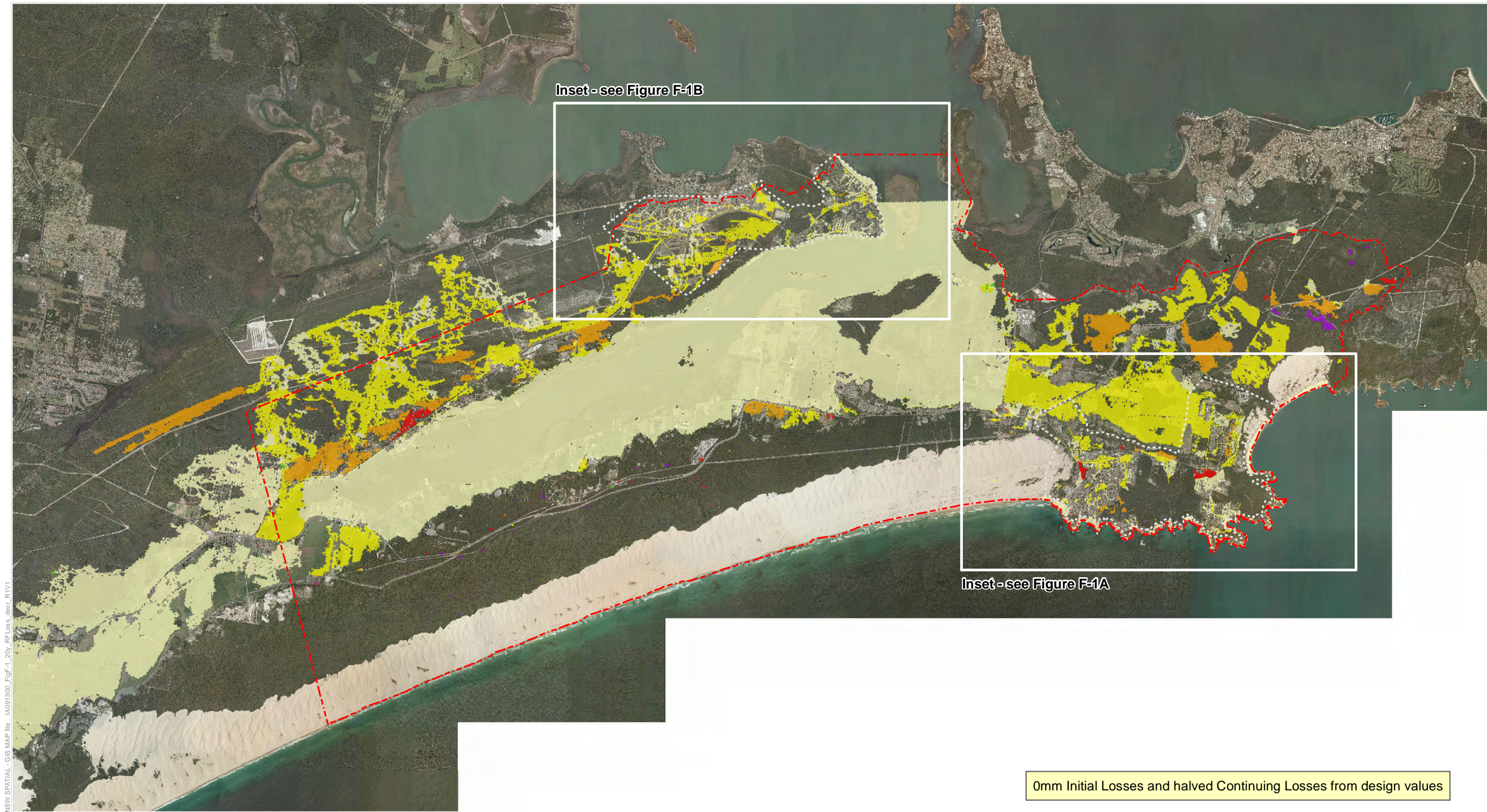


Appendix F. Sensitivity Analysis Flood Impact Mapping

List of Figures

- Figure F-1 and insets (A) and (B) - 5% AEP Change in Flood Level - Reduced Rainfall Losses
- Figure F-2 and insets (A) and (B) - 1% AEP Change in Flood Level - Reduced Rainfall Losses
- Figure F-3 and insets (A) and (B) - 5% AEP Change in Flood Level - Reduced Hydraulic Roughness
- Figure F-4 and insets (A) and (B) - 1% AEP Change in Flood Level - Reduced Hydraulic Roughness
- Figure F-5 and insets (A) and (B) - 5% AEP Change in Flood Level - Increased Hydraulic Roughness
- Figure F-6 and insets (A) and (B) - 1% AEP Change in Flood Level - Increased Hydraulic Roughness
- Figure F-7 and insets (A) and (B) - 5% AEP Change in Flood Level - Increased Blockage of Hydraulic Structures
