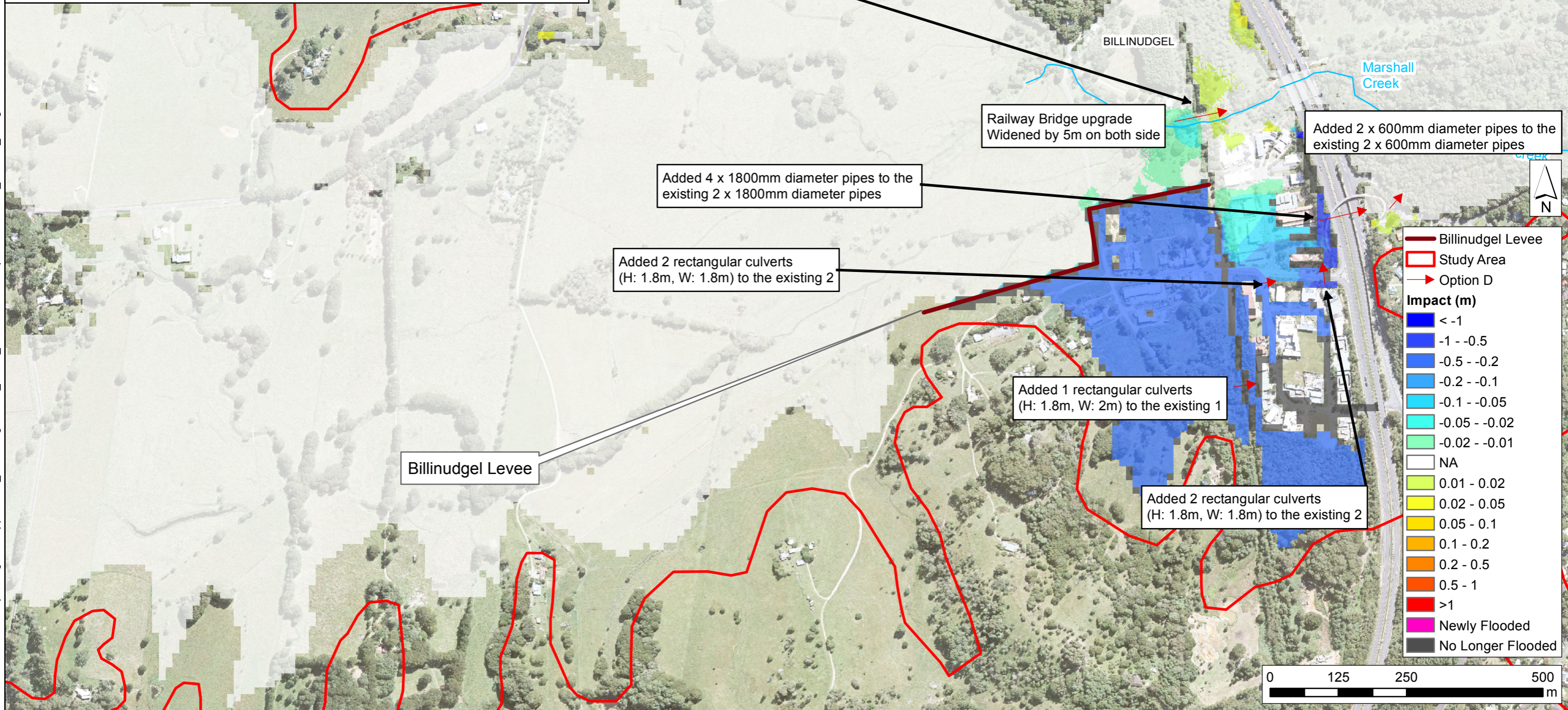
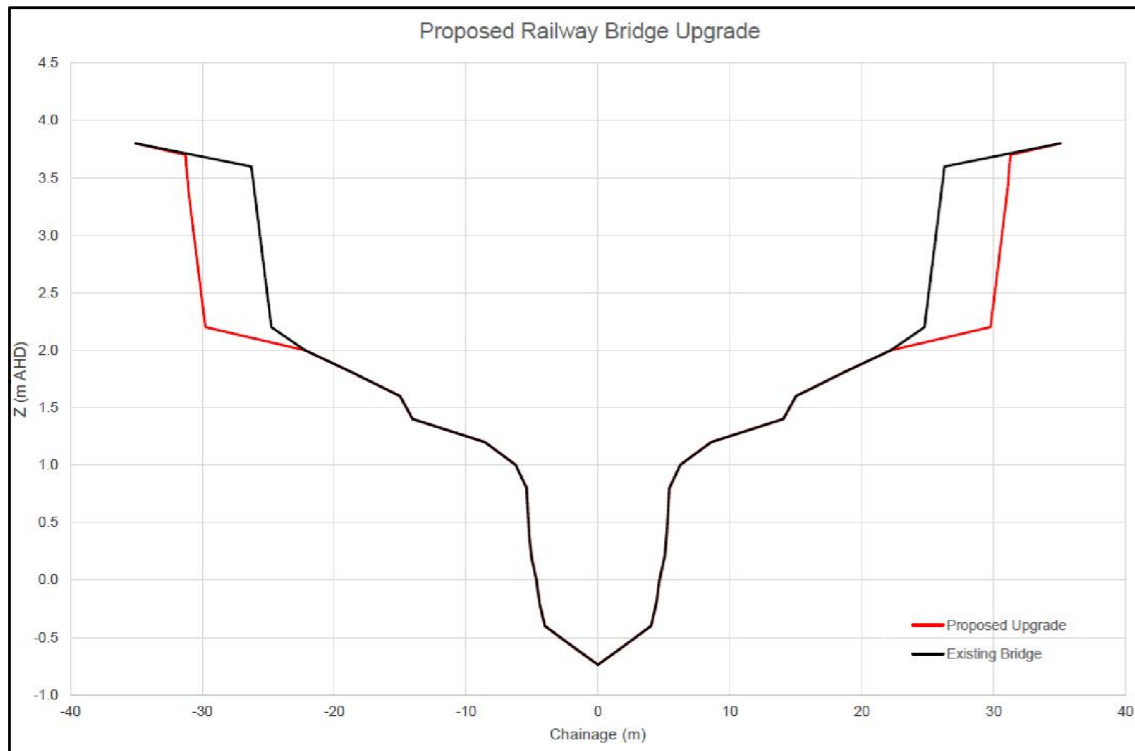




