FIGURE 4.1A
CITY
CRITICAL DURATION ANALYSIS

10% AEP
Critical Duration = 360 min
Rainfall Depth = 54.5 mm

10% AEP
Critical Duration = 720 min
Rainfall Depth = 64.8 mm

10% AEP
Critical Duration = 120 min
Rainfall Depth = 41.4 mm

N

Wagga City Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 10% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.1B
LAKE ALBERT
CRITICAL DURATION ANALYSIS

10% AEP
Critical Duration = 120 min
Rainfall Depth = 41.6 mm

10% AEP
Critical Duration = 720 min
Rainfall Depth = 65.2 mm

10% AEP
Critical Duration = 360 min
Rainfall Depth = 54.8 mm

N

Lake Albert Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 10% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.1C
WAGGA EAST
CRITICAL DURATION ANALYSIS

10% AEP
Critical Duration = 720 min
Rainfall Depth = 66.7 mm

10% AEP
Critical Duration = 120 min
Rainfall Depth = 42.0 mm

10% AEP
Critical Duration = 360 min
Rainfall Depth = 55.8 mm

N

Wagga East Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 10% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.1D
WAGGA NORTH
CRITICAL DURATION ANALYSIS

10% AEP
Critical Duration = 120 min
Rainfall Depth = 41.2 mm

1% AEP
Critical Duration = 720 min
Rainfall Depth = 64.8 mm

N

Wagga North Hydraulic Extent

Critical Duration

120 min
360 min
720 min

Peak 10% AEP Flood Depth (m)

< 0.15
0.15 - 0.3
0.3 - 0.5
0.5 - 1
1 - 2
> 2

0 0.5 1 2 km

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FIGURE 4.2A
CITY
CRITICAL DURATION ANALYSIS

1% AEP
Critical Duration = 360 min
Rainfall Depth = 83.4 mm

1% AEP
Critical Duration = 720 min
Rainfall Depth = 98.8 mm

1% AEP
Critical Duration = 120 min
Rainfall Depth = 64.6 mm

N

Wagga City Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 1% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.2B
LAKE ALBERT
CRITICAL DURATION ANALYSIS

1% AEP
Critical Duration = 120 min
Rainfall Depth = 64.6 mm

1% AEP
Critical Duration = 720 min
Rainfall Depth = 99.2 mm

1% AEP
Critical Duration = 360 min
Rainfall Depth = 84.0 mm

N

Lake Albert Hydraulic Extent

Critical Duration

120 min
360 min
720 min

Peak 1% AEP Flood Depth (m)

< 0.15
0.15 - 0.3
0.3 - 0.5
0.5 - 1
1 - 2
> 2

0 0.5 1 2 km

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FIGURE 4.2C
WAGGA EAST
CRITICAL DURATION ANALYSIS

1% AEP
Critical Duration = 720 min
Rainfall Depth = 101.6 mm

1% AEP
Critical Duration = 360 min
Rainfall Depth = 85.2 mm

1% AEP
Critical Duration = 120 min
Rainfall Depth = 65.2 mm

N

Wagga East Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 1% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.2D
WAGGA NORTH
CRITICAL DURATION ANALYSIS

1% AEP
Critical Duration = 120 min
Rainfall Depth = 64.2 mm

1% AEP
Critical Duration = 360 min
Rainfall Depth = 84.0 mm

1% AEP
Critical Duration = 720 min
Rainfall Depth = 99.8 mm

N

Wagga North Hydraulic Extent

Critical Duration

- 120 min
- 360 min
- 720 min

Peak 1% AEP Flood Depth (m)

- < 0.15
- 0.15 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

0 0.5 1 2 km

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FIGURE 4.3
COMMUNITY FLOOD PRONE AREAS

Gobbagombalin
Gobbagombalin
Olympic Hwy
North Wagga Wagga
Oura
Moorong
Flowerdale Lagoon
Wagga Wagga
Wollundry Lagoon
Ashmont
Turvey Park
Sturt Hwy
East Wagga Wagga
Glenfield Park
Kooringal
Tolland
Lloyd
Bourkelands
Tatton
Lake Albert
Springvale

N

1% AEP Overland Flow Flood Extent
1% Overland Flow Extent with Elevated River Level (9.7m at the Gauge)

0 1 2 3 4 km

In a 10% AEP riverine event (9.7m at the Hampden Bridge gauge No. 410001), all levee gates would be closed (and pumps may be in operation)

WAGGA WAGGA MAJOR OVERLAND FLOW FRMS&P
FLOOD AFFECTED AREAS

- Crooked Creek (D/S of Brunskill Road)
- Crooked Creek (U/S of Craft Street)
- Flowerdale Lagoon Area
- Stringybark Creek
- Turvey Park Overland Flow Path
- Wollundry Lagoon Drainage Area
- Glenfield Road Industrial Areas
- East Wagga Industrial Area

City of Wagga Wagga

wma water

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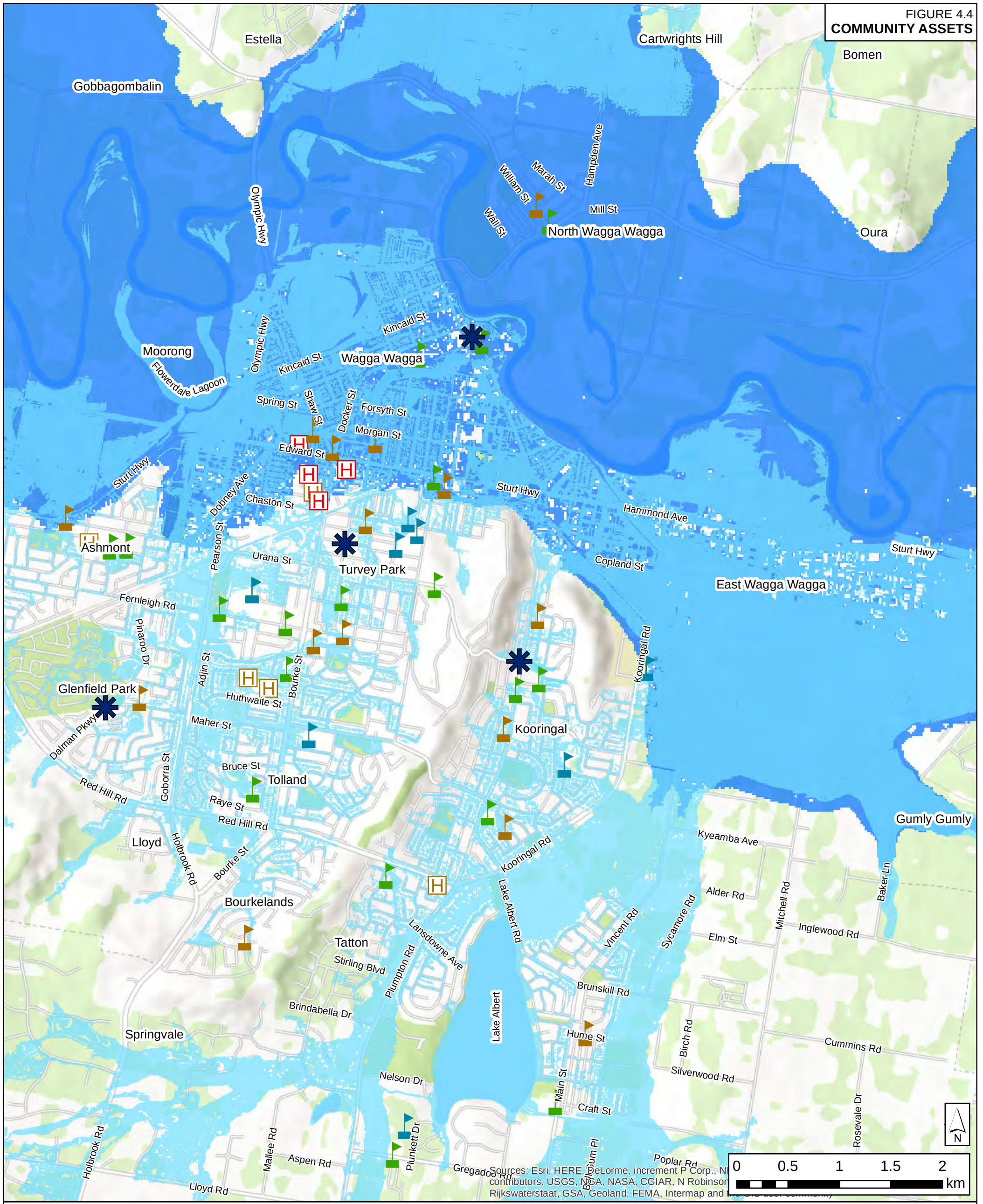
FIGURE 4.4
COMMUNITY ASSETS