- Figure F-8 and insets (A) and (B) - 1% AEP Change in Flood Level - Increased Blockage of Hydraulic Structures
- Figure F-9 - 1% AEP Change in Flood Level - Floodgates Partially Open



NSW SPATIAL - GIS MAP file : JA091300_EgF-1_20y_RFLoss_dec_r1v1

Legend

Change in Flood Level (m)

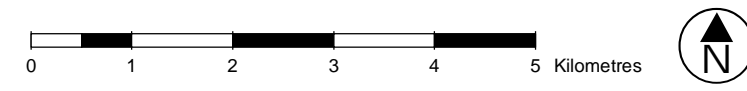
- < -0.5
- 0.5 - -0.3

- 0.3 - -0.1
- 0.1 - -0.01
- 0.01 - 0.01
- 0.01 - 0.1

- 0.1 - 0.3
- 0.3 - 0.5
- > 0.5

- Study Area
- Urban Area TUFLOW Model (2m grid)

0mm Initial Losses and halved Continuing Losses from design values



1:75,000@ A3

Figure F-1 5% AEP Change in Flood Level - Reduced Rainfall Losses- Overall Study Area View





NSW SPATIAL - GIS MAP file : JA091300_EgIF-1_20y_RFLoss_dec_r1v1

0mm Initial Losses and halved Continuing Losses from design values

Legend

Change in Flood Level (m)