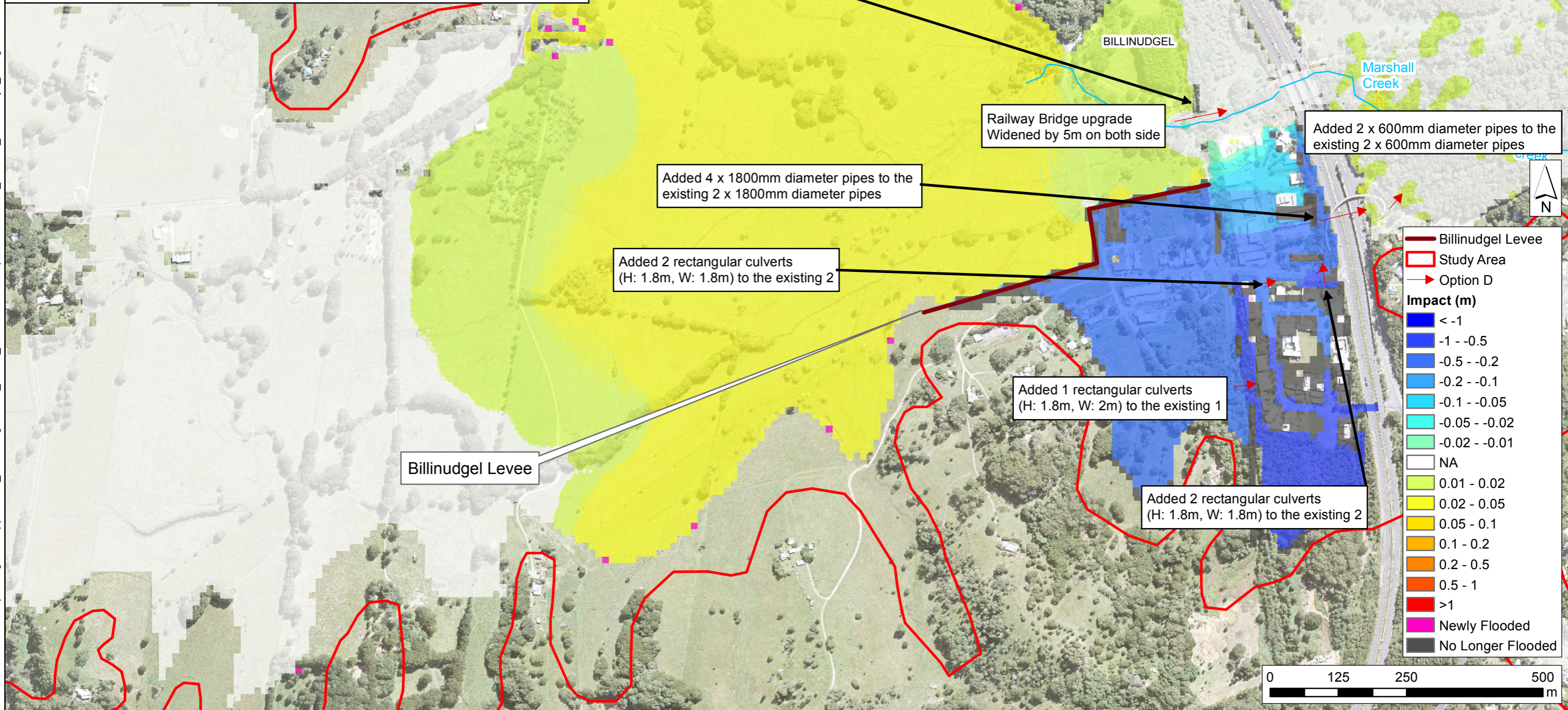
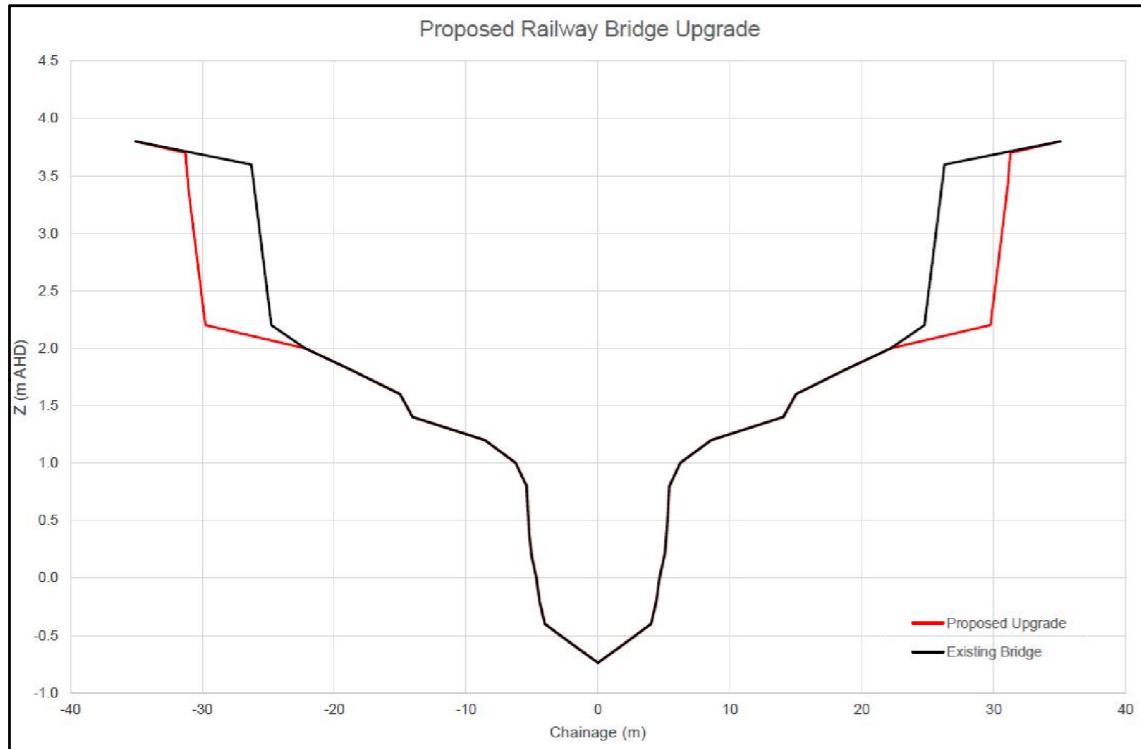
## Appendix M

