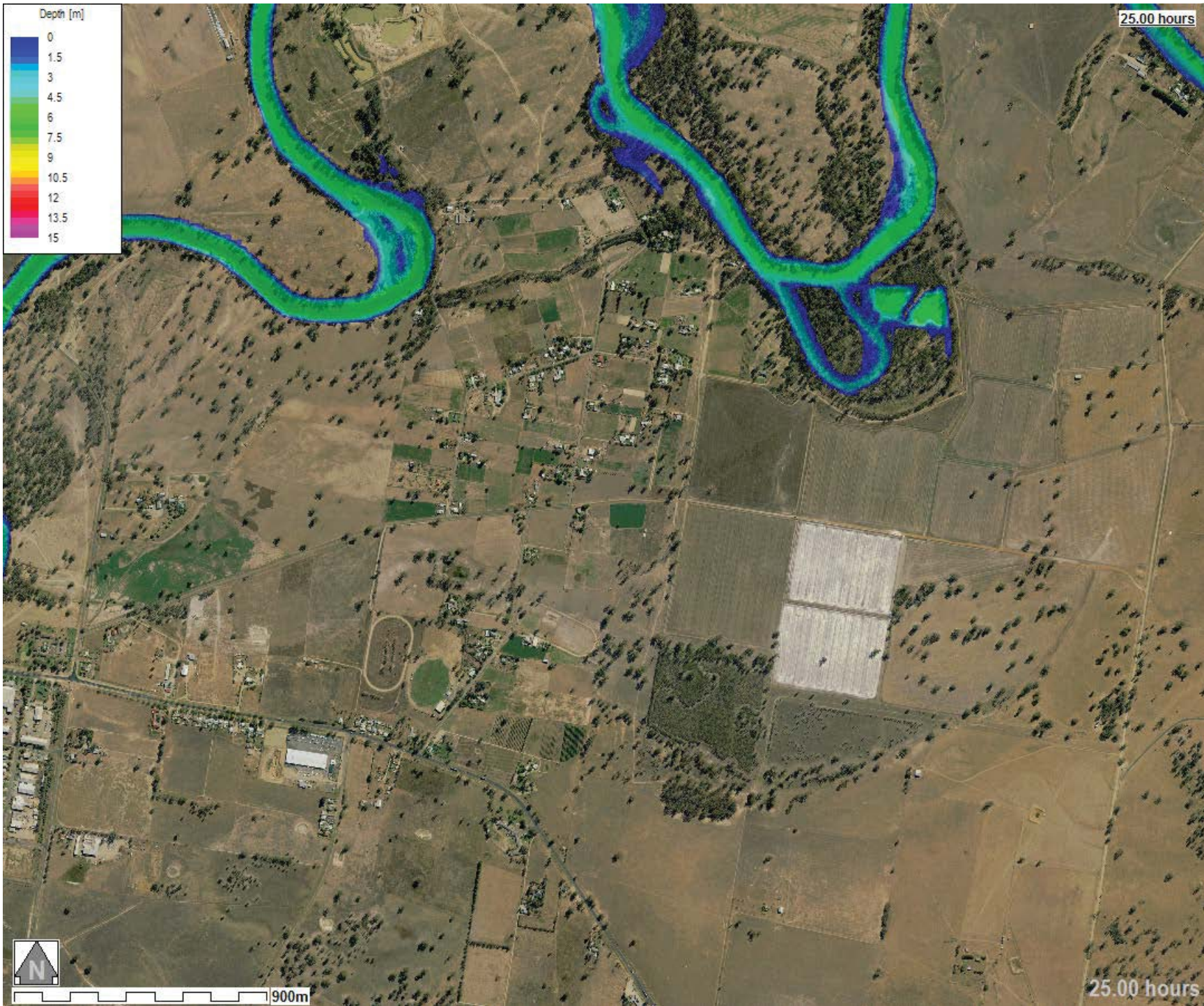
What is Flood Modelling?