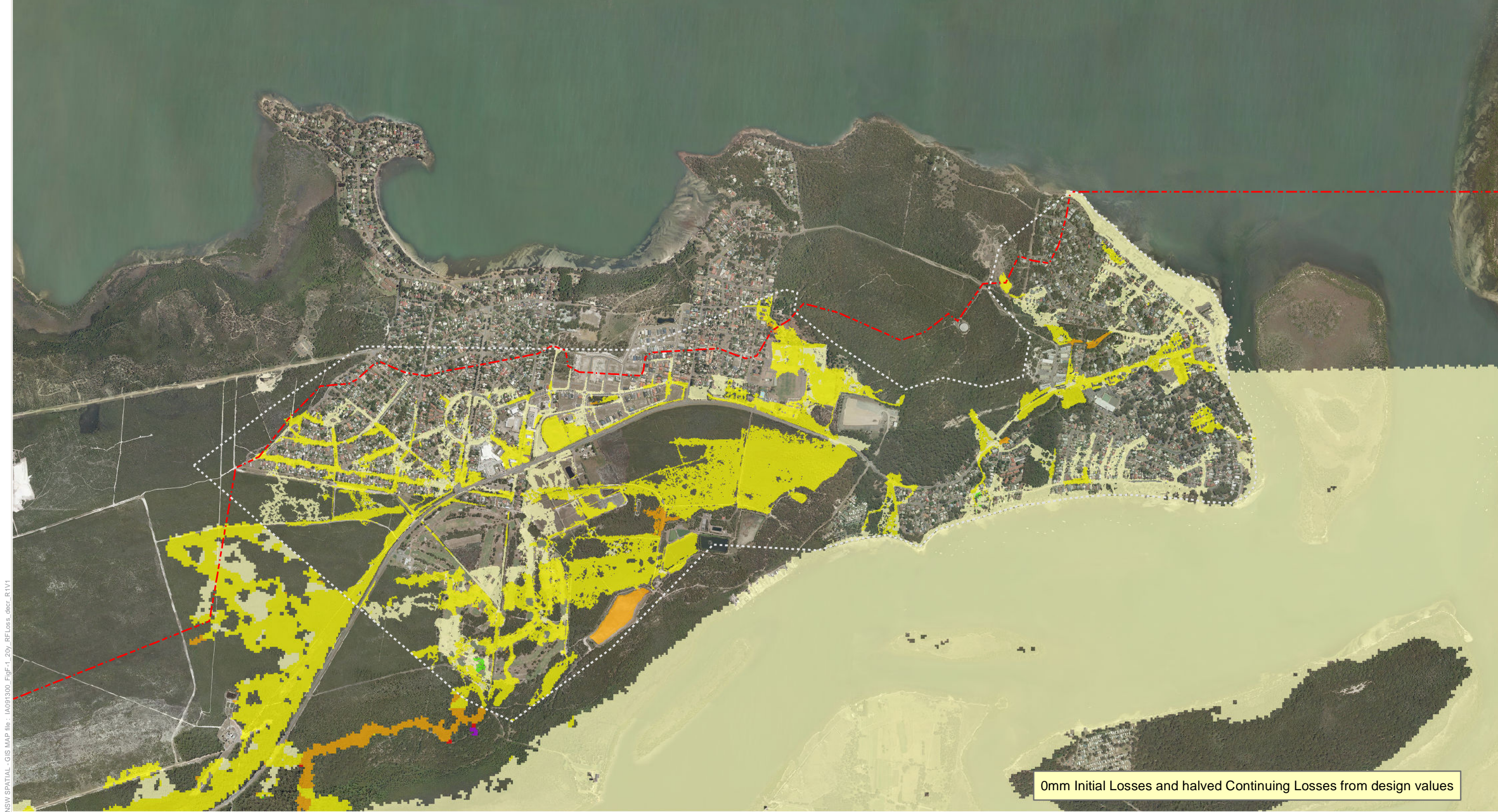
 < -0.5	 -0.3 - -0.1	 0.1 - 0.3	 Study Area
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5	 Urban Area TUFLOW Model (2m grid)
	 -0.01 - 0.01	 > 0.5	
	 0.01 - 0.1		



1:20,000@ A3

Figure F-1A 5% AEP Change in Flood Level - Reduced Rainfall Losses- Anna Bay Urban Area





NSW SPATIAL - GIS MAP file : JA091300_EgIF-1_20y_RFLoss_dec_r1v1

0mm Initial Losses and halved Continuing Losses from design values

Legend

Change in Flood Level (m)