**PEAK FLOOD DIFFERENCE OPTION CB2  
BILLINUDGEL UPGRADE AND LEVEE - DETAILED DESIGN  
NORTH BYRON FLOODPLAIN MANAGEMENT STUDY  
1% AEP EVENT**



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**PEAK FLOOD DIFFERENCE OPTION CB2  
BILLINUDGEL UPGRADE AND LEVEE - DETAILED DESIGN  
NORTH BYRON FLOODPLAIN MANAGEMENT STUDY  
CLIMATE CHANGE SENSITIVITY 2 EVENT (1%AEP + SLR2100 + 30% RAINFALL)**



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FIGURE M3  
**PEAK FLOOD DIFFERENCE OPTION BM2**  
**BILLINUDGEL UPGRADE - DETAILED DESIGN**  
**NORTH BYRON FLOODPLAIN MANAGEMENT STUDY**  
**1% AEP EVENT**

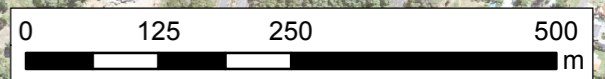
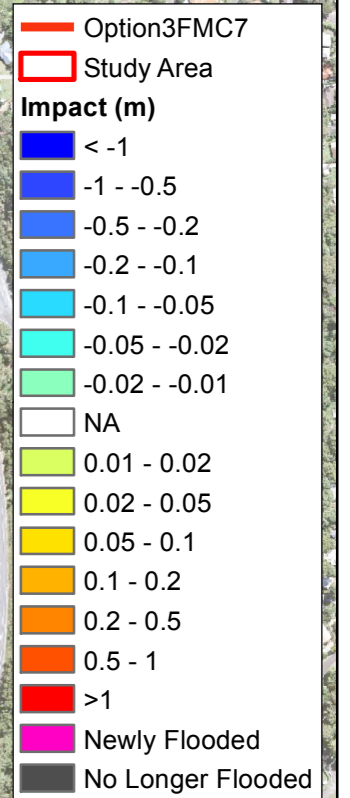
Left bank embankment removed on 60 m  
 Bridge infrastructure removed (only piers remaining)