WAGGA WAGGA
COMMUNITY ASSETS

- Overland PMF Extent
- Riverine PMF Extent
- Pre Schools
- Aged Care Facilities
- Primary Schools
- Hospitals
- High Schools
- Telecommunications
- University
- Gas

City of Wagga Wagga

wma water

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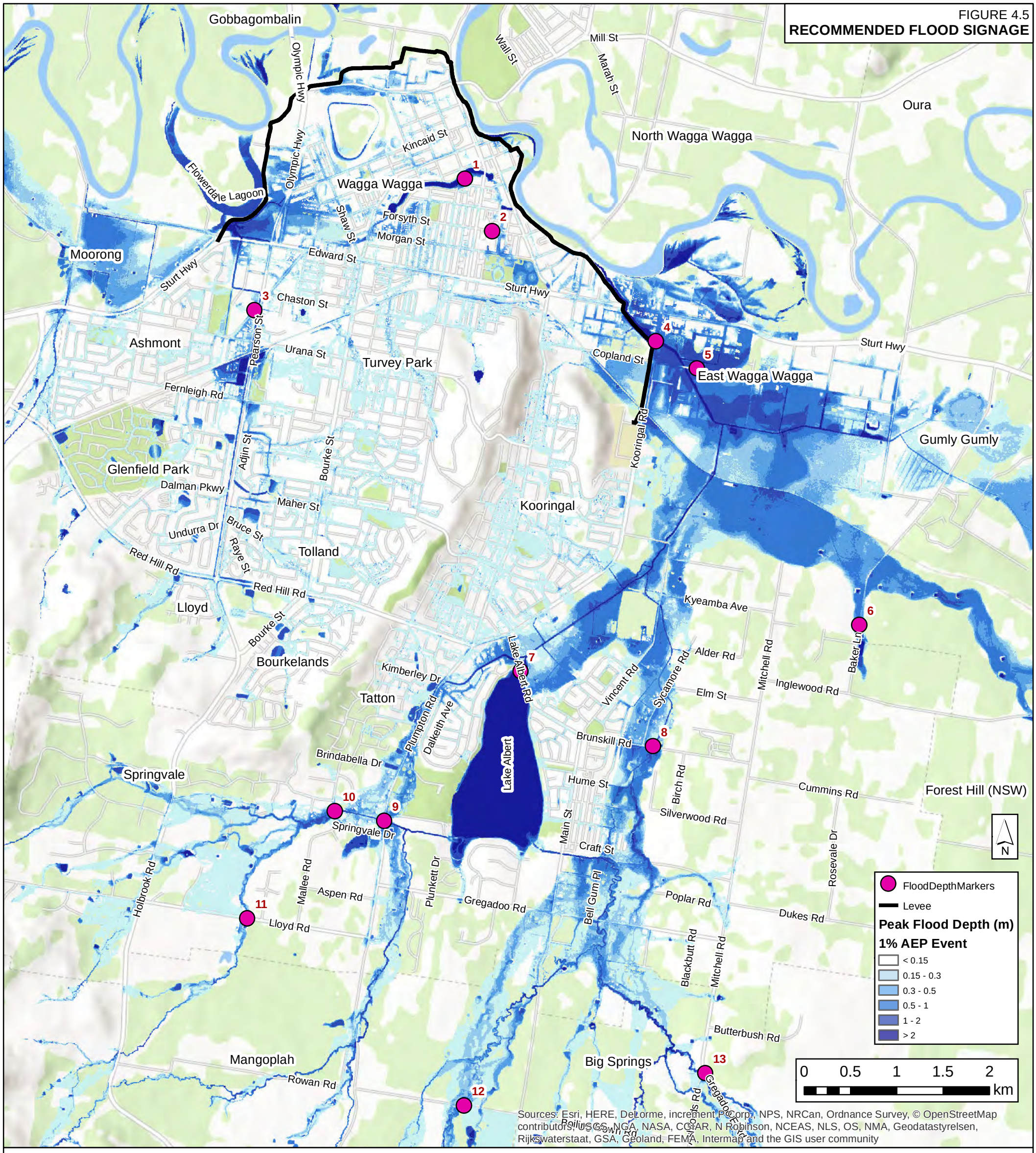
FIGURE 4.5
RECOMMENDED FLOOD SIGNAGE



WAGGA WAGGA RECOMMENDED FLOOD SIGNAGE LOCATIONS

1. Ivan Jack Dr - Overtopping occurs due to flooding of Wollundry Lagoon
2. Forsyth St* - Highly urban area locally inundated for frequent events
3. Dobney Ave* - Highly urban area locally inundated for frequent events
4. Kooringal Rd - Overtopping occurs due to flooding of Marshalls Creek
5. Copland St - Overtopping occurs due to flooding of Marshalls Creek
6. Bakers Ln - Major overland flooding
7. Lake Albert Rd - Overtopping occurs when Lake Albert is full
8. Brunskill Rd - Overtopping occurs due to flooding of channel perpendicular to the road
9. Plumpton Rd - Overtopping occurs due to flooding of Stringybark Creek (at Nelson Dr)
10. Springvale Dr - Overtopping occurs due to flooding of channel perpendicular to the road
11. Lloyd Rd - Overtopping occurs due to flooding of creek perpendicular to the road
12. Boiling Down Rd - Overtopping occurs due to flooding of Crooked Creek
13. Mitchell Rd/ Gregadoo E Rd - Overtopping of the Mitchell Rd and Asfhords Rd intersection due to flooding of Coxs Creek

City of Wagga Wagga

wma water

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FIGURE 4.6A
CITY
IMPACT BETWEEN 2Y AND 10Y TAILWATER LEVELS
1% AEP EVENT

N

Wagga City Hydraulic Extent

Impacts (m)

- No Longer Flooded
- < -0.75
- -0.75 - -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded

0 0.5 1 2 km

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FIGURE 4.6C
WAGGA EAST
IMPACT BETWEEN 2Y AND 10Y TAILWATER LEVELS
1% AEP EVENT

N

Wagga East Hydraulic Extent

Impacts (m)

- No Longer Flooded
- < -0.75
- -0.75 - -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- No Impact
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded

