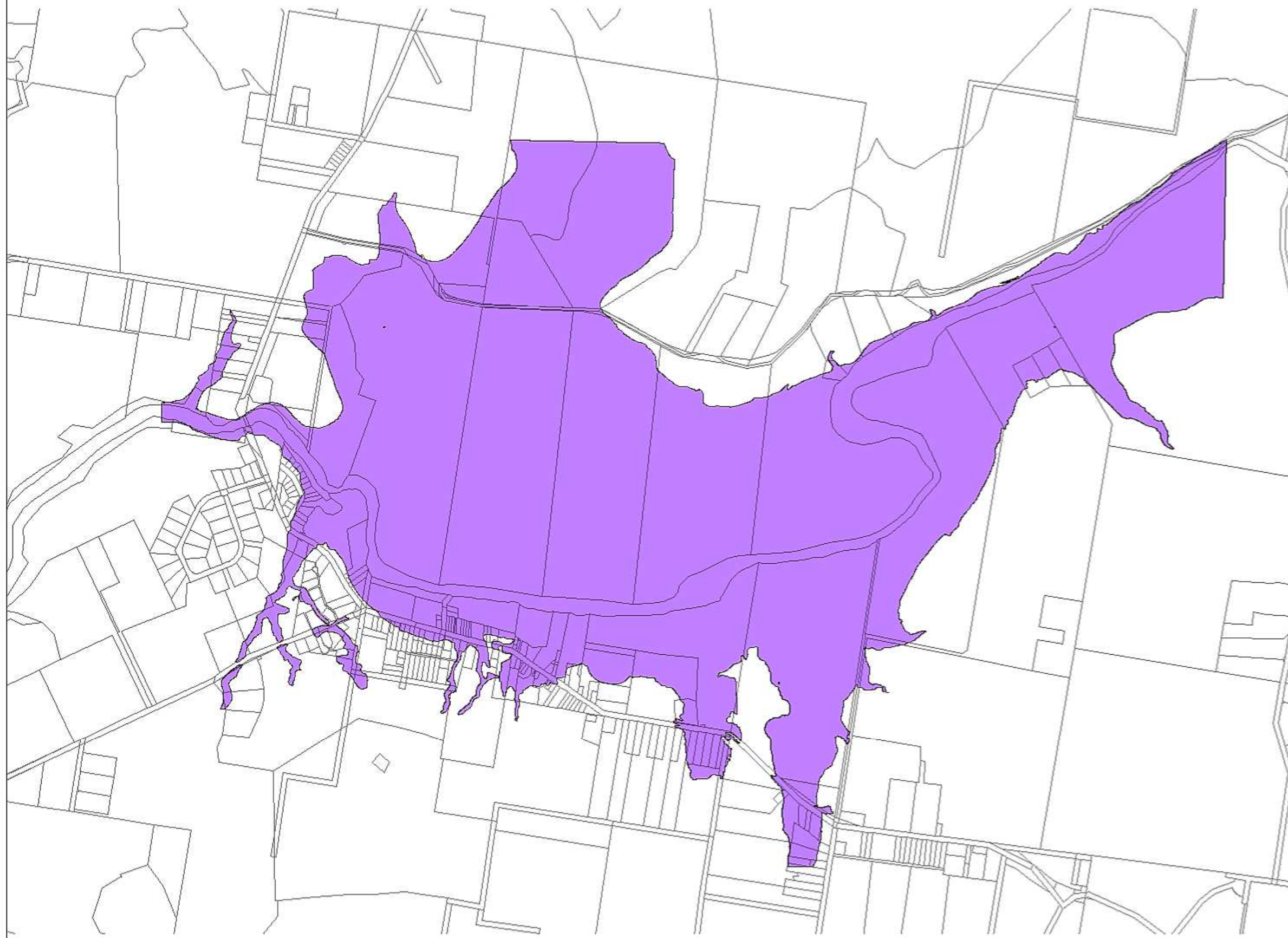


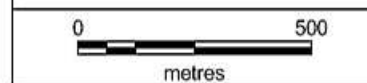
**Figure 10-1**

**Flood Planning Area**

Kangaroo Valley FRMSP



-  Cadastre
-  FPA

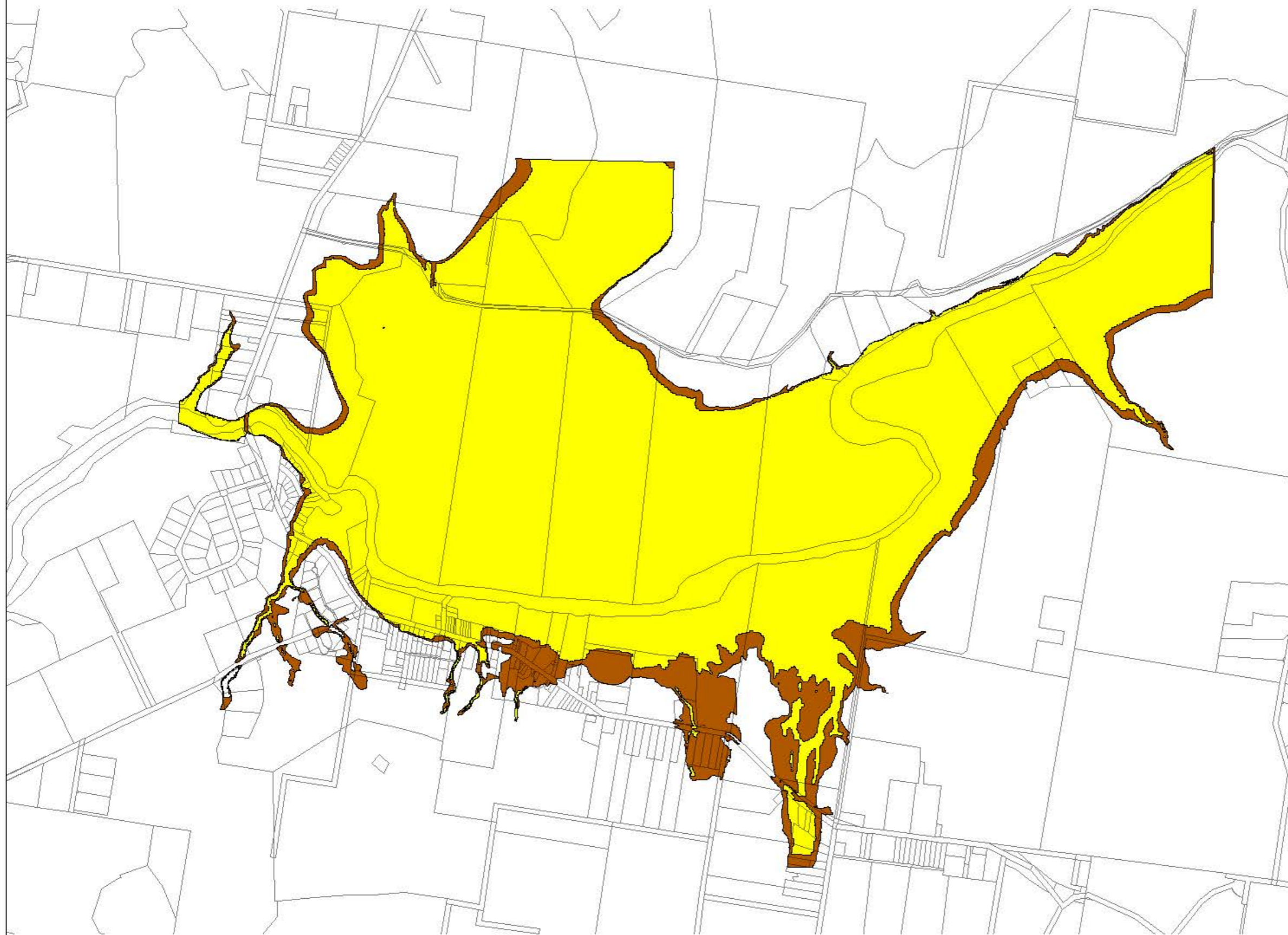





Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 21 / 09 / 2015  
Project: Kangaroo Valley FRMSP  
Coordinate System: Zone 56/1 ISG