Gumly Levee – March 2012





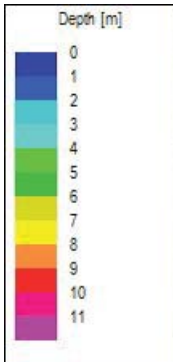
What impact will an upgraded levee have on Gumly and East Wagga?



March 2012 Flood 1 in 40 – 10.56m



1974 Flood 1 in 60 – 10.75m



Graham Avenue

Gumly Road



Depth at this location = 1.32 metre
Velocity at this location = 0.38 m/s

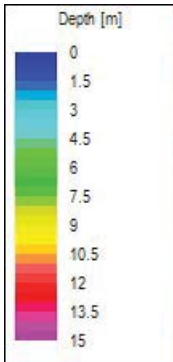


200m



Levee as it is NOW

1 in 100 – 11.3m



Graham Avenue

Gumly Road



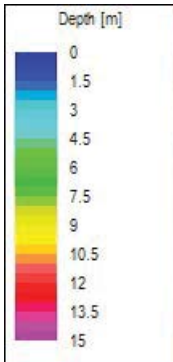
Depth at this location = 1.73 metres
Velocity at this location = 0.47 m/s



200m



Levee Upgraded 1 in 100 – 11.3m



Graham Avenue

Gumly Road



Depth at this location = 1.75 metres
Velocity at this location = 0.46 m/s

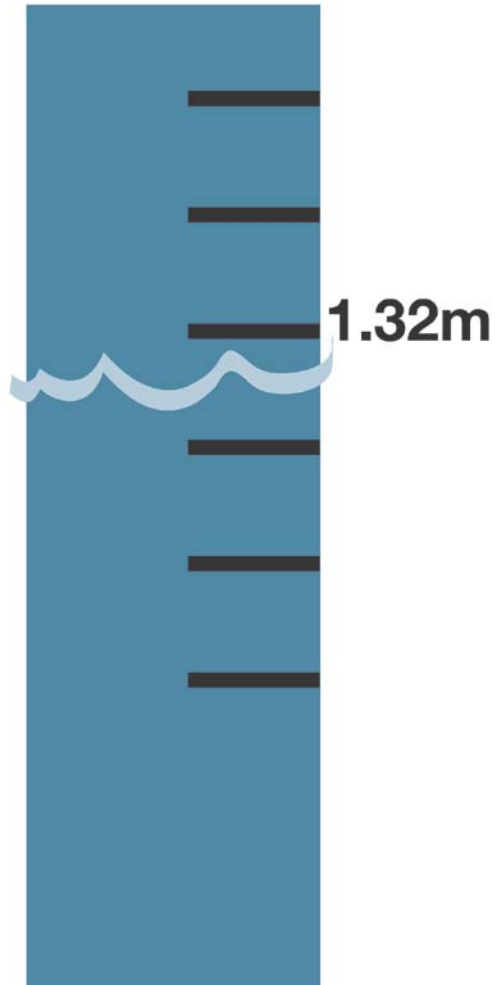


200m

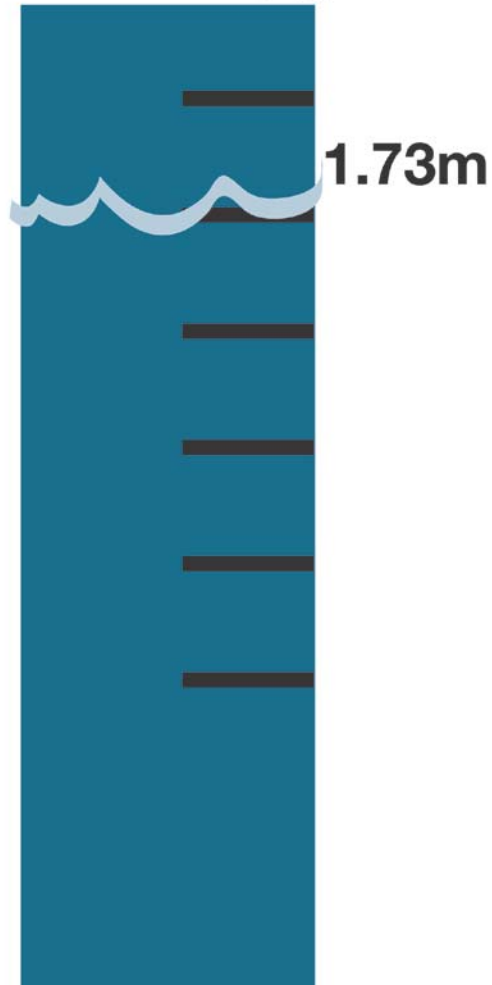


Gumly height differences

1974



**1 in 100
Before Upgrade**



**1 in 100
After Upgrade**



Gumly Gumly

an approximate increase
of

0.02 metre

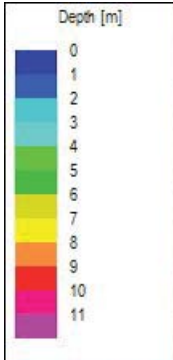
in a 1 in 100 yr flood



March 2012 Flood 1 in 40 – 10.56m