South Creek Embankment Removed

BILLINUDGEL

Marshall Creek

Marshall Creek



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FIGURE M4  
**PEAK FLOOD DIFFERENCE OPTION BM2  
 BILLINUDGEL UPGRADE - DETAILED DESIGN  
 NORTH BYRON FLOODPLAIN MANAGEMENT STUDY  
 CLIMATE CHANGE SENSITIVITY 2 EVENT (1%AEP + SLR2100 + 30%RAINFALL)**

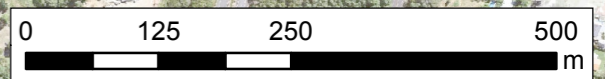
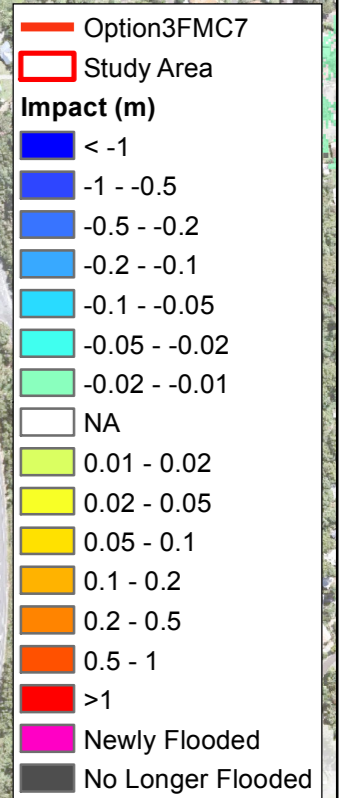
Left bank embankment removed on 60 m  
 Bridge infrastructure removed (only piers remaining)

BILLINUDGEL

Marshall  
 Creek

Marshall  
 Creek

South Creek Embankment Removed



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FIGURE M5  
OPTION AC  
AVOCADO COURT AND GREVILLEA AVENUE - DETAILED DESIGN  
NORTH BYRON FLOODPLAIN MANAGEMENT STUDY  
EXISTING CONFIGURATION



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- Overland Flow Path
- Pipes
- Inlet Pits
- Junction Pits
- Study Area