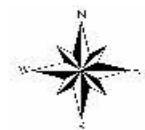
Figure 10-2

**Flood Planning Area  
True Hazard Categories**

Kangaroo Valley FRMSP



-  Cadastre
-  High Hazard
-  Low Hazard



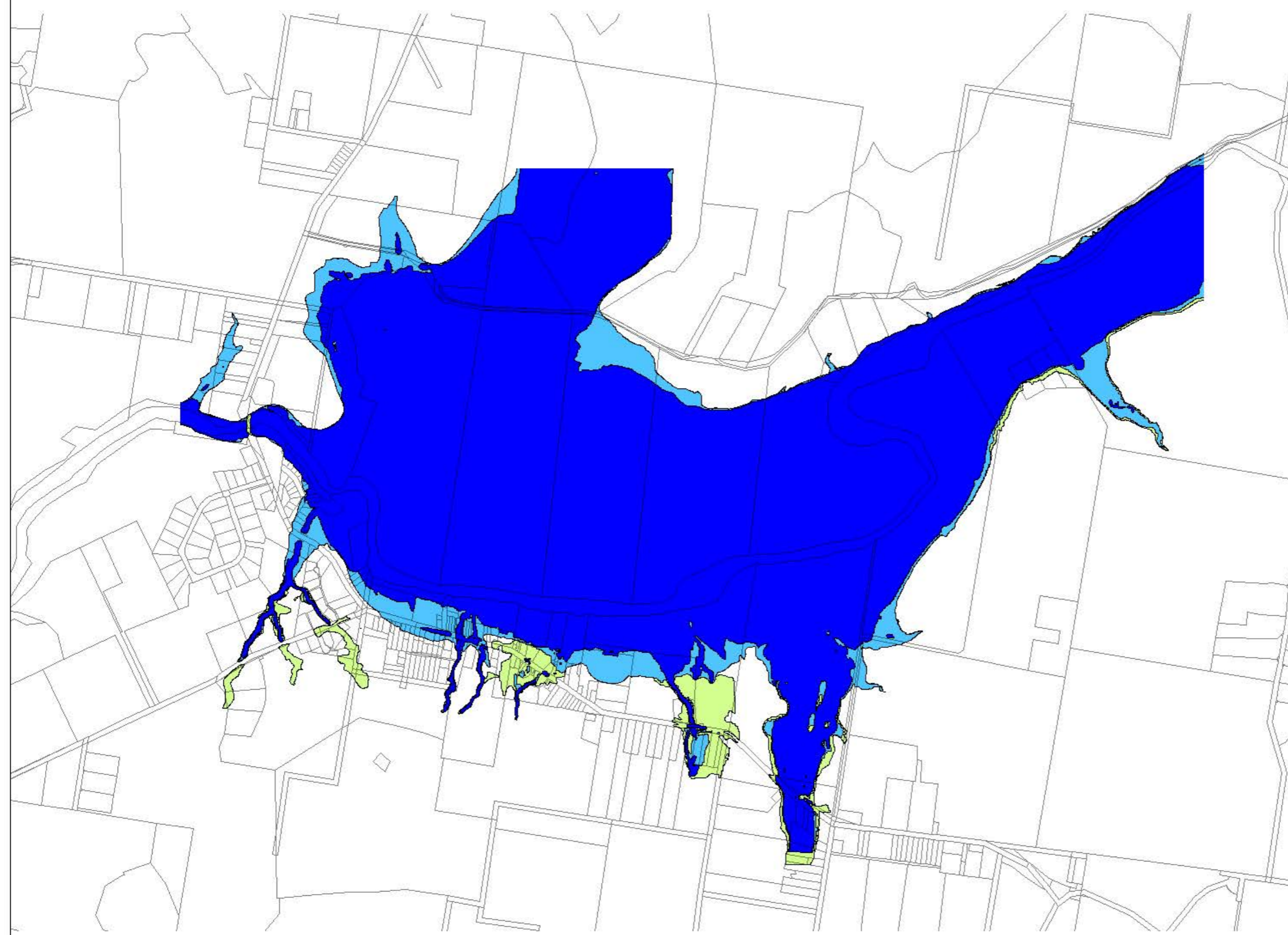
0 500  
metres





Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 21 / 09 / 2015  
Project: Kangaroo Valley FRMSP  
Coordinate System: Zone 56/1 IS G