1974 Flood 1 in 60 – 10.7m



Depth at this location = 0.67 metres
Velocity at this location = 0.35 m/s

Hammond Avenue

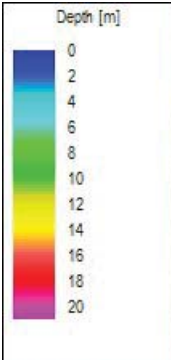
Koorinal Road



100m



Levee as it is NOW 1 in 100 – 11.3m



Depth at this location = 1.11 metres
Velocity at this location = 0.38 m/s

Hammond Avenue

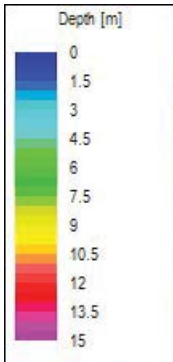
Koorinal Road



100m



Levee Upgraded 1 in 100 – 11.3m



Depth at this location = 1.23 metres
Velocity at this location = 0.46 m/s

Hammond Avenue

Koorungal Road

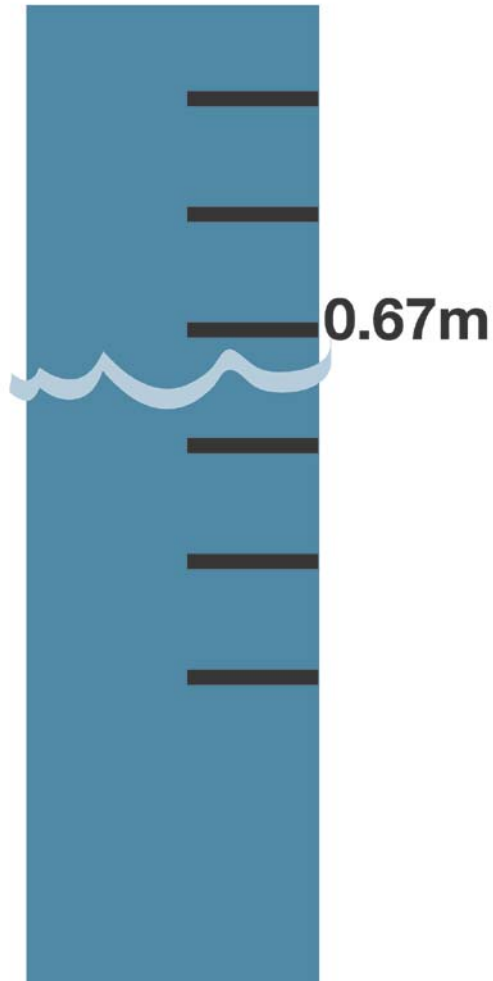


100m

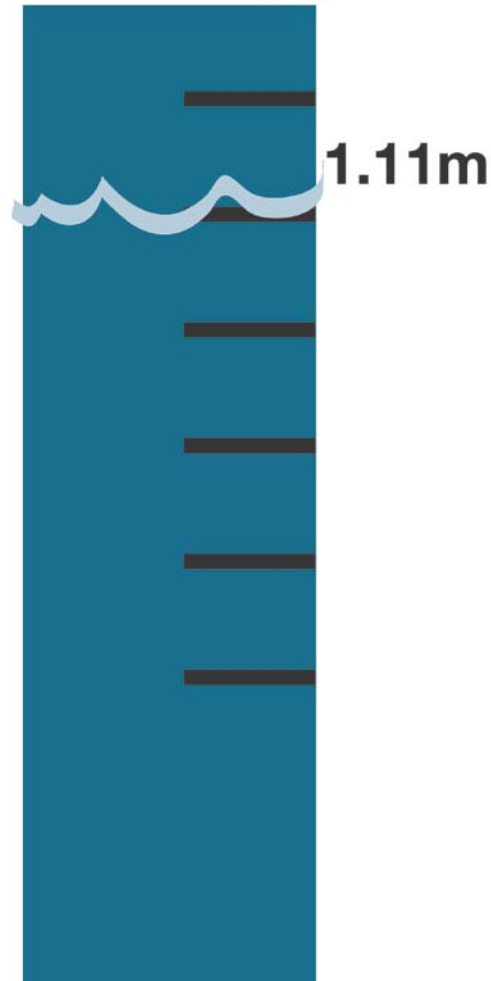


East Wagga height differences

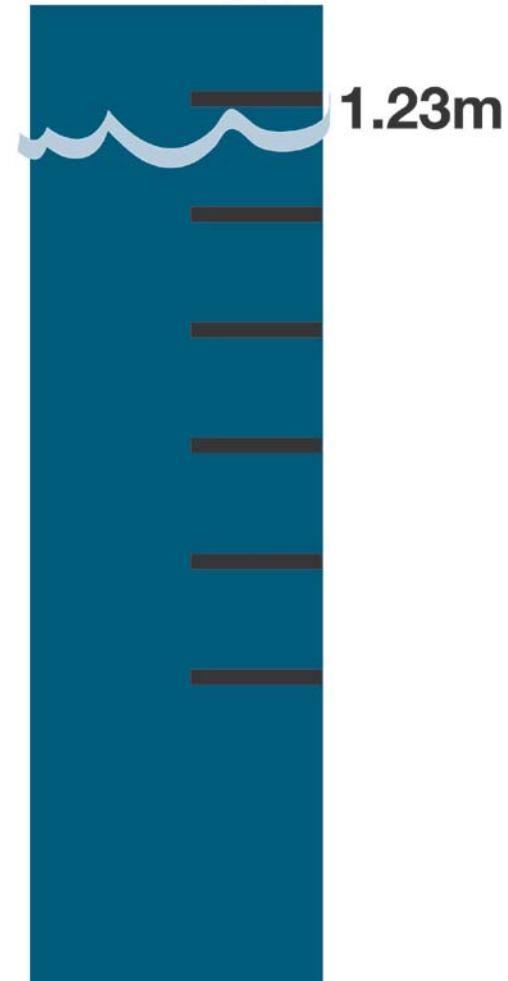
1974



**1 in 100
Before Upgrade**



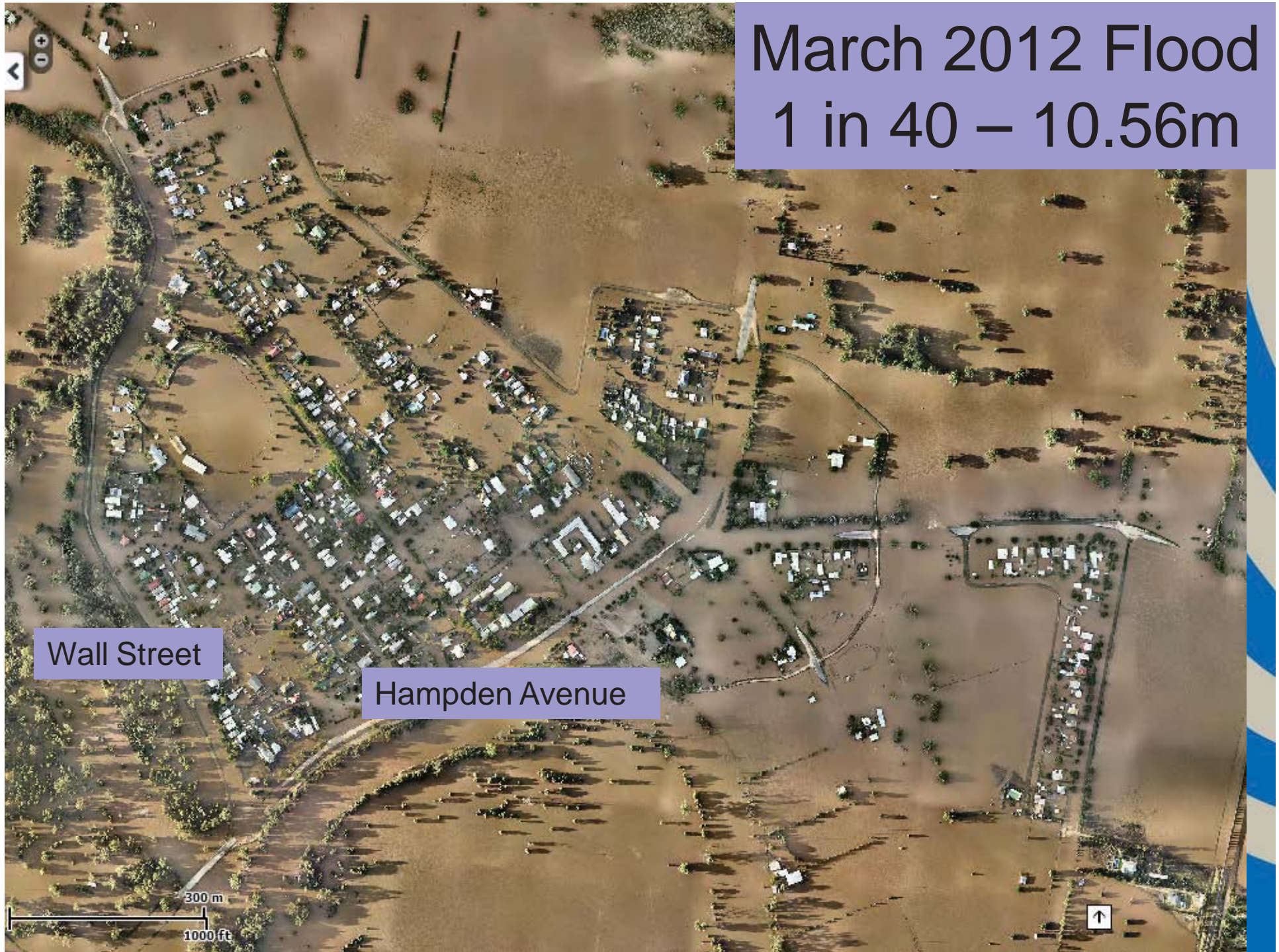
**1 in 100
After Upgrade**



East Wagga
an approximate increase
of
0.12 metre
in a 1 in 100 yr flood



March 2012 Flood 1 in 40 – 10.56m



Wall Street

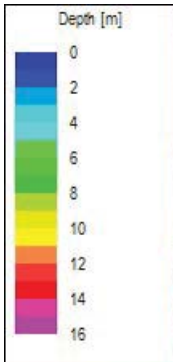
Hampden Avenue

300 m

1000 ft



1974 Flood 1 in 60 – 10.7m