0 0.5 1 2 km

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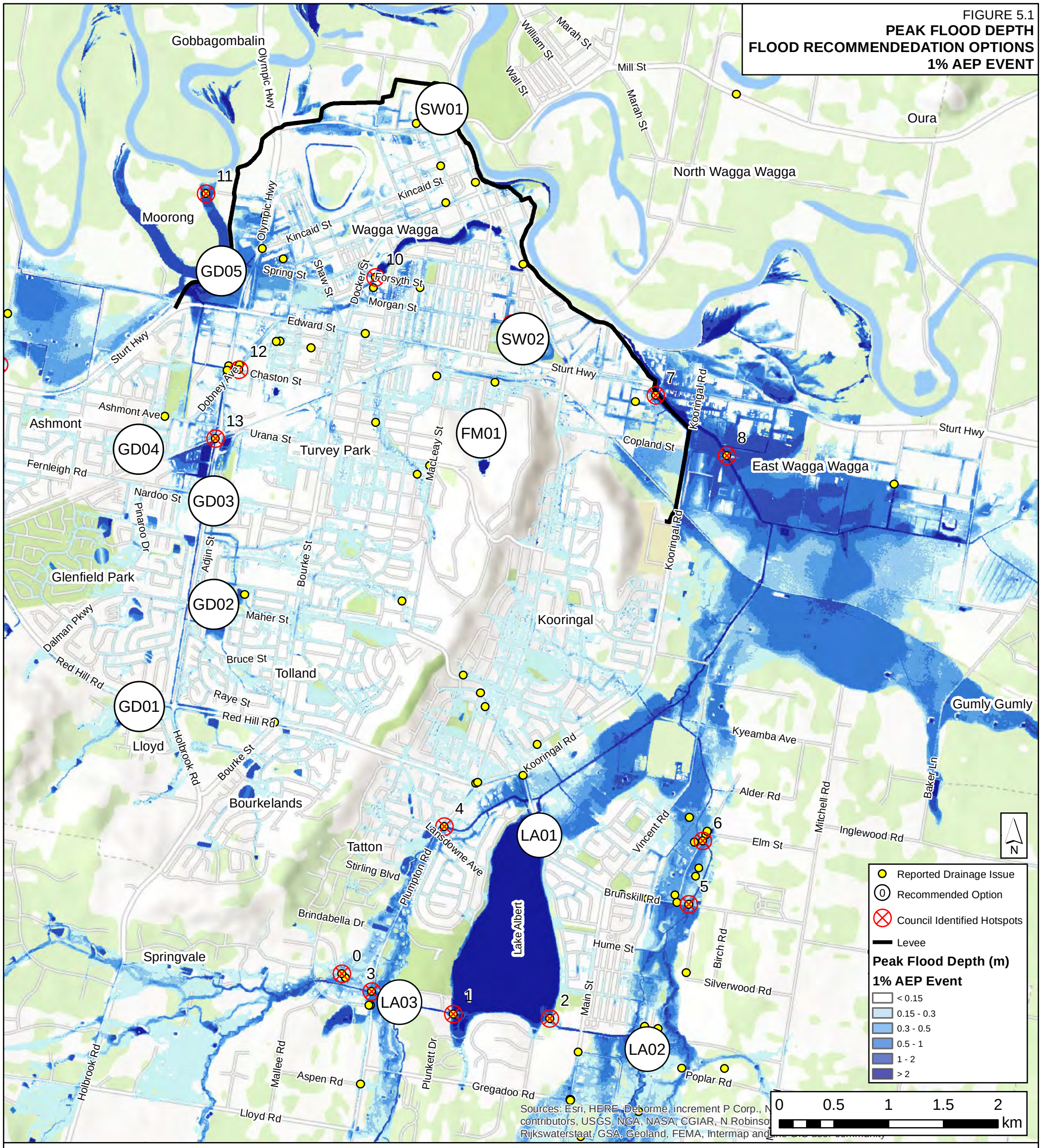
FIGURE 5.1
PEAK FLOOD DEPTH
FLOOD RECOMMENDEDATION OPTIONS
1% AEP EVENT



WAGGA WAGGA MAJOR OVERLAND FLOW FLOODPLAIN RISK MANAGEMENT STRATEGIES

GD01 Red Hill Road and Glenfield Road intersection civil works.

GD02 Civil works at the Adjin Street and Maher Street intersection including regrading road, retaining wall and culvert upgrade.

GD03 Anderson Park basin and swale augmentation.

GD04 New trunk drain from railway to Ashmont Drain, beneath Rabaul Place and Ashmont Avenue.

GD05 Additional pipe through the levee bank to Flowerdale Lagoon.

FM01 Willans Hill Overland Flow Options Assessment

SW01 Incarnie Crescent subsurface stormwater pipe.

SW02 Bolton Park Retention Basin Improvement.

LA01 Raise Lake Albert Road and modify outlet.

LA02 Augmentation of Crooked Creek Diversion into Lake Albert.

LA03 Augmentation of Stringybark Creek Diversion into Lake Albert.

City of Wagga Wagga

wma water

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FIGURE 5.2

OPTION GD01

CHANGE IN PEAK FLOOD LEVEL

ROAD RAISED, BASIN, ONE PIPE BLOCKED AND SMALL LEVEE ADDED

1% AEP EVENT

Ashmont
Turvey Park
Glenfield Park
Springvale
Lloyd
Bourkelands
Kooringal
Tolland
Ashmont Ave
Pearson St
Urana St
Fernleigh Rd
Nardoo St
Glenfield Rd
Adjin St
Bourke St
Huthwaite St
Dalman Pkwy
Maher St
Bandera Ave
Undurra Dr
Martin St
Bruce St
Raye St
Red Hill Rd
Goborra St
Holbrook Rd
Study Area
Road Filled by 1m
Basin Set to 211.5 mAHD
1x Pipe Blocked
Hole in Levee Filled
Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded
N
0 50 100 200 300 400
Meters

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FIGURE 5.3

OPTION GD01

CHANGE IN PEAK FLOOD LEVEL

ROAD RAISED, BASIN, ONE PIPE BLOCKED AND SMALL LEVEE ADDED

5% AEP EVENT

Ashmont
Turvey Park
Glenfield Park
Springvale
Tolland
Lloyd
Bourkelands
Kooringal
Ashmont Ave
Pearson St
Urana St
Fernleigh Rd
Nardoo St
Glenfield Rd
Adjin St
Bourke St
Huthwaite St
Dalman Pkwy
Maher St
Bandera Ave
Martin St
Undurra Dr
Bruce St
Red Hill Rd
Goborra St
Raye St
Holbrook Rd
Martin St

Study Area
Road Filled by 1m
Basin Set to 211.5 mAHD
1x Pipe Blocked
Hole in Levee Filled

Impact (m)

- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

N

0 50 100 200 300 400 Meters

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FIGURE 5.4
OPTION GD02
CHANGE IN PEAK FLOOD LEVEL
ADDITIONAL PIPE BELOW THE ROAD
NEW 1.5M WALL PARALLEL TO THE CREEK
REGRADING OF THE ROAD AND THE SIDES
1% AEP EVENT

Glenfield Park
Glenfield Rd
Adjin St
Huthwaite St
Maher St
Tolland

N

Study Area
Road Regraded
Roadside Lowered
New 2x 1.8m Pipe
New 1.5m Wall
Stormwater Network

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 12.5 25 50 75 100
Meters

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FIGURE 5.5
OPTION GD02
CHANGE IN PEAK FLOOD LEVEL
ADDITIONAL PIPE BELOW THE ROAD
NEW 1.5M WALL PARALLEL TO THE CREEK
REGRADING OF THE ROAD AND THE SIDES
5% AEP EVENT

Glenfield Park
Glenfield Rd
Adjin St
Huthwaite St
Maher St
Tolland

N

Study Area
Road Regraded
Roadside Lowered
New 2x 1.8m Pipe
New 1.5m Wall
Stormwater Network

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 12.5 25 50 75 100
Meters

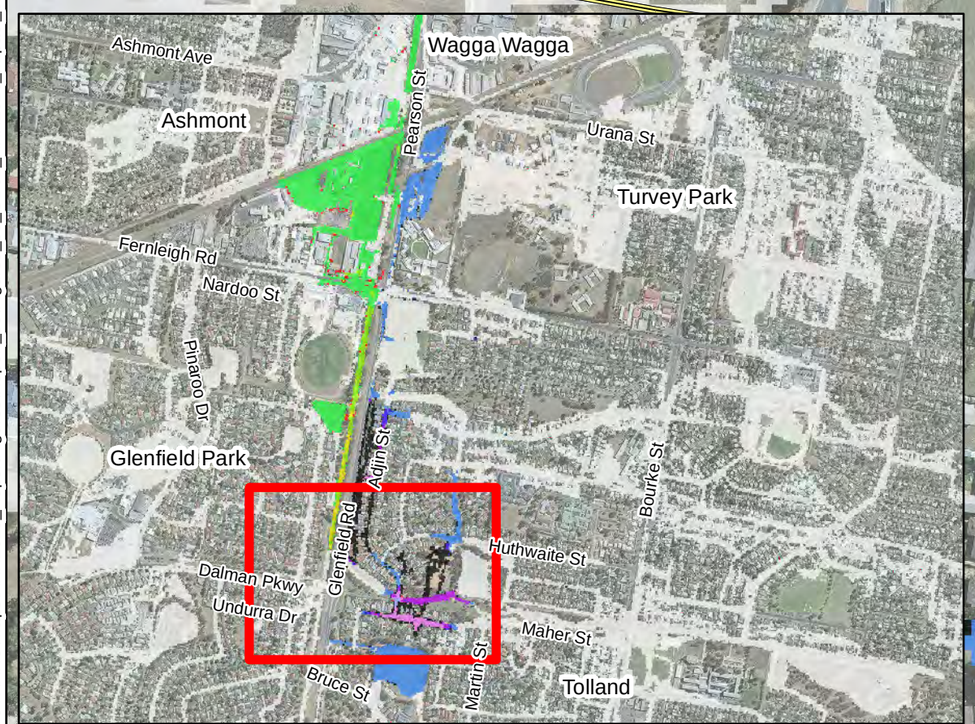

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FIGURE 5.6
OPTION GD03
CHANGE IN PEAK FLOOD LEVEL
INCREASE LEVEE HEIGHT BY 1M AROUND BASIN
1% AEP EVENT