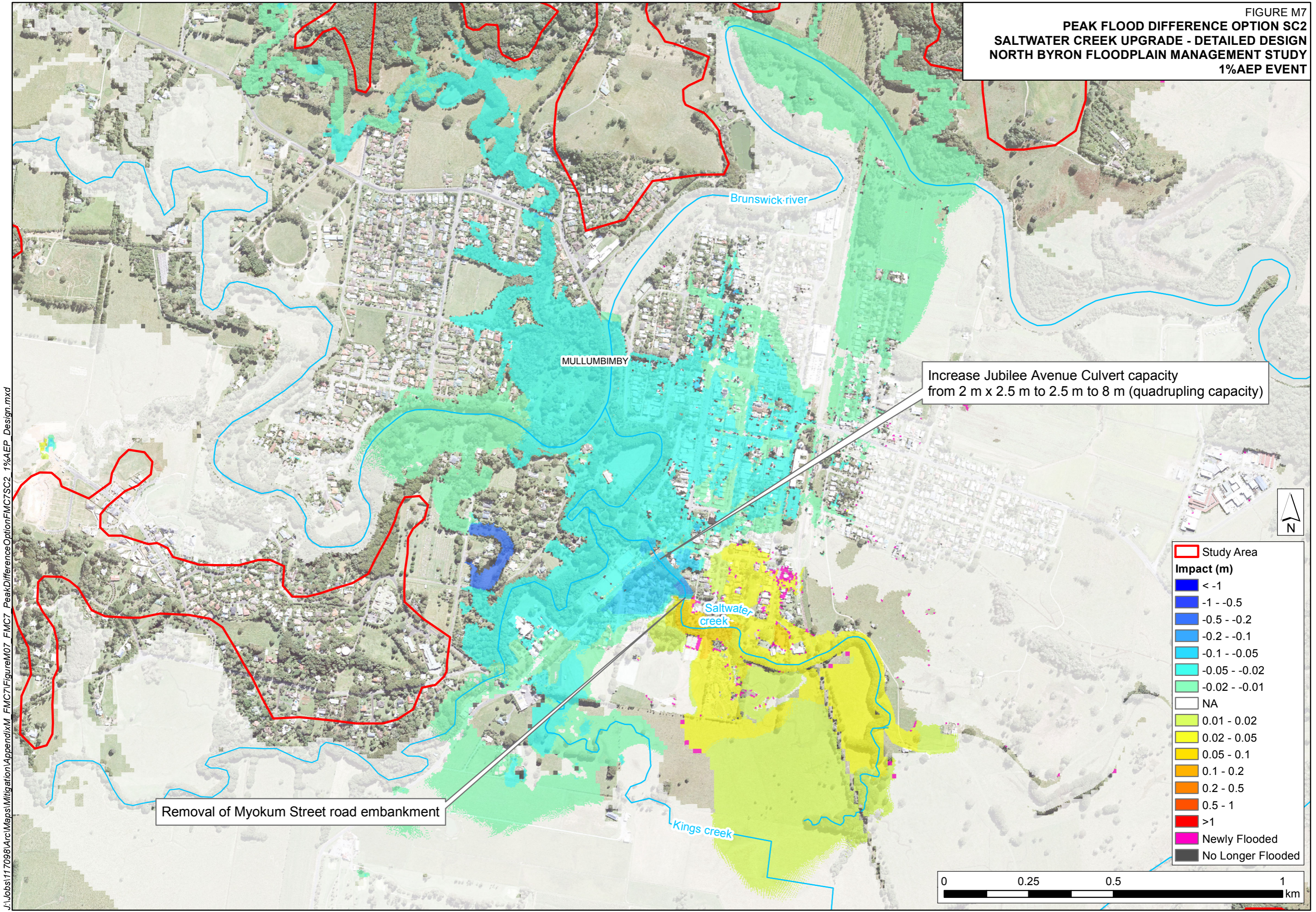
0 25 50 100 m

FIGURE M6  
OPTION AC  
AVOCADO COURT AND GREVILLEA AVENUE - DETAILED DESIGN  
NORTH BYRON FLOODPLAIN MANAGEMENT STUDY  
MITIGATION OPTION CONFIGURATION



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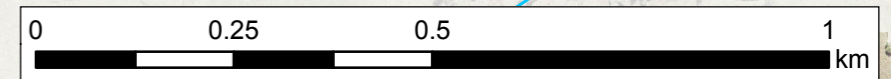
FIGURE M7  
**PEAK FLOOD DIFFERENCE OPTION SC2**  
**SALTWATER CREEK UPGRADE - DETAILED DESIGN**  
**NORTH BYRON FLOODPLAIN MANAGEMENT STUDY**  
**1% AEP EVENT**



Increase Jubilee Avenue Culvert capacity from 2 m x 2.5 m to 2.5 m to 8 m (quadrupling capacity)