◆ Depth at this location = 1.48 metres
Velocity at this location = 0.13 m/s

Wall Street

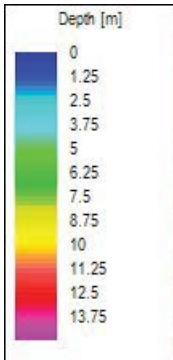
Hampden Avenue



400m



Levee as it is NOW 1 in 100 – 11.3m



◆ Depth at this location = 2.19 metres
Velocity at this location = 0.48 m/s

Wall Street

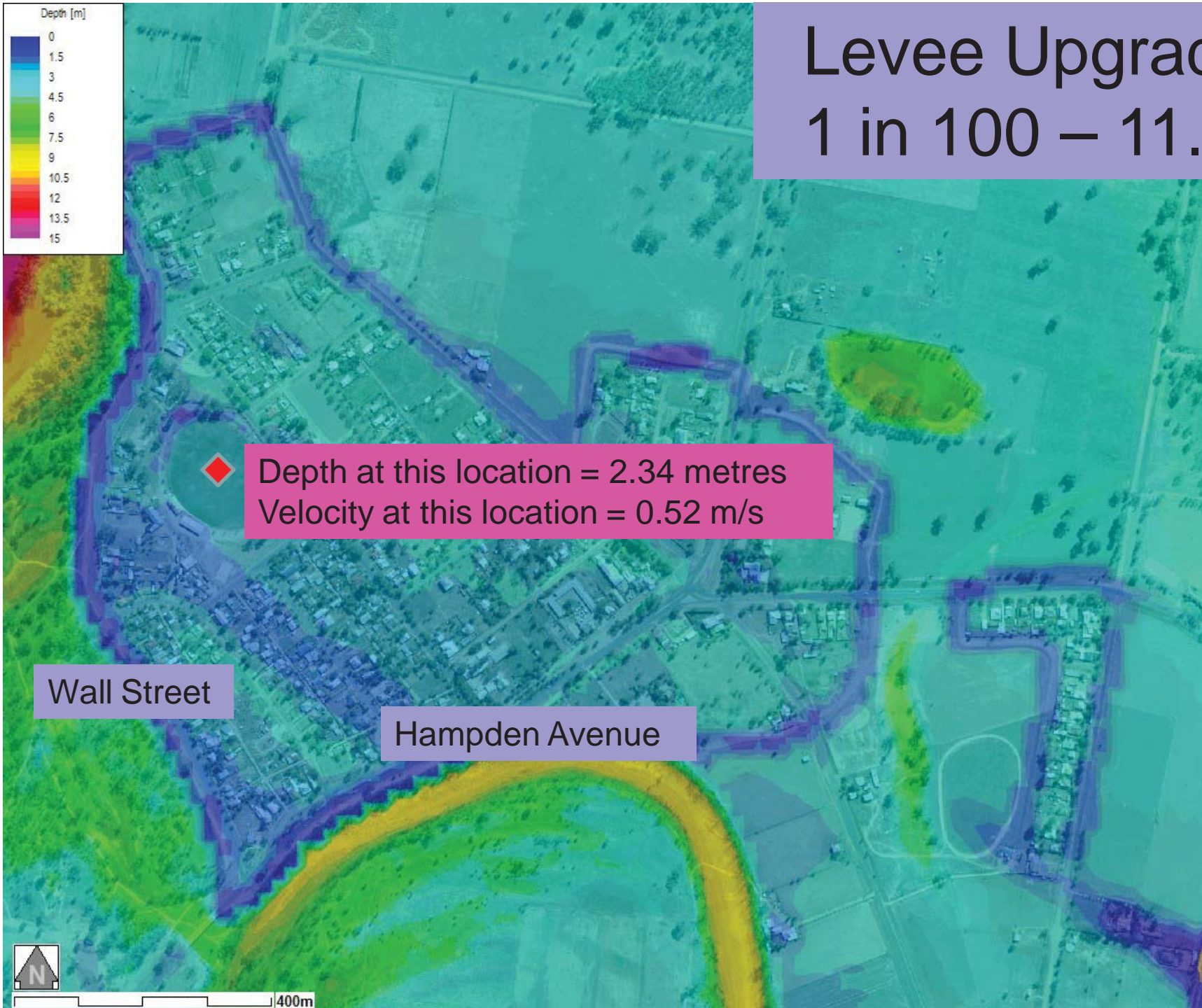
Hampden Avenue



400m

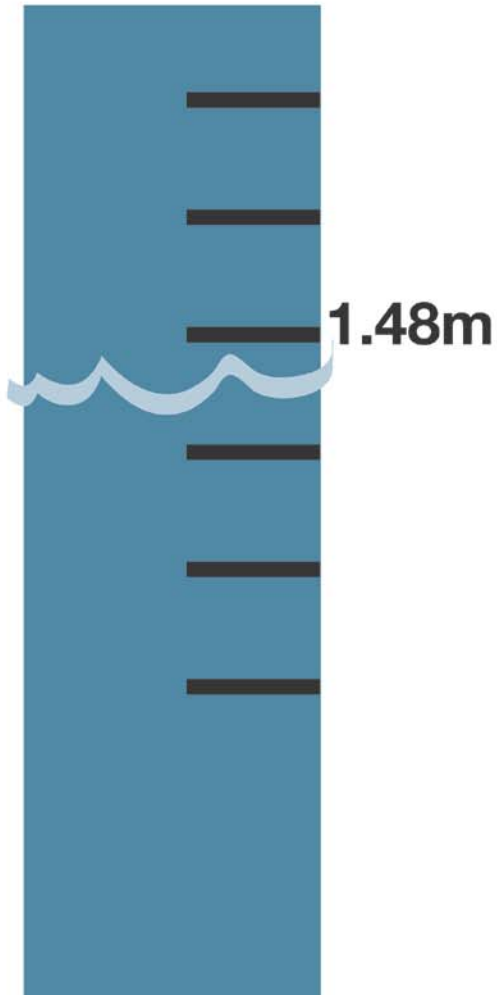


Levee Upgraded 1 in 100 – 11.3m

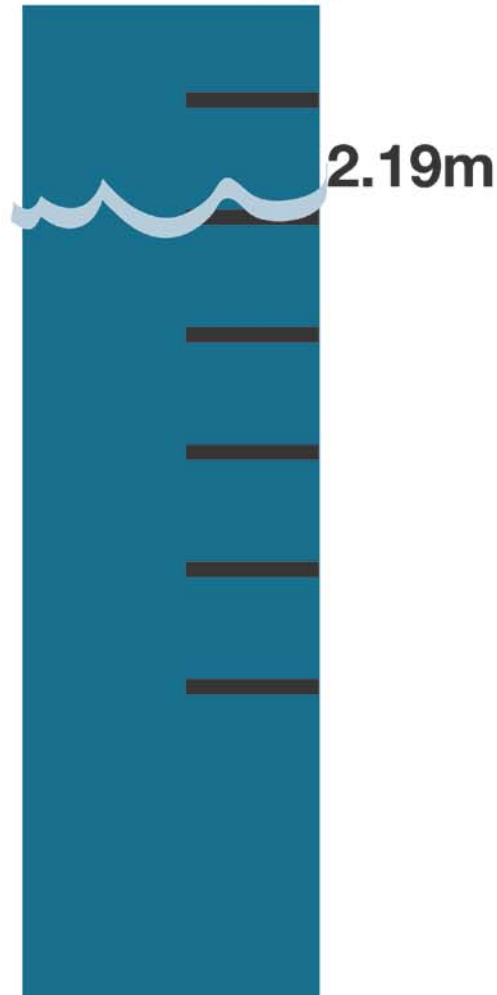


North Wagga height differences