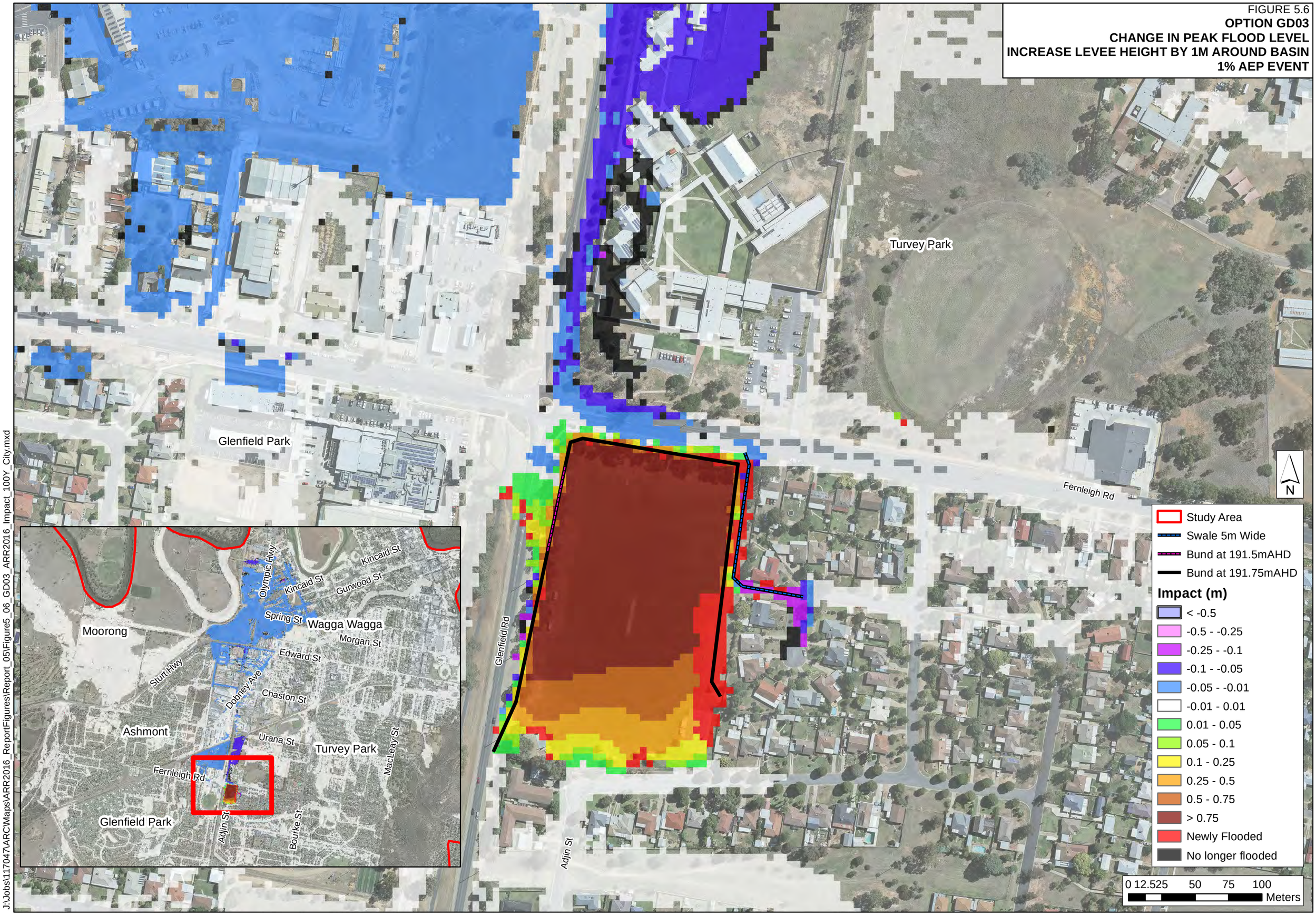

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FIGURE 5.7
OPTION GD03
CHANGE IN PEAK FLOOD LEVEL
INCREASE LEVEE HEIGHT BY 1M AROUND BASIN
5% AEP EVENT

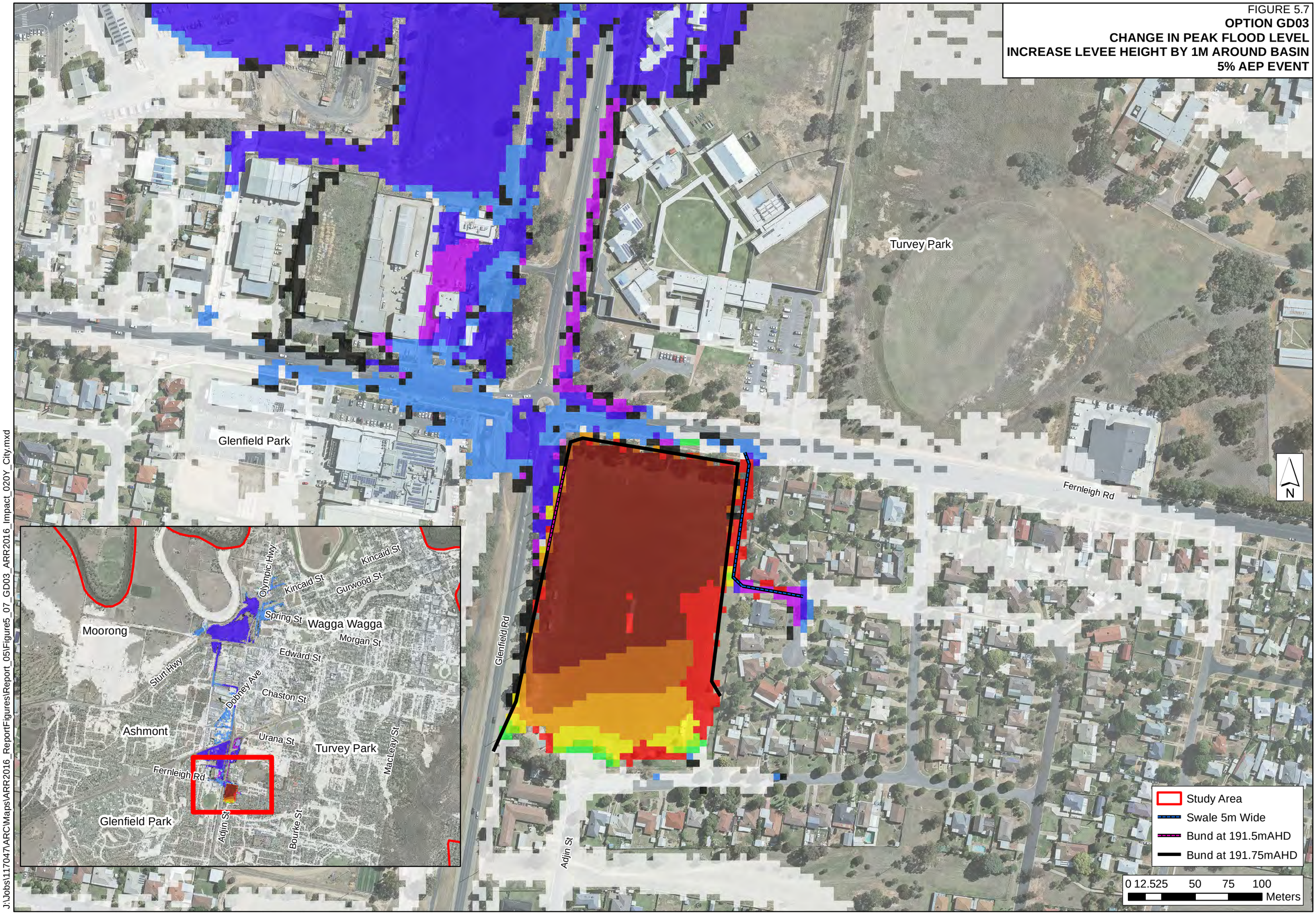

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FIGURE 5.8
OPTION GD04
CHANGE IN PEAK FLOOD LEVEL
3X1.8M TRUNK DRAIN FROM RAILWAY UNDERPASS
1% AEP EVENT