Figure 10-3

**Flood Planning Area  
Hydraulic Categories**

Kangaroo Valley FRMSP



-  Cadastre
-  Floodway
-  Flood Storage
-  Flood Fringe

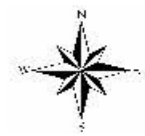


Figure 11-1

Access Road Overtopping Locations

Kangaroo Valley FRMSP

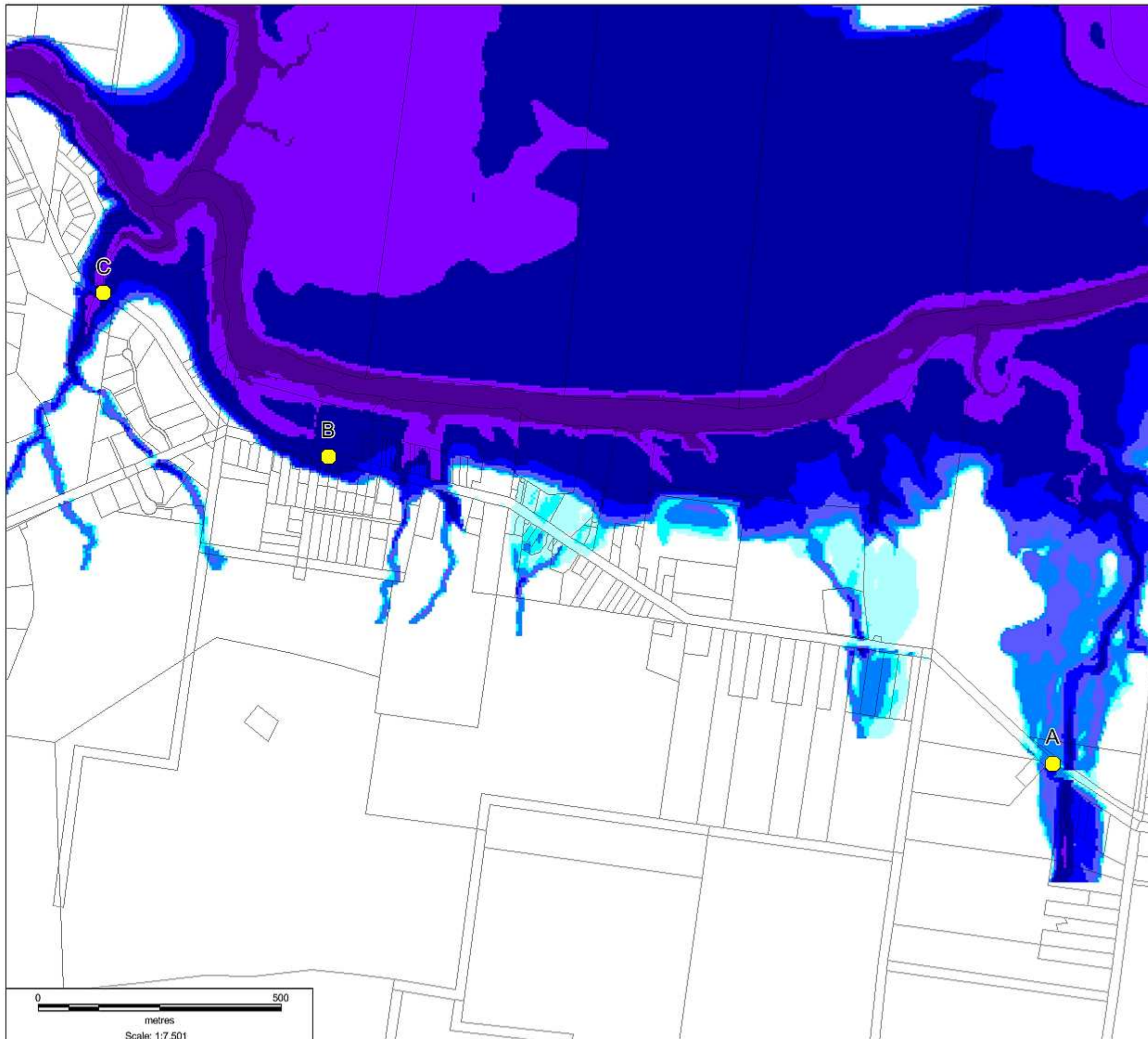
- Cadastre
- Overtopping Locations

1% AEP Peak Depth (m)

- 0.0 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 5.0
- 5.0 - 10.0
- > 10.0



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

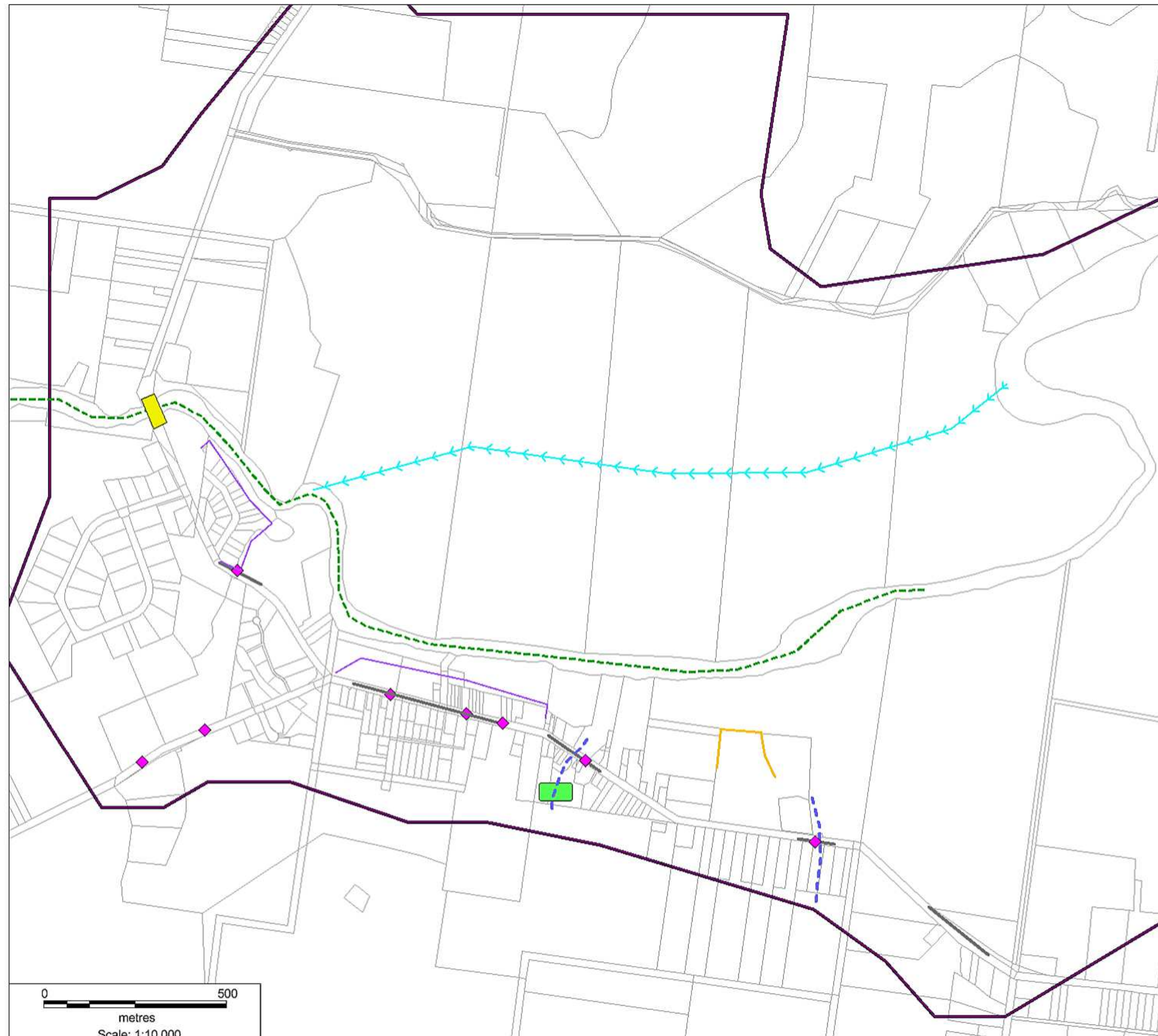













0 500  
metres  
Scale: 1:7,501

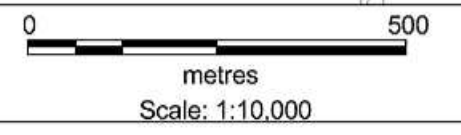
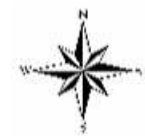
Figure 13-1

### Structural Mitigation Options

Kangaroo Valley FRMSP



-  Cadastre
-  Study Area
-  FM 1.1 & 1.2  
Levees
-  FM 1.3  
Caravan Park Levee
-  FM 1.4 & 1.5  
Road Raising
-  FM 2.1  
Town Creek Detention
-  FM 3.1  
Vegetation Management
-  FM 3.2  
Creek Formalisation
-  FM 3.3  
Bridge Widening
-  FM 3.4 & 3.5  
Central Channel
-  FM 4.1  
Culvert Augmentation



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

10% AEP Peak Flood Level Impacts  
Caravan Park Levee

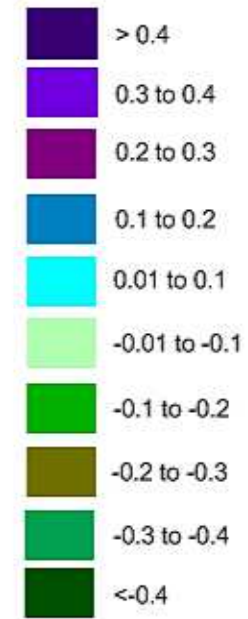
1% AEP Peak Flood Level Impacts  
Caravan Park Levee