Removal of Myokum Street road embankment

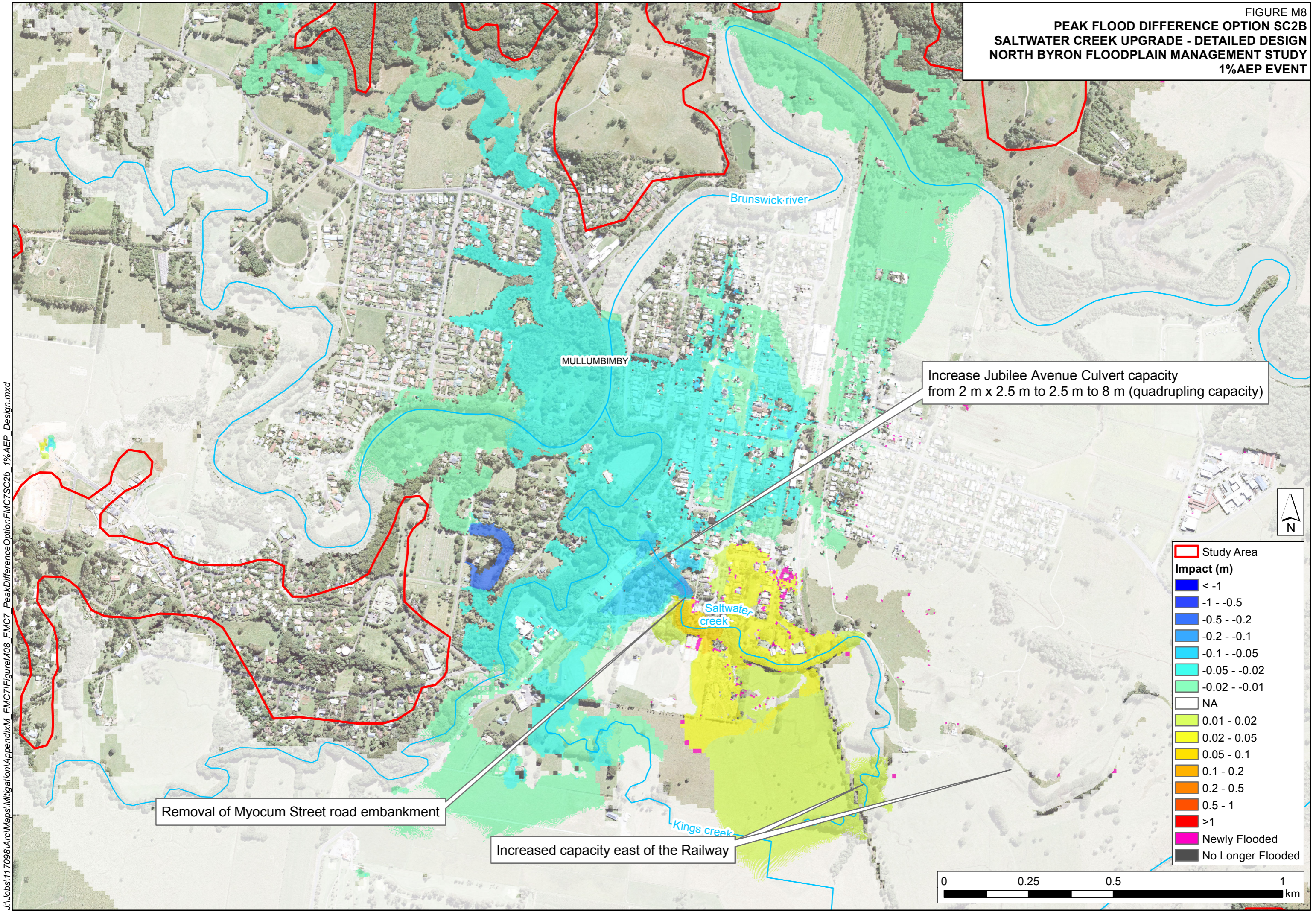
Study Area	
[Red outline]	Study Area
Impact (m)	
[Dark Blue]	< -1
[Blue]	-1 - -0.5
[Light Blue]	-0.5 - -0.2
[Cyan]	-0.2 - -0.1
[Light Cyan]	-0.1 - -0.05
[Teal]	-0.05 - -0.02
[Light Green]	-0.02 - -0.01
[White]	NA
[Light Yellow]	0.01 - 0.02
[Yellow]	0.02 - 0.05
[Orange]	0.05 - 0.1
[Dark Orange]	0.1 - 0.2
[Red-Orange]	0.2 - 0.5
[Red]	0.5 - 1
[Dark Red]	>1
[Pink]	Newly Flooded
[Grey]	No Longer Flooded



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FIGURE M8  
**PEAK FLOOD DIFFERENCE OPTION SC2B**  
**SALTWATER CREEK UPGRADE - DETAILED DESIGN**  
**NORTH BYRON FLOODPLAIN MANAGEMENT STUDY**  
**1%AEP EVENT**

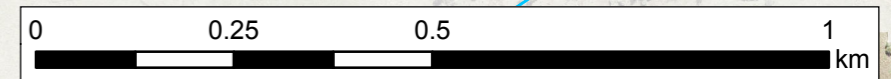


Increase Jubilee Avenue Culvert capacity from 2 m x 2.5 m to 2.5 m to 8 m (quadrupling capacity)