Moorong
Wagga Wagga
Ashmont
Turvey Park
Glenfield Park
Olympic Hwy
Kincaid St
Gurwood St
Spring St
Shaw St
Albury St
Forsyth St
Morgan St
Darlow St
Edward St
Sturt Hwy
Pearson St
Dobney Ave
Chaston St
Ashmont Ave
Urana St
Fernleigh Rd
Cheshire St

Study Area
New 3x 1.8m Pipe

Impact (m)
- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

N

0 50 100 200 300 400 Meters

J:\Jobs\117047\ARC\Maps\ARR2016_ReportFigures\Report_05\Figure5_08_GD04_ARR2016_Impact_100Y_City.mxd

FIGURE 5.9
OPTION GD04
CHANGE IN PEAK FLOOD LEVEL
3X1.8M TRUNK DRAIN FROM RAILWAY UNDERPASS
5% AEP EVENT

Study Area
New 3x 1.8m Pipe

Impact (m)

- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

N

0 50 100 200 300 400 Meters

J:\Jobs\117047\ARC\Maps\ARR2016_ReportFigures\Report_05\Figure5_09_GD04_ARR2016_Impact_020Y_City.mxd

FIGURE 5.10
OPTION GD05
CHANGE IN PEAK FLOOD LEVEL
NEW 3X1.8M PIPE THROUGH THE LEVEE
1% AEP EVENT

Gobbagombalin
Moorong
Ashmont
Wagga Wagga
Turvey Park
Olympic Hwy
Sturt Hwy
Kincaid St
Gurwood St
Shaw St
Spring St
Albury St
Docker St
Forsyth St
The Esplanade
Darlow St
Murray St
Edward St
Pearson St
Dobney Ave
Chaston St

N

Study Area
New 3x 1.8m Pipe
Floodgates

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 50 100 200 300 400
Meters

J:\Jobs\117047\ARC\Maps\ARR2016_ReportFigures\Report_05\Figure5_10_GD05_ARR2016_Impact_100Y_City.mxd

FIGURE 5.11
OPTION GD05
CHANGE IN PEAK FLOOD LEVEL
NEW 3X1.8M PIPE THROUGH THE LEVEE
5% AEP EVENT

Gobbagombalin
Moorong
Ashmont
Wagga Wagga
Turvey Park
Olympic Hwy
Sturt Hwy
Kincaid St
Gurwood St
Shaw St
Spring St
Albury St
Docker St
Forsyth St
The Esplanade
Pearson St
Dobney Ave
Edward St
Darlow St
Murray St
Chaston St

N

Study Area
New 3x 1.8m Pipe
Floodgates

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 50 100 200 300 400
Meters

J:\Jobs\117047\ARC\Maps\ARR2016_ReportFigures\Report_05\Figure5_11_GD05_ARR2016_Impact_020Y_City.mxd

FIGURE 5.12
OPTION GDSC
CHANGE IN PEAK FLOOD LEVEL
GLENFIELD DRAIN SCHEME
1% AEP EVENT

Study Area
Swale 5m Wide
Bund at 191.5mAHD
Bund at 191.75mAHD
New 2x 1.8m Pipe
New 1.5m Wall
Road Regraded
Roadside Lowered
1x Pipe Blocked
Hole in Levee Filled
Road Filled by 1m
Basin Set to 211.5 mAHD
New 3x 1.8m Pipe
New 3x 1.8m Pipe
Floodgates

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.25 0.5 1 1.5 2 Kilometers

N

J:\Jobs\117047\ARCMaps\ARR2016_ReportFigures\Report_05\Figure5_12_GDScheme_ARR2016_Impact_100Y_City.mxd

FIGURE 5.13
OPTION GDSC
CHANGE IN PEAK FLOOD LEVEL
GLENFIELD DRAIN SCHEME
5% AEP EVENT

Study Area
Swale 5m Wide
Bund at 191.5mAHD
Bund at 191.75mAHD
New 2x 1.8m Pipe
New 1.5m Wall
Road Regraded
Roadside Lowered
1x Pipe Blocked
Hole in Levee Filled
Road Filled by 1m
Basin Set to 211.5 mAHD
New 3x 1.8m Pipe
New 3x 1.8m Pipe
Floodgates

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.25 0.5 1 1.5 2 Kilometers

N

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FIGURE 5.14
OPTION SW01
CHANGE IN PEAK FLOOD LEVEL
NEW STORMWATER LINE EASTWARD
1% AEP EVENT

Gobbagombalin

Wagga Wagga

Kincaid St

Wagga Wagga

North Wagga Wagga

N

Study Area
New 0.525m Pipe
Stormwater Network

Impact (m)

- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

0 7.5 15 30 45 60 Meters

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FIGURE 5.15
OPTION SW01
CHANGE IN PEAK FLOOD LEVEL
NEW STORMWATER LINE EASTWARD
5% AEP EVENT

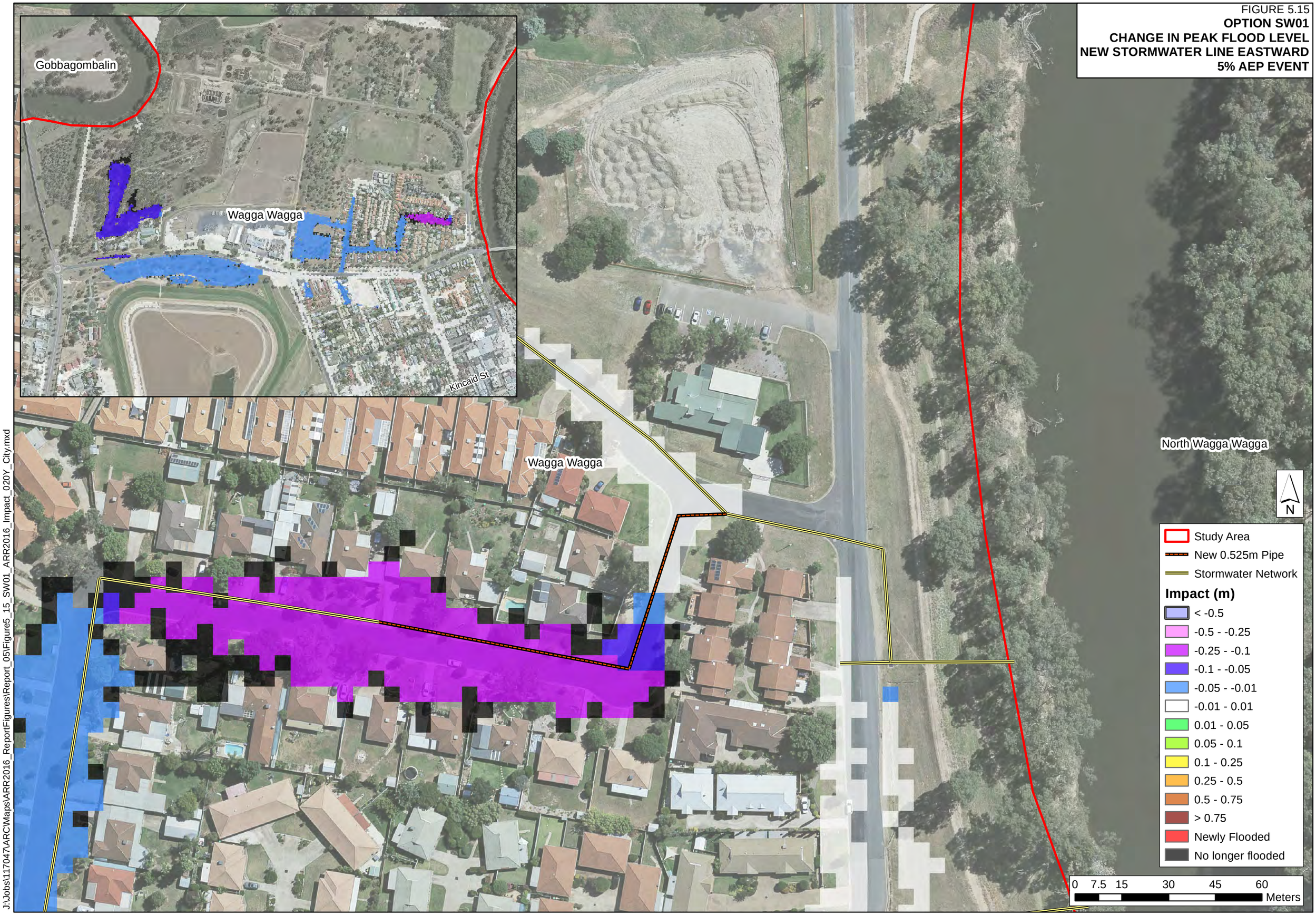

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FIGURE 5.16
OPTION SW02
CHANGE IN PEAK FLOOD LEVEL
REPLACING 1.5M PIPE BY 0.6M IN THE PARK
1% AEP EVENT