Figure 13-2

Option 1.3 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

0 200

metres

Scale: 1:3,000

0 200

metres

Scale: 1:3,000

10% AEP Peak Flood Level Impacts  
Road Raising to Reduce Overtopping to 0.2m

1% AEP Peak Flood Level Impacts  
Road Raising to Reduce Overtopping to 0.2m

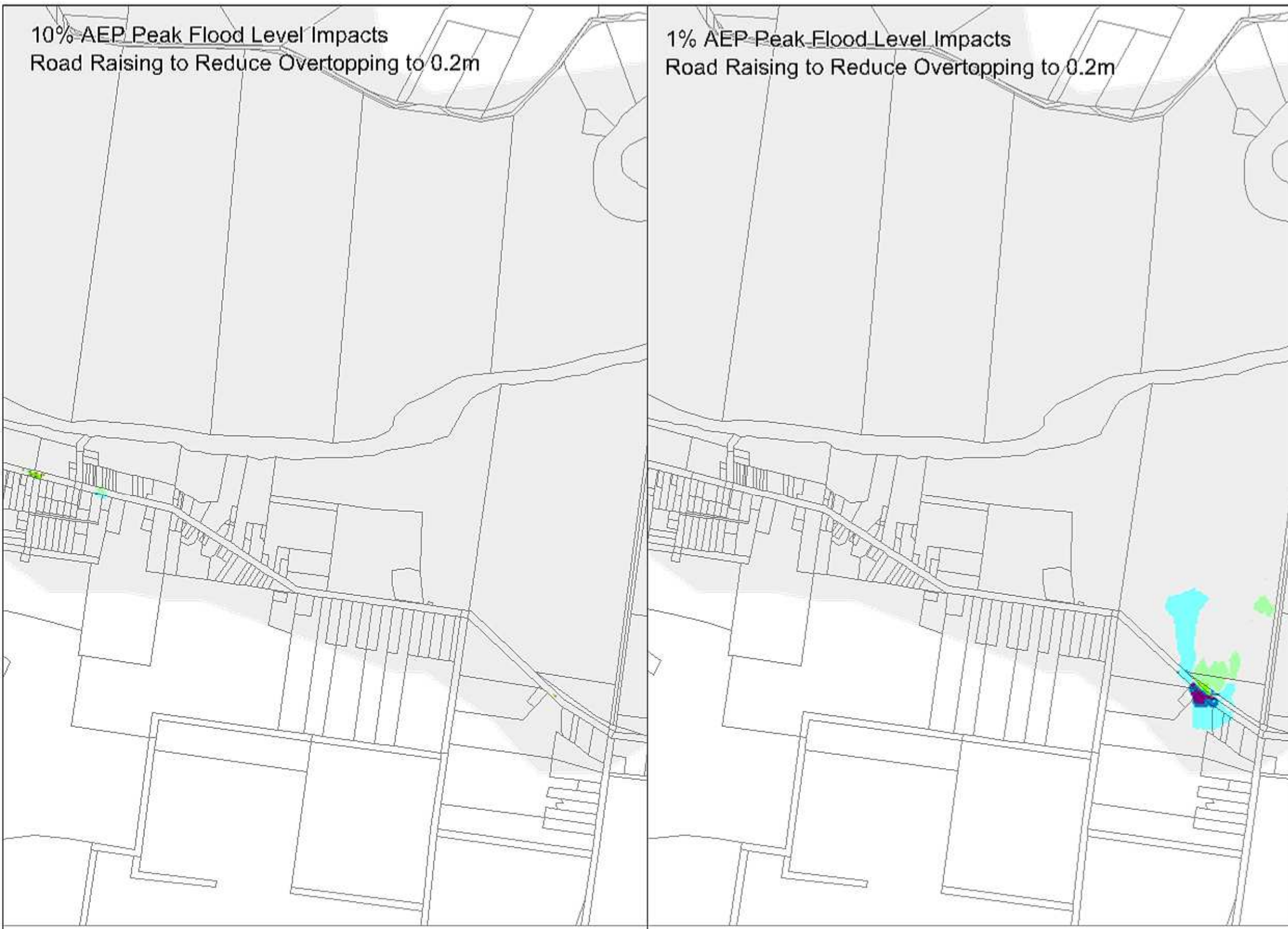
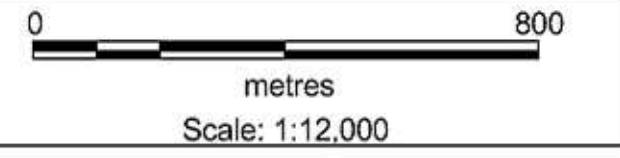
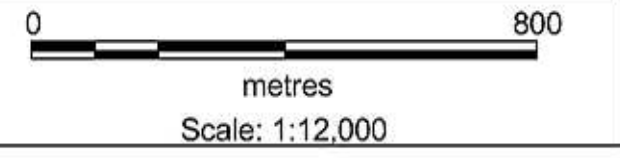
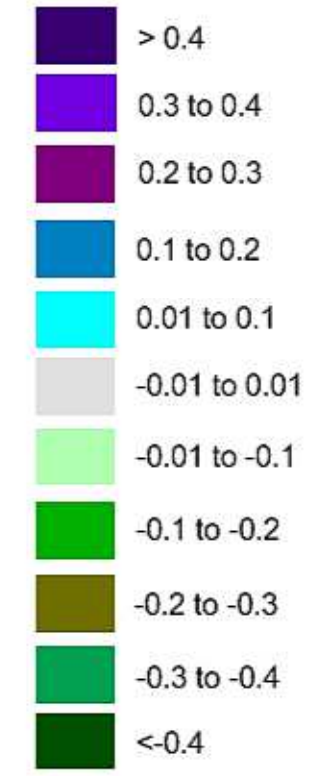