Removal of Myocum Street road embankment

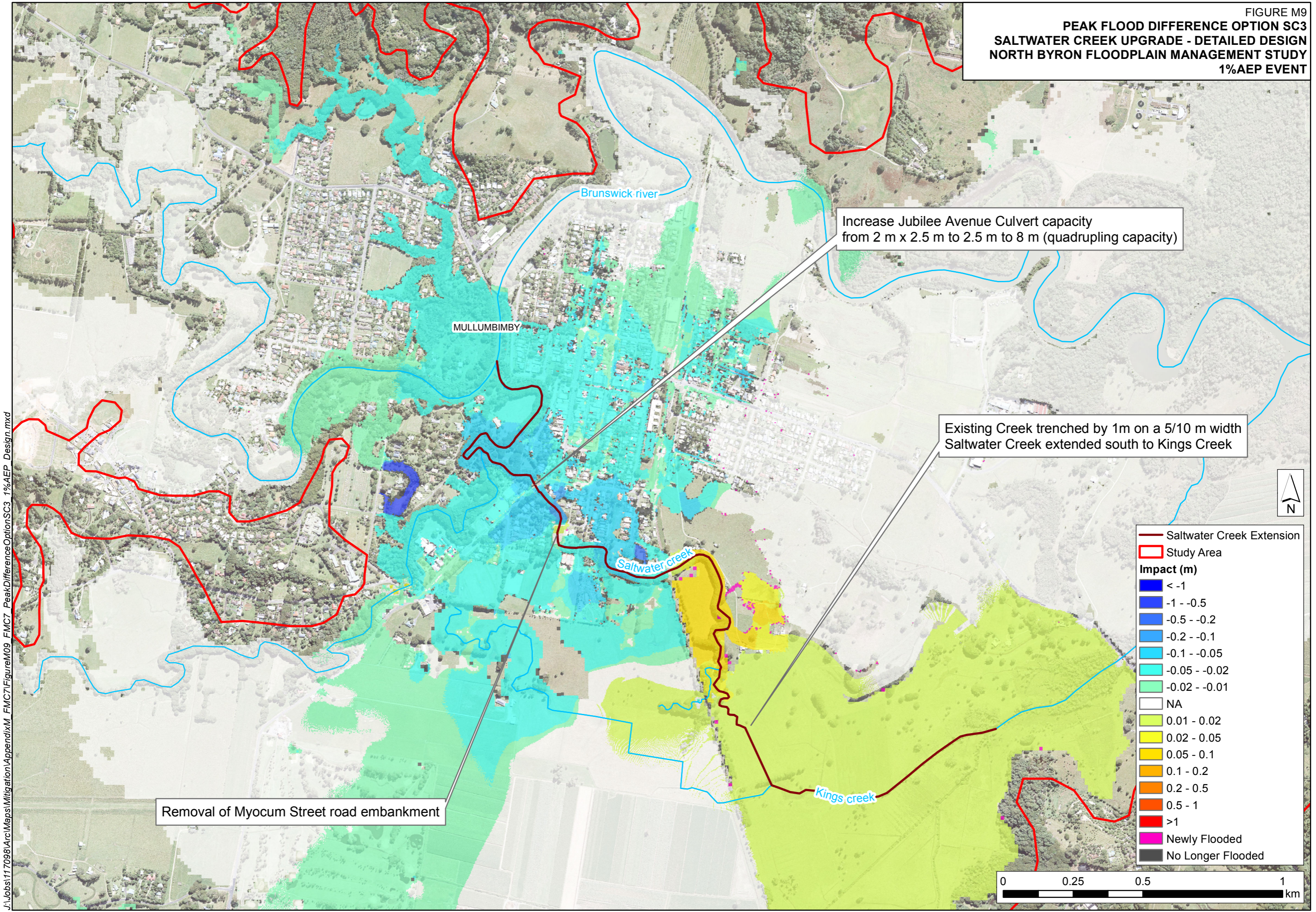
Increased capacity east of the Railway

Study Area	
[Red outline]	Study Area
Impact (m)	
[Dark Blue]	< -1
[Blue]	-1 - -0.5
[Light Blue]	-0.5 - -0.2
[Cyan]	-0.2 - -0.1
[Light Cyan]	-0.1 - -0.05
[Teal]	-0.05 - -0.02
[Green]	-0.02 - -0.01
[White]	NA
[Light Green]	0.01 - 0.02
[Yellow-Green]	0.02 - 0.05
[Yellow]	0.05 - 0.1
[Orange-Yellow]	0.1 - 0.2
[Orange]	0.2 - 0.5
[Red-Orange]	0.5 - 1
[Red]	>1
[Pink]	Newly Flooded
[Grey]	No Longer Flooded



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FIGURE M9  
**PEAK FLOOD DIFFERENCE OPTION SC3**  
**SALTWATER CREEK UPGRADE - DETAILED DESIGN**  
**NORTH BYRON FLOODPLAIN MANAGEMENT STUDY**  
**1% AEP EVENT**

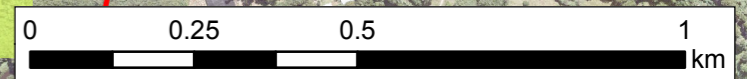


Increase Jubilee Avenue Culvert capacity from 2 m x 2.5 m to 2.5 m to 8 m (quadrupling capacity)

Existing Creek trenched by 1m on a 5/10 m width Saltwater Creek extended south to Kings Creek