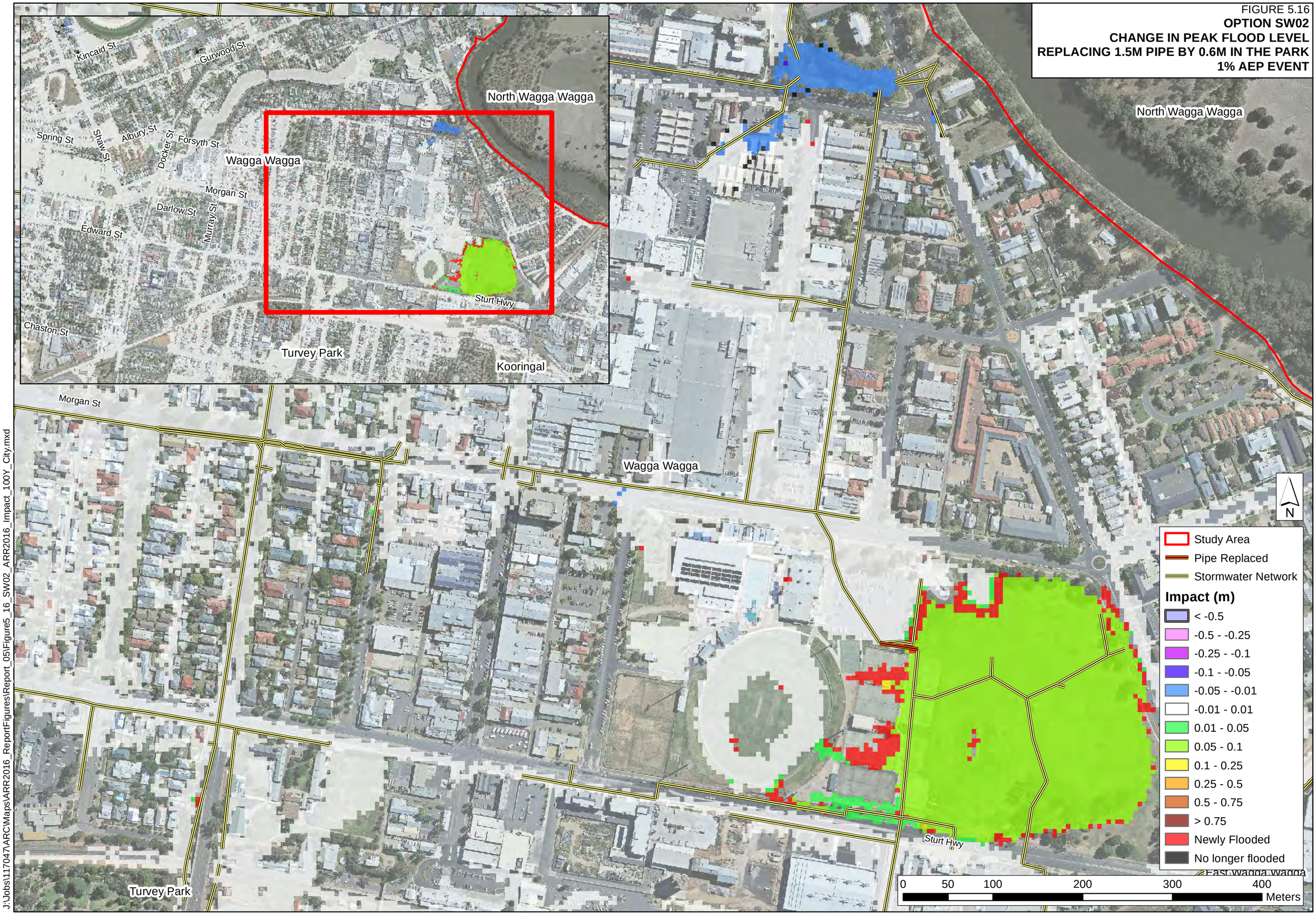

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FIGURE 5.17
OPTION SW02
CHANGE IN PEAK FLOOD LEVEL
REPLACING 1.5M PIPE BY 0.6M IN THE PARK
5% AEP EVENT

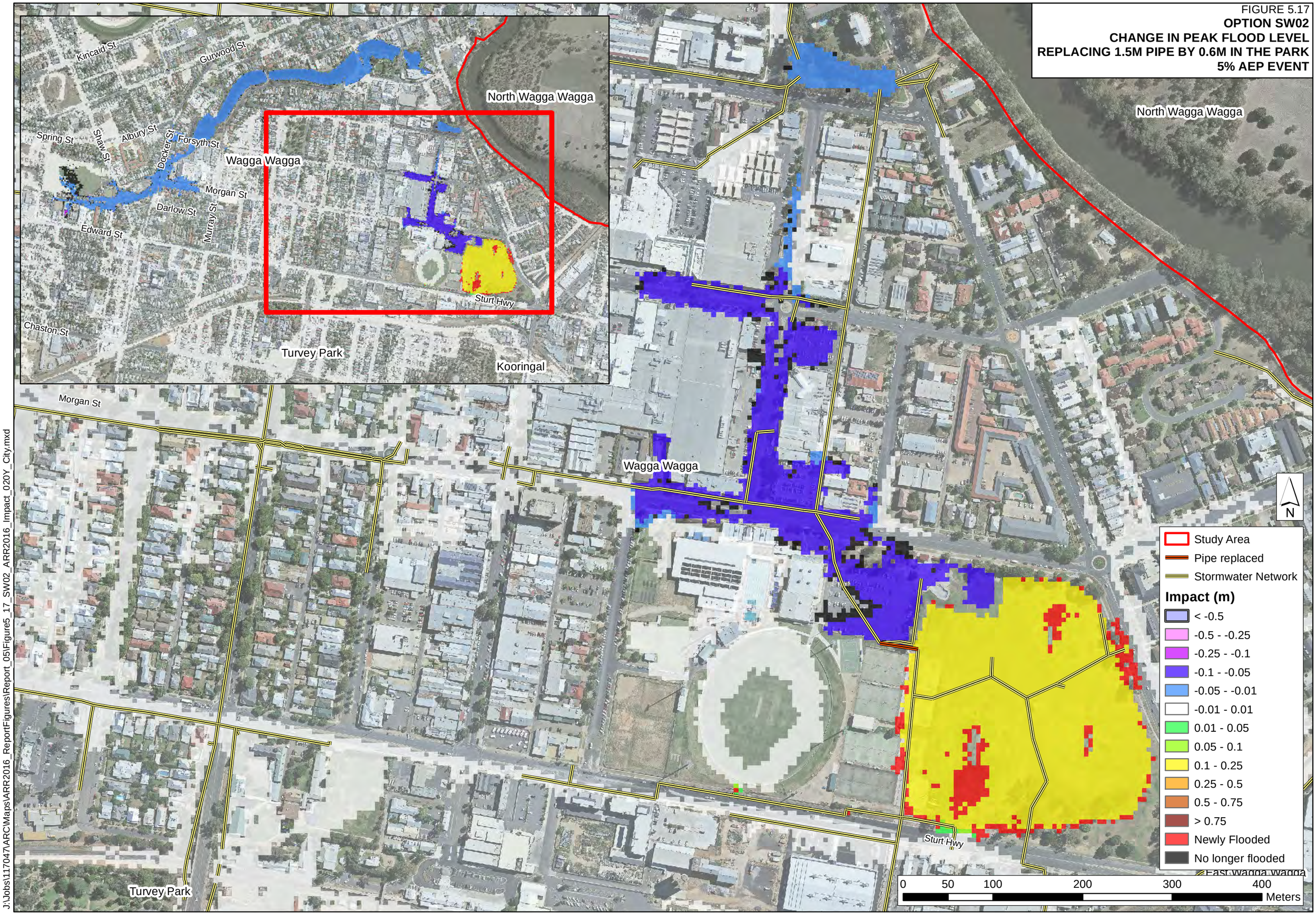

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FIGURE 5.18
OPTION LA01
CHANGE IN PEAK FLOOD LEVEL
ROAD RAISED DS OF THE LAKE BY 2M
1% AEP EVENT