Figure 13-3

Option 1.4 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

10% AEP Peak Flood Level Impacts  
Road Raising to Prevent Overtopping

1% AEP Peak Flood Level Impacts  
Road Raising to Prevent Overtopping

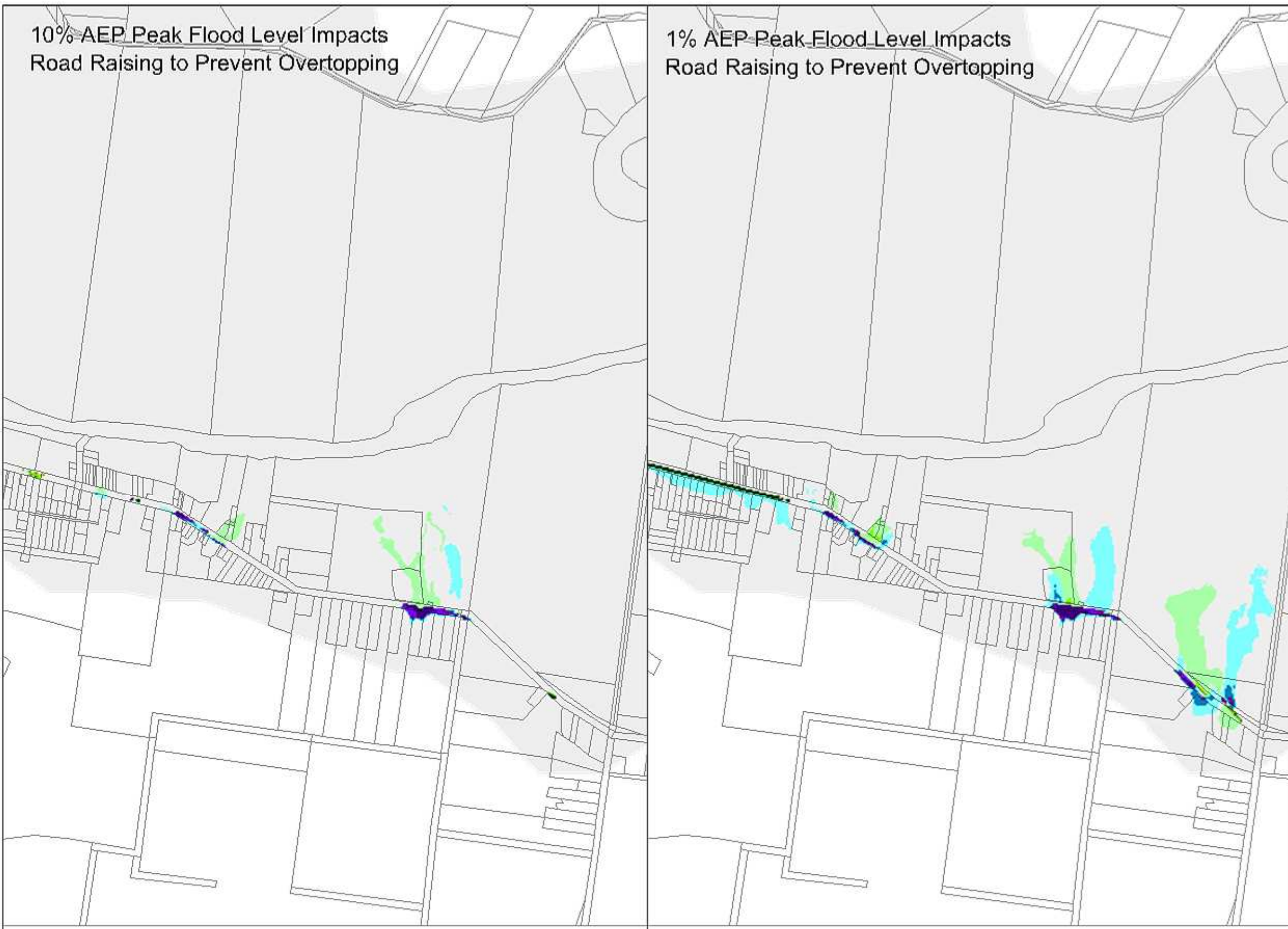
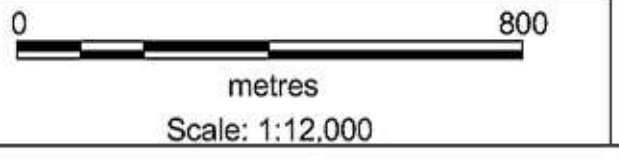
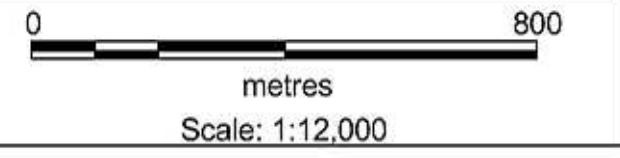
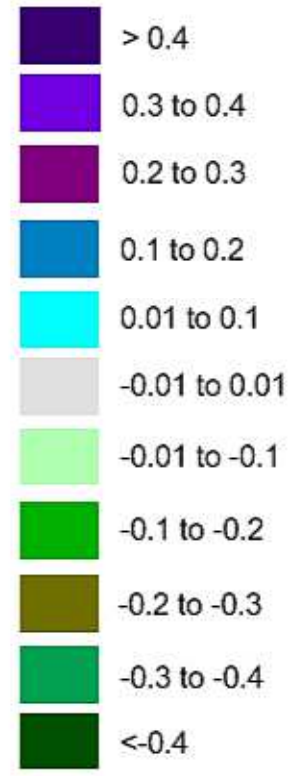


Figure 13-4

Option 1.5 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56



10% AEP Peak Flood Level Impacts  
Town Creek Detention Basin

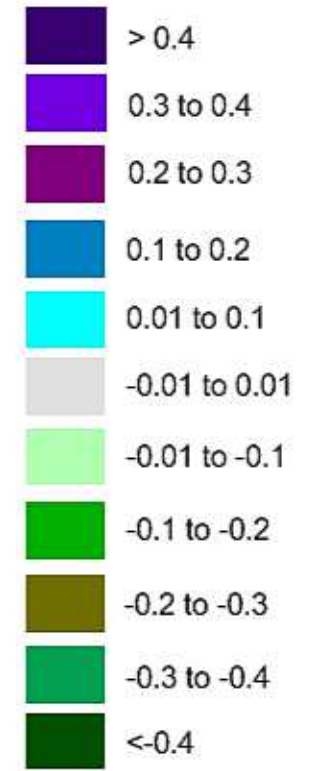
1% AEP Peak Flood Level Impacts  
Town Creek Detention Basin

Figure 13-5

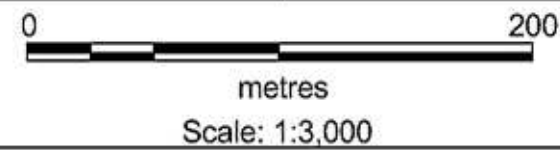
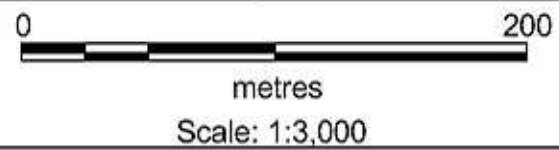
Option 2-1 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