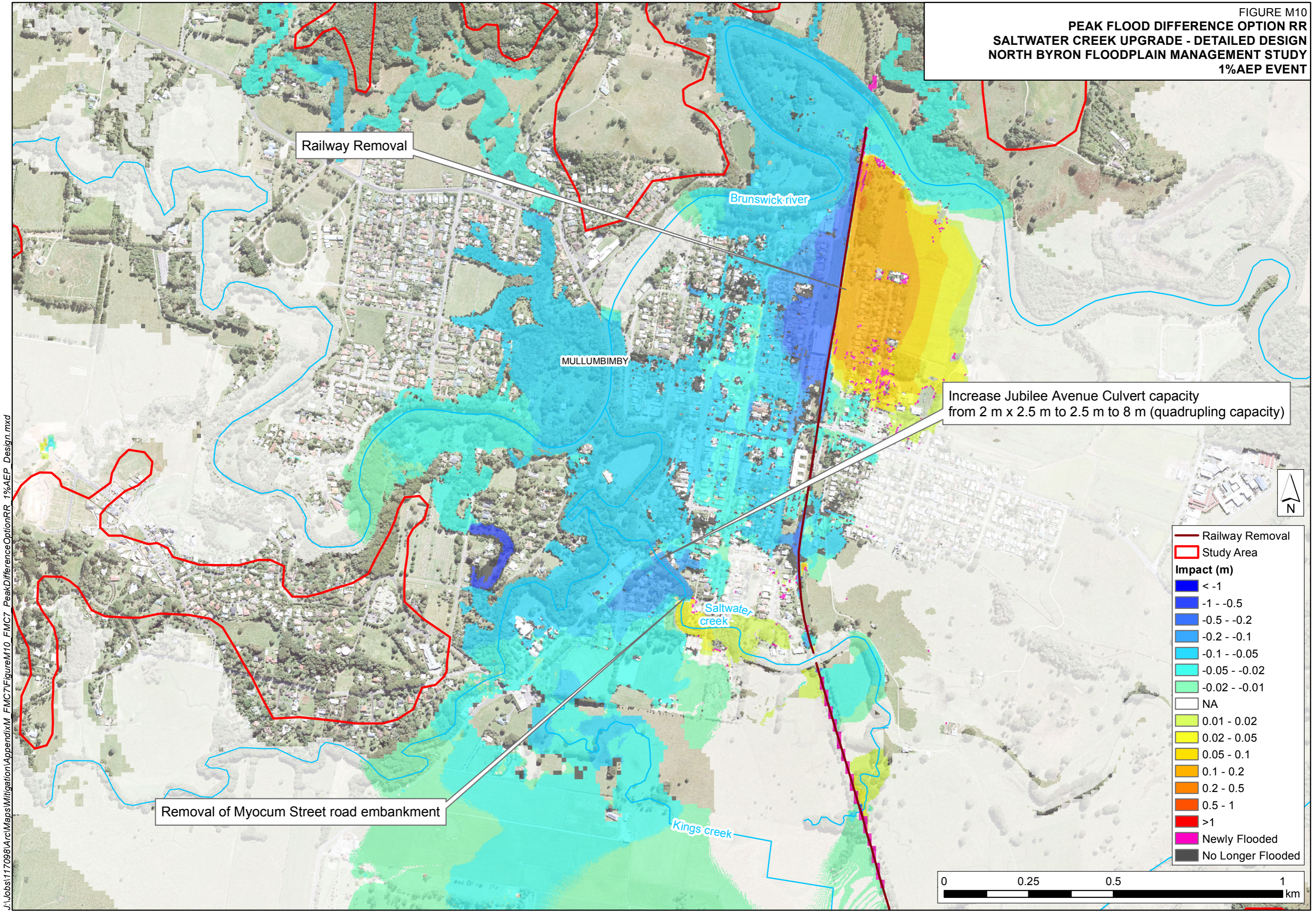
Removal of Myocum Street road embankment

- Saltwater Creek Extension
- ▭ Study Area
- Impact (m)**
- ▭ < -1
- ▭ -1 - -0.5
- ▭ -0.5 - -0.2
- ▭ -0.2 - -0.1
- ▭ -0.1 - -0.05
- ▭ -0.05 - -0.02
- ▭ -0.02 - -0.01
- ▭ NA
- ▭ 0.01 - 0.02
- ▭ 0.02 - 0.05
- ▭ 0.05 - 0.1
- ▭ 0.1 - 0.2
- ▭ 0.2 - 0.5
- ▭ 0.5 - 1
- ▭ >1
- ▭ Newly Flooded
- ▭ No Longer Flooded



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FIGURE M10  
**PEAK FLOOD DIFFERENCE OPTION RR**  
**SALTWATER CREEK UPGRADE - DETAILED DESIGN**  
**NORTH BYRON FLOODPLAIN MANAGEMENT STUDY**  
**1% AEP EVENT**



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— Railway Removal  
 [Red Outline] Study Area

**Impact (m)**

- [Dark Blue] < -1
- [Blue] -1 - -0.5
- [Light Blue] -0.5 - -0.2
- [Cyan] -0.2 - -0.1
- [Light Cyan] -0.1 - -0.05
- [Teal] -0.05 - -0.02
- [Light Green] -0.02 - -0.01
- [White] NA
- [Light Yellow] 0.01 - 0.02
- [Yellow] 0.02 - 0.05
- [Orange-Yellow] 0.05 - 0.1
- [Orange] 0.1 - 0.2
- [Dark Orange] 0.2 - 0.5
- [Red-Orange] 0.5 - 1
- [Red] >1
- [Pink] Newly Flooded
- [Grey] No Longer Flooded