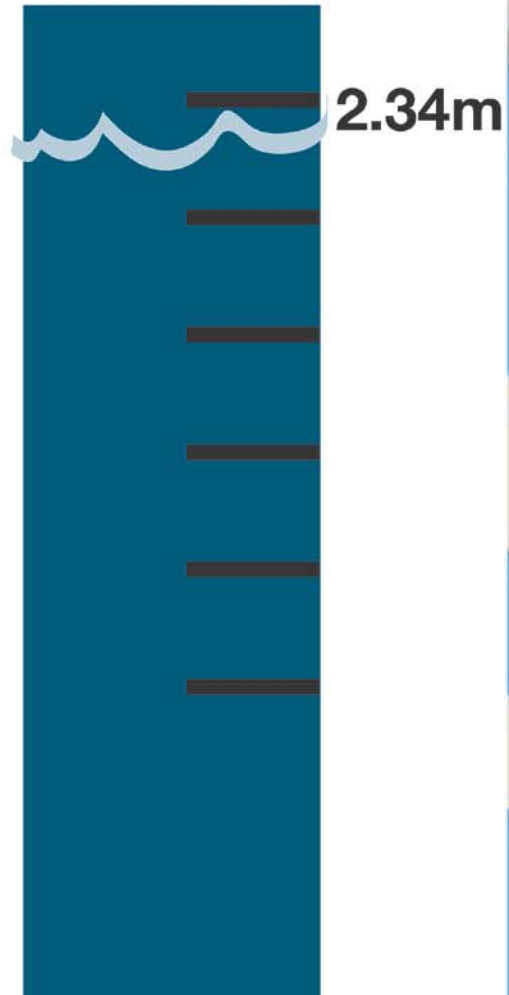
1974



**1 in 100
Before Upgrade**



**1 in 100
After Upgrade**



North Wagga

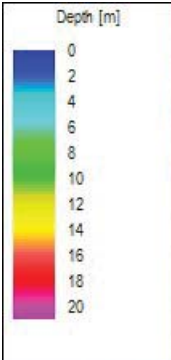
an approximate increase
of

0.15 metre

in a 1 in 100 yr flood



Wagga Wagga CBD Before the upgrade 1 in 100 – 11.3m



Baylis Street

Thompson Street

Depth at this location = 0.95 metre
Velocity at this location = 0.75 m/s



100m



How do I get further information and assistance?



www.wagga.nsw.gov.au/floodfutures



1300 292 442



leveeupgrade@wagga.nsw.gov.au