Wagga Wagga
Turvey Park
Kooringal
East Wagga Wagga
Gumly Gumly
Tolland
Bourkelands
Tatton
Springvale
Darlow St
Edward St
Pearson St
Dobney Ave
Chaston St
Sturt Hwy
Urana St
MacLeay St
Fernleigh Rd
Glenfield Rd
Adjin St
Bourke St
Huthwaite St
Maher St
Martin St
Bruce St
Raye St
Red Hill Rd
Hollbrook Rd
Atherton Cres
Kimberley Dr
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Brindabella Dr
Springvale Dr
Nelson Dr
Mallee Rd
Lake Albert rd
Kooringal Rd
Hammond Ave
Copland St
Lake Albert Rd
Brunskill Rd
Eyre St
Forrest St
Hume St
Main St
Craft St
Bell Gum Pl
Bocquet St
Vincent Rd
Sycamore Rd
Elm St
Alder Rd
Mitchell Rd
Inglewood Rd
Kyeamba Ave
Silverwood Rd
Birch Rd
Cummins Rd
Baker Ln
Rosevale Dr

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Removed Pipes

Impact (m)
- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

N

0 0.5 1 2 Kilometers

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FIGURE 5.19
OPTION LA01
CHANGE IN PEAK FLOOD LEVEL
ROAD RAISED DS OF THE LAKE BY 2M
5% AEP EVENT

Wagga Wagga
Turvey Park
Kooringal
East Wagga Wagga
Gumly Gumly
Tolland
Bourkelands
Tatton
Springvale
Darlow St
Edward St
Pearson St
Dobney Ave
Chaston St
Sturt Hwy
Hammond Ave
Copland St
Urana St
MacLeay St
Fernleigh Rd
Glenfield Rd
Adjin St
Bourke St
Huthwaite St
Maher St
Martin St
Bruce St
Raye St
Red Hill Rd
Kooringal Rd
Lake Albert Rd
Lake Albert rd
Kyeamba Ave
Alder Rd
Mitchell Rd
Baker Ln
Inglewood Rd
Elm St
Sycamore Rd
Vincent Rd
Holbrook Rd
Atherton Cres
Kimberley Dr
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Brunskill Rd
Eyre St
Forrest St
Hume St
Brindabella Dr
Springvale Dr
Nelson Dr
Main St
Craft St
Bocquet St
Birch Rd
Silverwood Rd
Cummins Rd
Rosevale Dr
Mailee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Removed Pipes

Impact (m)

< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2
Kilometers

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FIGURE 5.20
OPTION LA02
CHANGE IN PEAK FLOOD LEVEL
AUGMENTATION OF CROOKED CREEK DIVERSION INTO LAKE ALBERT
1% AEP EVENT

Wagga Wagga
Darlow St
Edward St
Pearson St
Dobney Ave
Sturt Hwy
Chaston St
Hammond Ave
Copland St
Turvey Park
Pearson St
East Wagga Wagga
Fernleigh Rd
Glenfield Rd
Adjin St
Bourke St
Gumly Gumly
Huthwaite St
Maher St
Martin St
Lake Albert rd
Kooringal
Bruce St
Raye St
Tolland
Red Hill Rd
Kyeamba Ave
Kooringal Rd
Bourke St
Holbrook Rd
Bourkelands
Atherton Cres
Kimberley Dr
Alder Rd
Baker Ln
Vincent Rd
Sycamore Rd
Inglewood Rd
Elm St
Tatton
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Lake Albert Rd
Brunskill Rd
Mitchell Rd
Eyre St
Forest St
Brindabella Dr
Springvale Dr
Hume St
Birch Rd
Cummins Rd
Springvale
Nelson Dr
Main St
Silverwood Rd
Rosevale Dr
Craft St
Bocquer St
Mallee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Creek Wider by 10m
Removed Pipes

Impact (m)

< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2
Kilometers

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FIGURE 5.21
OPTION LA02
CHANGE IN PEAK FLOOD LEVEL
AUGMENTATION OF CROOKED CREEK DIVERSION INTO LAKE ALBERT
5% AEP EVENT

Darlow St
Edward St
Pearson St
Dobney Ave
Wagga Wagga
Sturt Hwy
Chaston St
Hammond Ave
Copland St
Pearson St
Turvey Park
East Wagga Wagga
Glenfield Rd
Fernleigh Rd
Adjin St
Bourke St
Gumly Gumly
Huthwaite St
Lake Albert rd
Kooringal
Maher St
Martin St
Bruce St
Tolland
Raye St
Red Hill Rd
Bourke St
Holbrook Rd
Kyeamba Ave
Kooringal Rd
Baker Ln
Alder Rd
Bourkelands
Atherton Cres
Kimberley Dr
Vincent Rd
Sycamore Rd
Inglewood Rd
Elm St
Tatton
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Lake Albert Rd
Mitchell Rd
Brunskill Rd
Eyre St
Forrest St
Brindabella Dr
Springvale Dr
Hume St
Birch Rd
Cummins Rd
Main St
Silverwood Rd
Springvale
Nelson Dr
Rosevale Dr
Bocquet St
Craft St
Mallee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Creek Wider by 10m
Removed Pipes

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2
Kilometers

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FIGURE 5.22
OPTION LA03
CHANGE IN PEAK FLOOD LEVEL
AUGMENTATION OF STRINGYBARK CREEK DIVERSION INTO LAKE ALBERT
1% AEP EVENT

Darlow St
Edward St
Pearson St
Dobney Ave
Wagga Wagga
Sturt Hwy
Chaston St
Hammond Ave
Copland St
Turvey Park
Pearson St
East Wagga Wagga
Fernleigh Rd
Glenfield Rd
Adjin St
Bourke St
Gumly Gumly
Huthwaite St
Maher St
Martin St
Lake Albert rd
Kooringal
Bruce St
Raye St
Tolland
Red Hill Rd
Bourke St
Kooringal Rd
Kyeamba Ave
Baker Ln
Hollbrook Rd
Bourkelands
Atherton Cres
Kimberley Dr
Alder Rd
Inglewood Rd
Sycamore Rd
Vincent Rd
Tatton
Elm St
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Lake Albert Rd
Brunskill Rd
Mitchell Rd
Eyre St
Forrest St
Brindabella Dr
Springvale Dr
Hume St
Birch Rd
Cummins Rd
Springvale
Nelson Dr
Main St
Silverwood Rd
Rosevale Dr
Craft St
Bocquet St
Mallee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Creek Wider by 10m
Road Crest Raised by 1m
Removed Pipes

Impact (m)

< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2
Kilometers

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FIGURE 5.23
OPTION LA03
CHANGE IN PEAK FLOOD LEVEL
AUGMENTATION OF STRINGYBARK CREEK DIVERSION INTO LAKE ALBERT
5% AEP EVENT

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Road Crest Raised by 2m
Creek Wider by 10m
Road Crest Raised by 1m
Removed Pipes