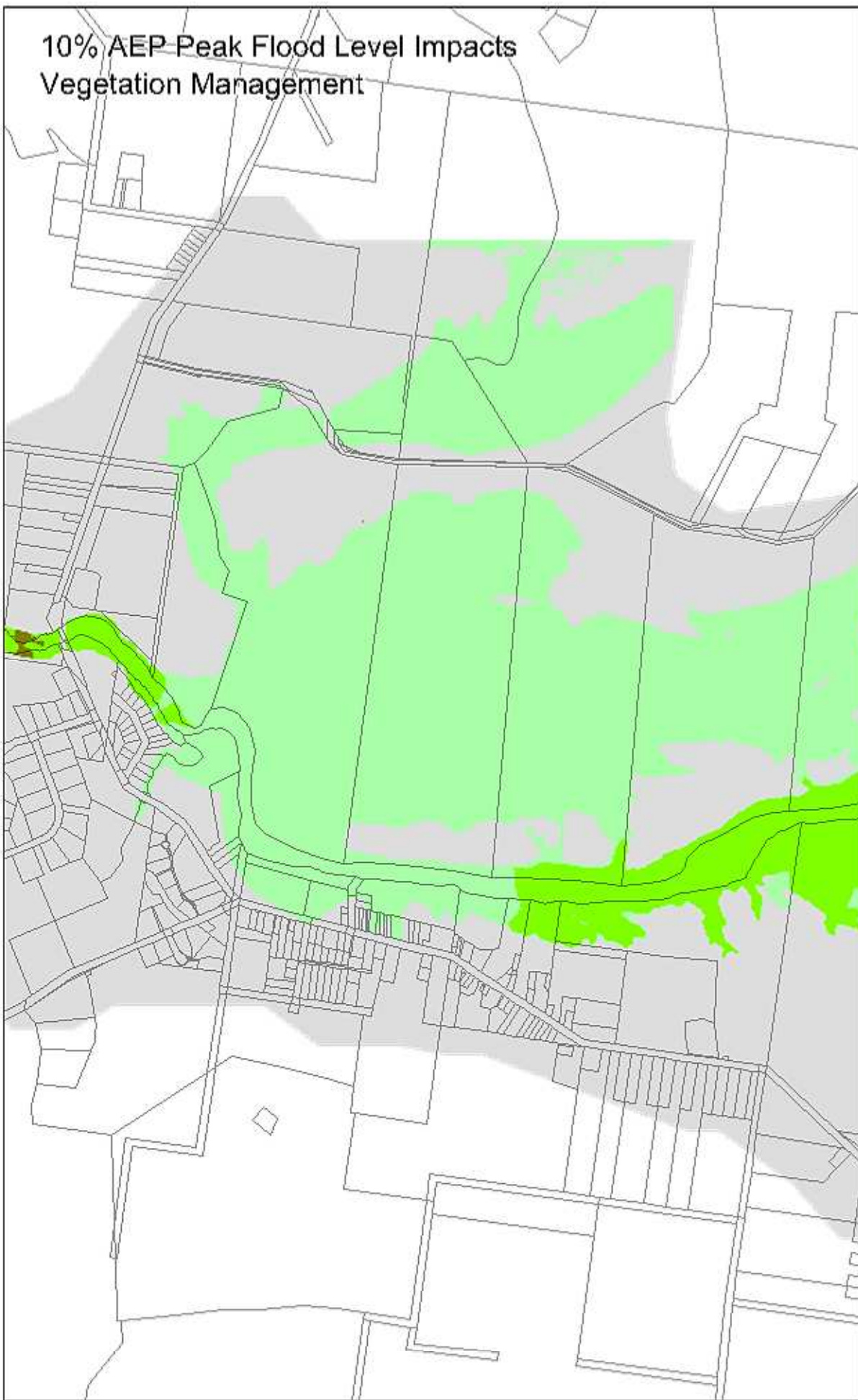
Peak Water Level Difference  
metres



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56



10% AEP Peak Flood Level Impacts  
Vegetation Management



1% AEP Peak Flood Level Impacts  
Vegetation Management

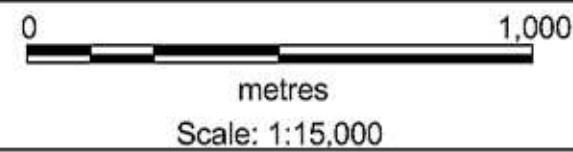
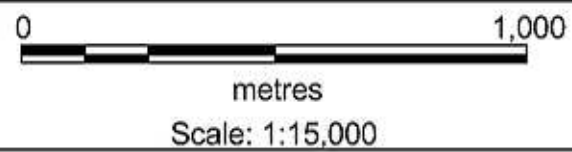
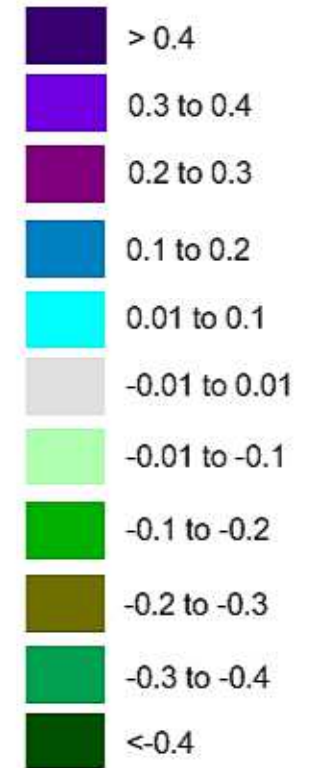