How do I interpret the documents?



www.wagga.nsw.gov.au/floodfutures



How can I share my views?



www.wagga.nsw.gov.au/floodfutures



PO Box 20 Wagga Wagga



leveeupgrade@wagga.nsw.gov.au



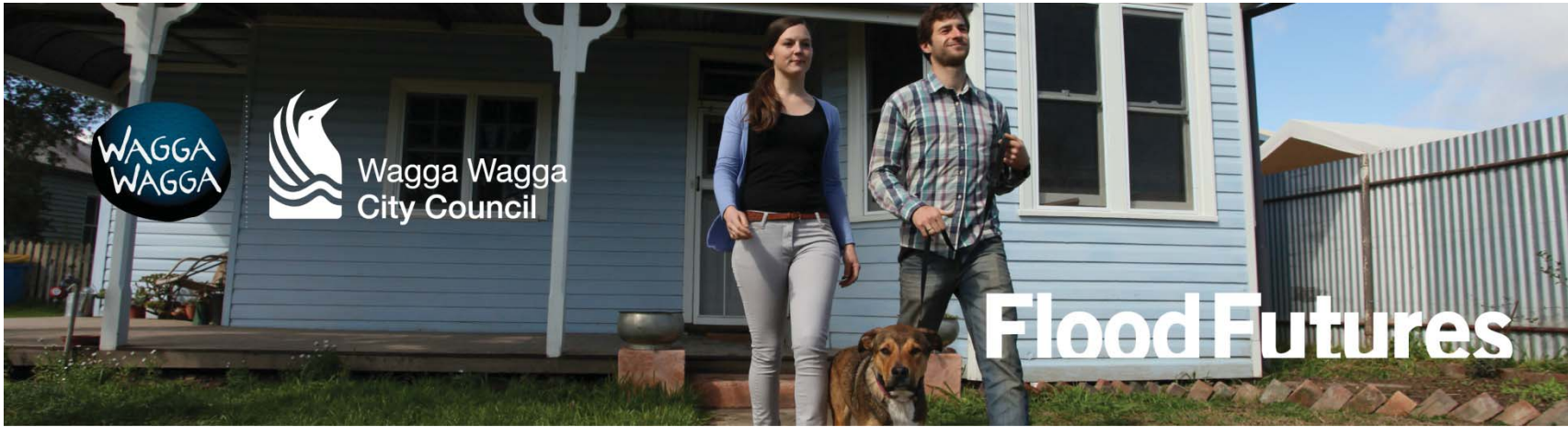
Project Funding

The estimate for the upgrade of the levees, based upon the concept designs is \$18.8M.

Main City Levee = \$11.3 Million
North Wagga Levee = \$7.5 Million

This estimate will be refined as part of the detailed design process.





OPEN DISCUSSION