Impact (m)
< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2 Kilometers

N

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FIGURE 5.24

ULTIMATE LAKE ALBERT OPTION
CHANGE IN PEAK FLOOD LEVEL
COMBINATION OF LA01 TO LA03
1% AEP EVENT

Wagga Wagga
Darlow St
Edward St
Pearson St
Dobney Ave
Sturt Hwy
Chaston St
Hammond Ave
Pearson St
Urana St
Turvey Park
MacLeay St
Copland St
East Wagga Wagga
Glenfield Rd
Fernleigh Rd
Kooringal Rd
Adjin St
Bourke St
Gumly Gumly
Huthwaite St
Lake Albert rd
Maher St
Kooringal
Martin St
Bruce St
Tolland
Raye St
Red Hill Rd
Bourke St
Kooringal Rd
Kyeamba Ave
Holbrook Rd
Bourkelands
Atherton Cres
Kimberley Dr
Baker Ln
Alder Rd
Mitchell Rd
Inglewood Rd
Tatton
Vincent Rd
Sycamore Rd
Elm St
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Lake Albert Rd
Brunskill Rd
Eyre St
Forrest St
Brindabella Dr
Springvale Dr
Hume St
Birch Rd
Cummins Rd
Main St
Springvale
Nelson Dr
Silverwood Rd
Craft St
Boorguer St
Rosevale Dr
Mallee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Creek Wider by 10m
Road Crest Raised by 1m
Foothpath Raised by 1m
Road Crest Raised by 2m
Removed Pipes

Impact (m)

< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2 Kilometers

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FIGURE 5.25

ULTIMATE LAKE ALBERT OPTION
CHANGE IN PEAK FLOOD LEVEL
COMBINATION OF LA01 TO LA03
5% AEP EVENT

Darlow St
Edward St
Pearson St
Dobney Ave
Wagga Wagga
Sturt Hwy
Chaston St
Hammond Ave
Pearson St
Urana St
Turvey Park
MacLeay St
Copland St
East Wagga Wagga
Glenfield Rd
Fernleigh Rd
Kooringal Rd
Adjin St
Bourke St
Gumly Gumly
Huthwaite St
Lake Albert rd
Maher St
Kooringal
Martin St
Bruce St
Tolland
Raye St
Red Hill Rd
Bourke St
Holbrook Rd
Kooringal Rd
Kyeamba Ave
Baker Ln
Bourkelands
Alder Rd
Mitchell Rd
Atherton Cres
Kimberley Dr
Inglewood Rd
Vincent Rd
Sycamore Rd
Tatton
Elm St
Stirling Blvd
Plumpton Rd
Dalkeith Ave
Lake Albert Rd
Brunskill Rd
Eyre St
Forrest St
Brindabella Dr
Springvale Dr
Hume St
Birch Rd
Cummins Rd
Main St
Springvale
Nelson Dr
Silverwood Rd
Craft St
Bogquert St
Rosevale Dr
Mallee Rd
Bell Gum Pl

N

Lake Albert Hydraulic Extent
Wagga East Hydraulic Extent
Creek Wider by 10m
Road Crest Raised by 1m
Foothpath Raised by 1m
Road Crest Raised by 2m
Removed Pipes

Impact (m)

< -0.5
-0.5 - -0.25
-0.25 - -0.1
-0.1 - -0.05
-0.05 - -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.1
0.1 - 0.25
0.25 - 0.5
0.5 - 0.75
> 0.75
Newly Flooded
No longer flooded

0 0.5 1 2 Kilometers

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FIGURE 5.26

OPTION FM02

CHANGE IN PEAK FLOOD LEVEL

CHANNEL AND CULVERT ADDED ALONG ROACH ROAD

1% AEP EVENT

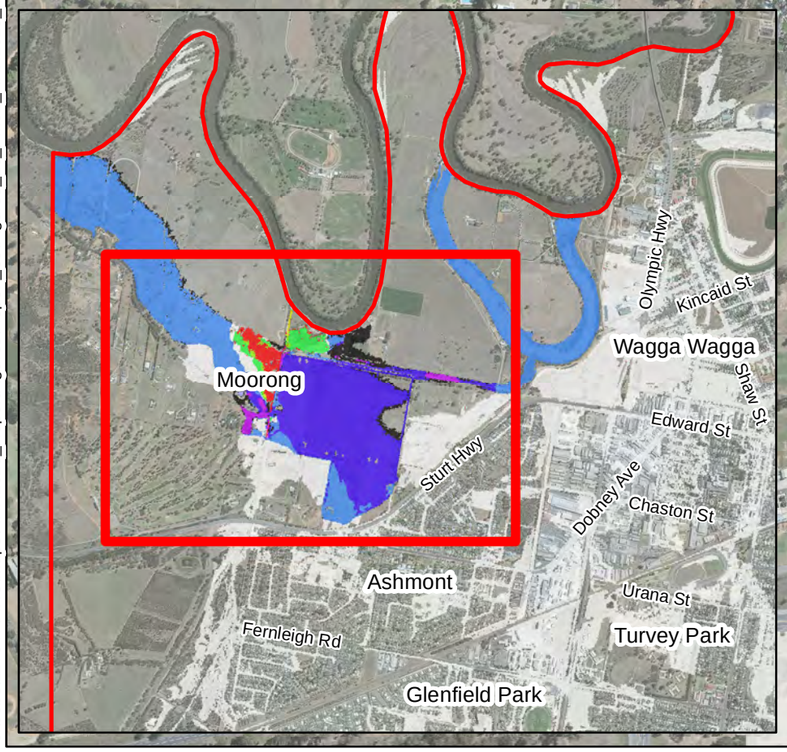
Gobbagombalin

Moorong

McNickle Rd

Sturt Hwy

Ashmo



N

New 5m x 1m Culvert

Swale 5m Wide

Stormwater Network

Study Area

Impact (m)

- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

0 50 100 200 300 400 Meters

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FIGURE 5.27

OPTION FM02

CHANGE IN PEAK FLOOD LEVEL

CHANNEL AND CULVERT ADDED ALONG ROACH ROAD

10% AEP EVENT

Gobbagombalin

Moorong

McNickle Rd

Sturt Hwy

Ashmo

N

New 5m x 1m Culvert

Swale 5m Wide

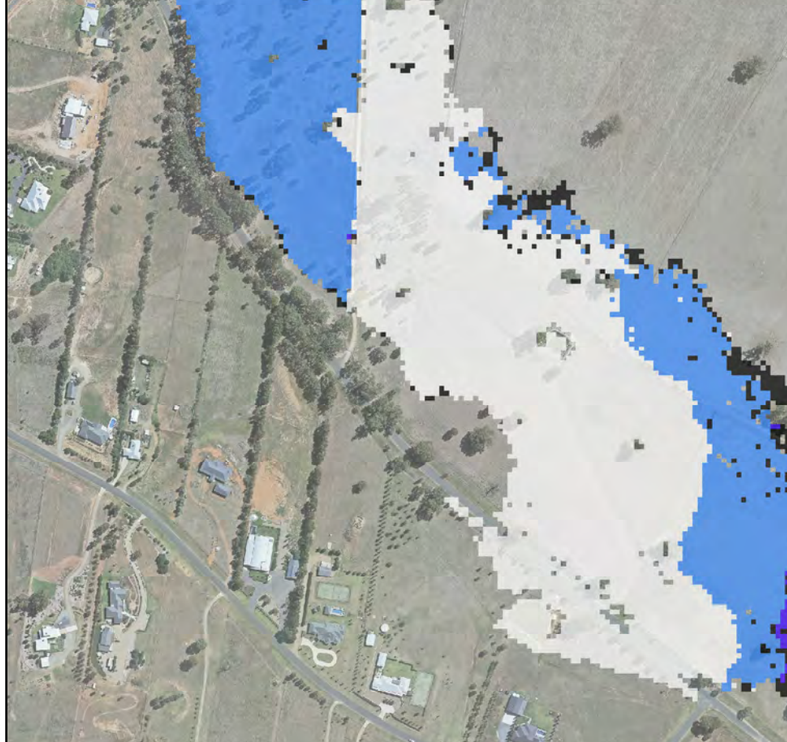
Stormwater Network

Study Area

Impact (m)

- < -0.5
- -0.5 - -0.25
- -0.25 - -0.1
- -0.1 - -0.05
- -0.05 - -0.01
- -0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- > 0.75
- Newly Flooded
- No longer flooded

0 50 100 200 300 400 Meters



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