Figure 13-6

Option 3-1 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



10% AEP Peak Flood Level Impacts  
Creek Formalisation

1% AEP Peak Flood Level Impacts  
Creek Formalisation

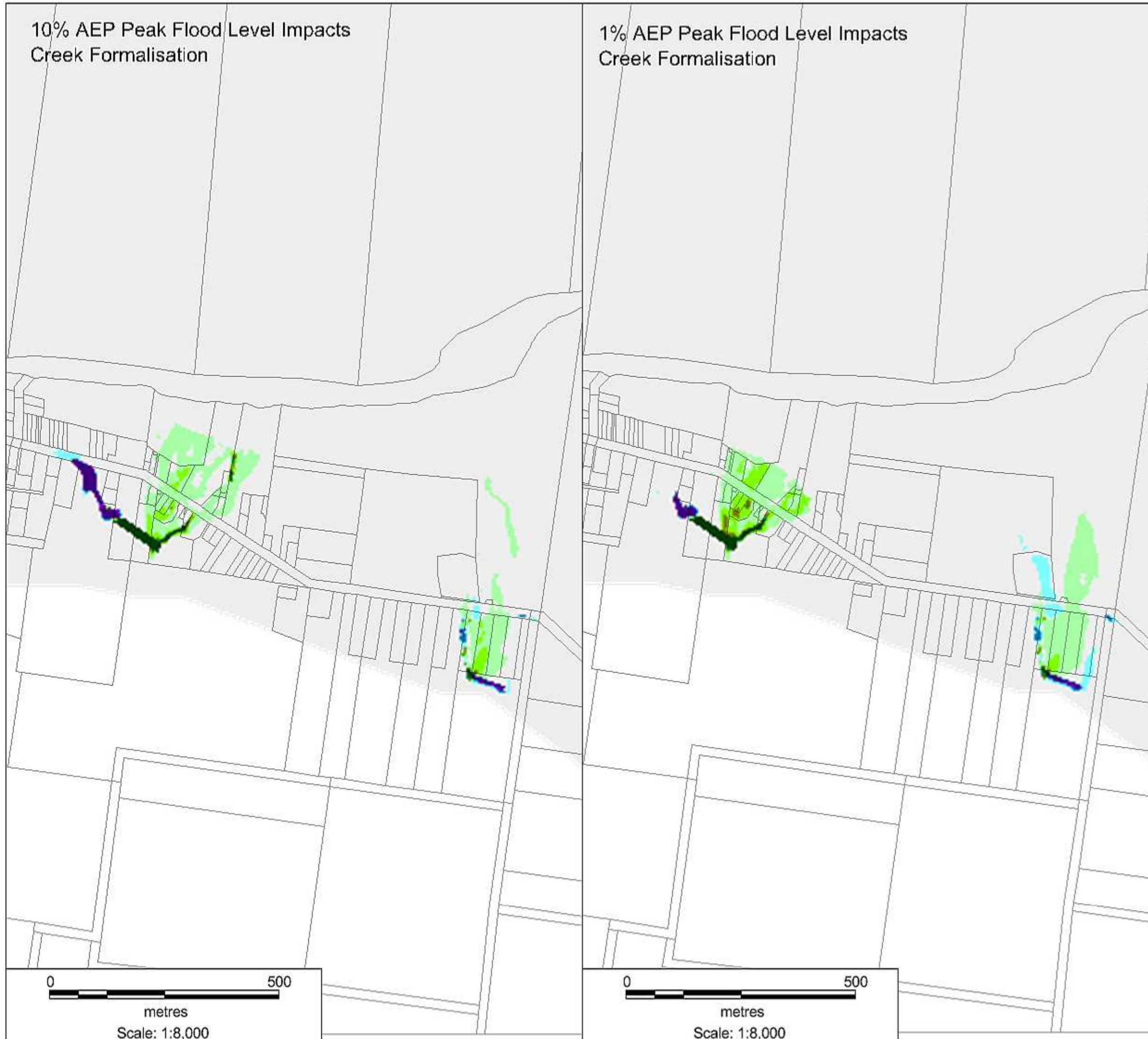


Figure 13-7

Option 3-2 Impacts  
Option Less Existing

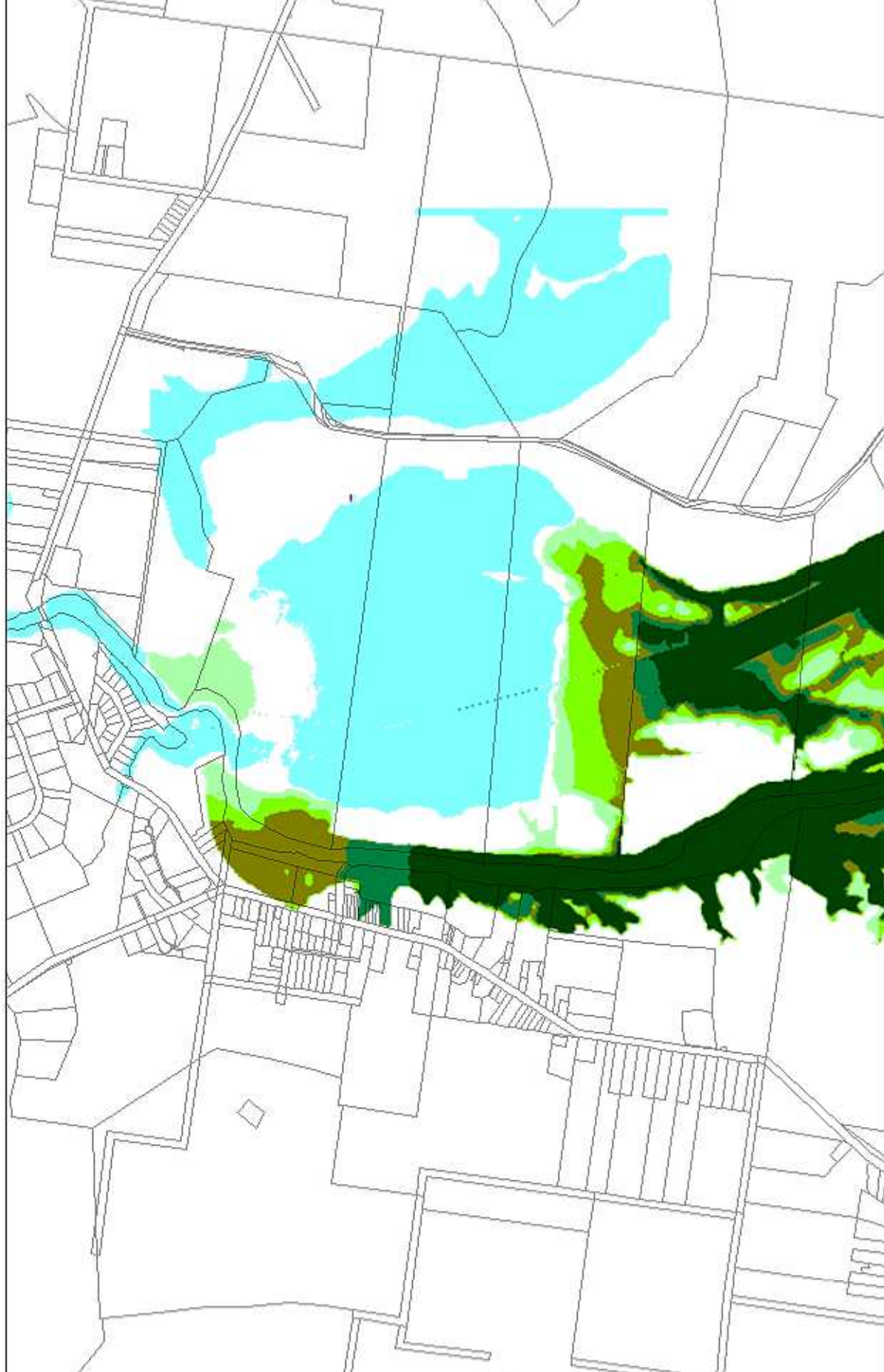
KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

10% AEP Peak Flood Level Impacts  
Central Channel - Large



1% AEP Peak Flood Level Impacts  
Central Channel - Large

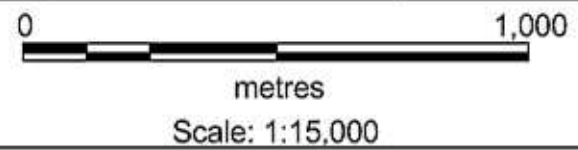
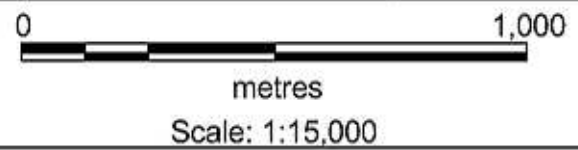


Figure 13-8

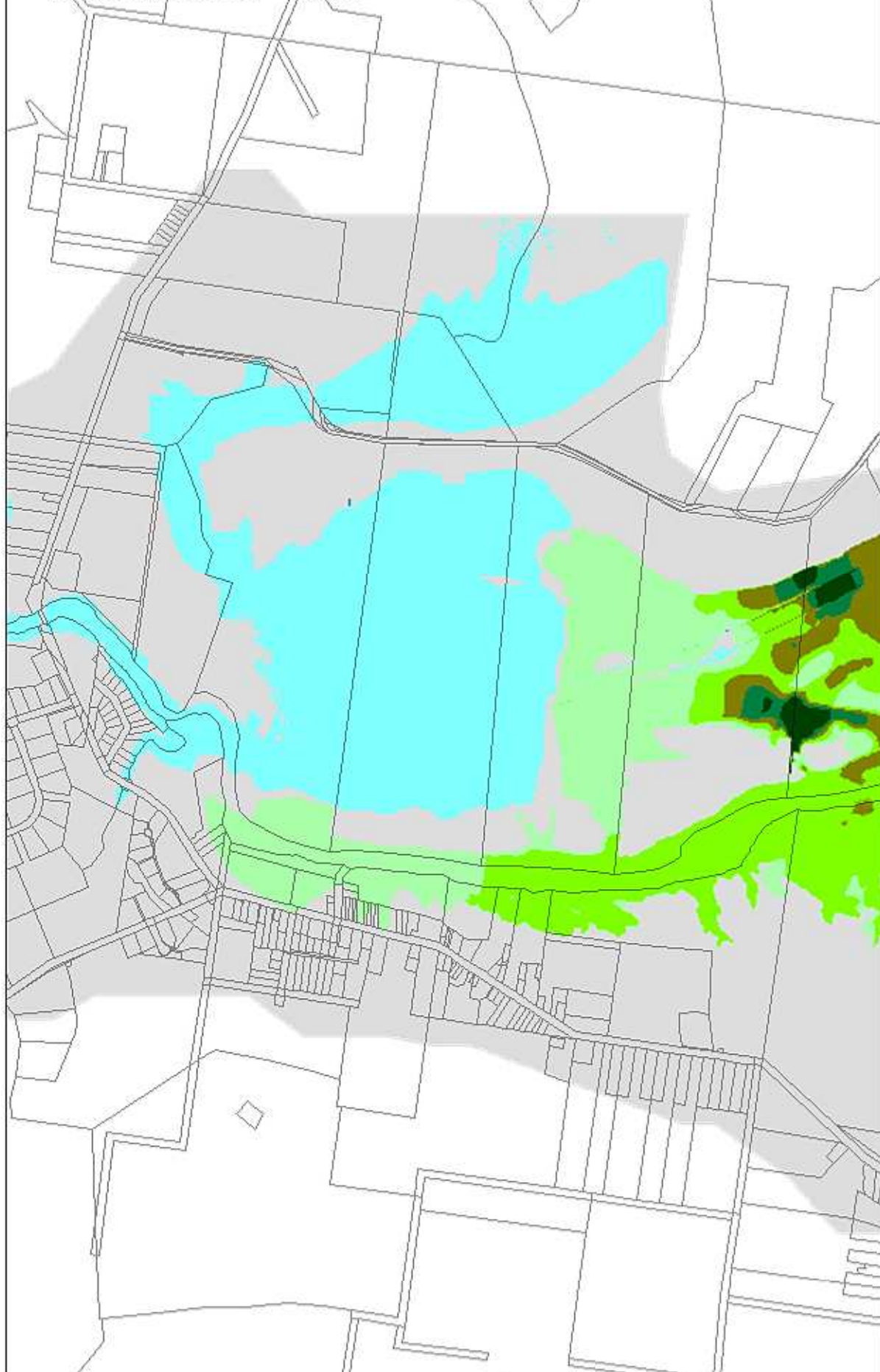
Option 3-4 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres



10% AEP Peak Flood Level Impacts  
Central Channel - Small



1% AEP Peak Flood Level Impacts  
Central Channel - Small

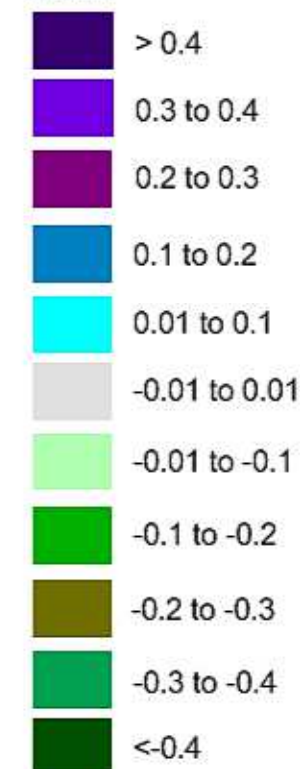


Figure 13-9

Option 3-5 Impacts  
Option Less Existing

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres





**Figure 13-10**

**Option 4-1 Impacts  
Option Less Existing**

KANGAROO VALLEY FRMSP

Peak Water Level Difference  
metres

- > 0.4
- 0.3 to 0.4
- 0.2 to 0.3
- 0.1 to 0.2
- 0.01 to 0.1
- 0.01 to 0.01
- 0.01 to -0.1
- 0.1 to -0.2
- 0.2 to -0.3
- 0.3 to -0.4
- <-0.4



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 10 / 08 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56

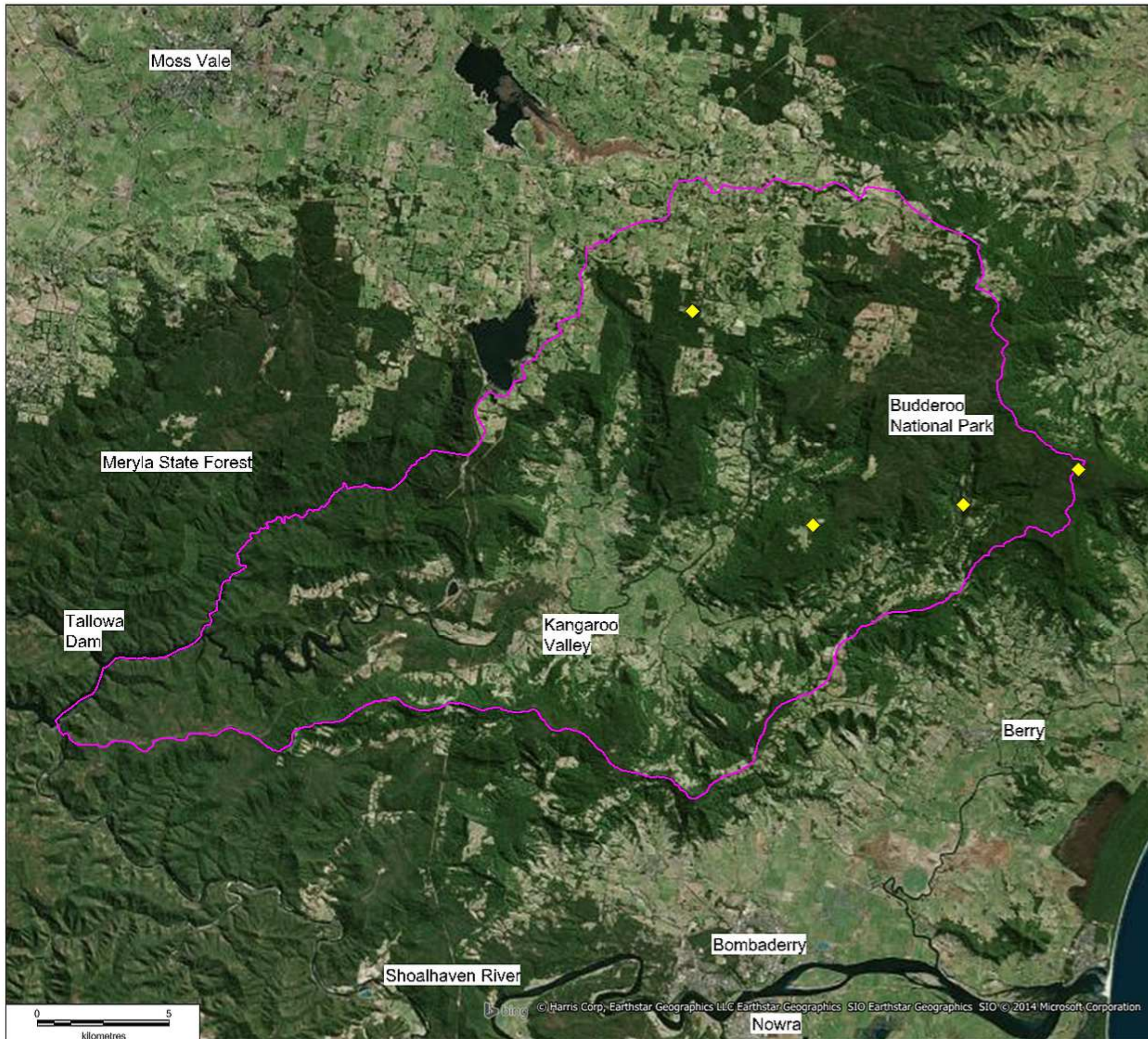




Figure 13-11

Pluviograph Locations  
For Flood Warning

Kangaroo Valley FRMSP

-  Catchment Area
-  Pluviographs



Map Produced by Cardno NSW/ACT Pty Ltd  
Date: 02 /04 / 2014  
Project: Kangaroo Valley FRMSP  
Coordinate System: MGA Zone 56