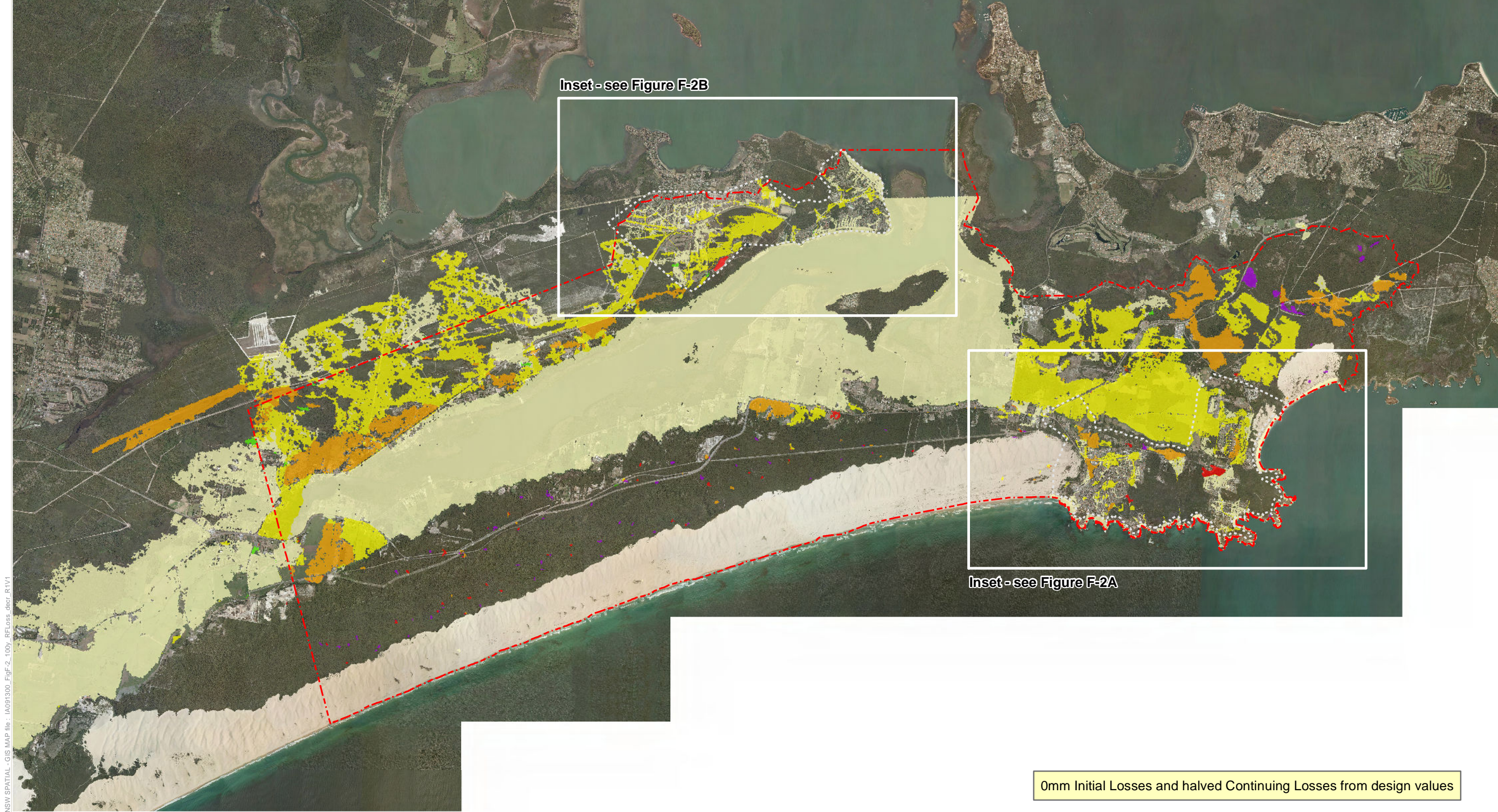
 < -0.5	 -0.3 - -0.1	 0.1 - 0.3	 Study Area
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5	 Urban Area TUFLOW Model (2m grid)
	 -0.01 - 0.01	 > 0.5	
	 0.01 - 0.1		



1:20,000@ A3

Figure F-1B 5% AEP Change in Flood Level - Reduced Rainfall Losses- Tilligerry Peninsula Urban Area





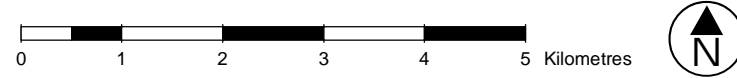
NSW SPATIAL - GIS MAP file : JA091300_FigF-2_100y_RFLoss_decR_R1V1

Legend

Change in Flood Level (m)

 < -0.5	 -0.3 - -0.1	 0.1 - 0.3	 Study Area
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5	 Urban Area TUFLOW Model (2m grid)
	 -0.01 - 0.01	 > 0.5	
	 0.01 - 0.1		

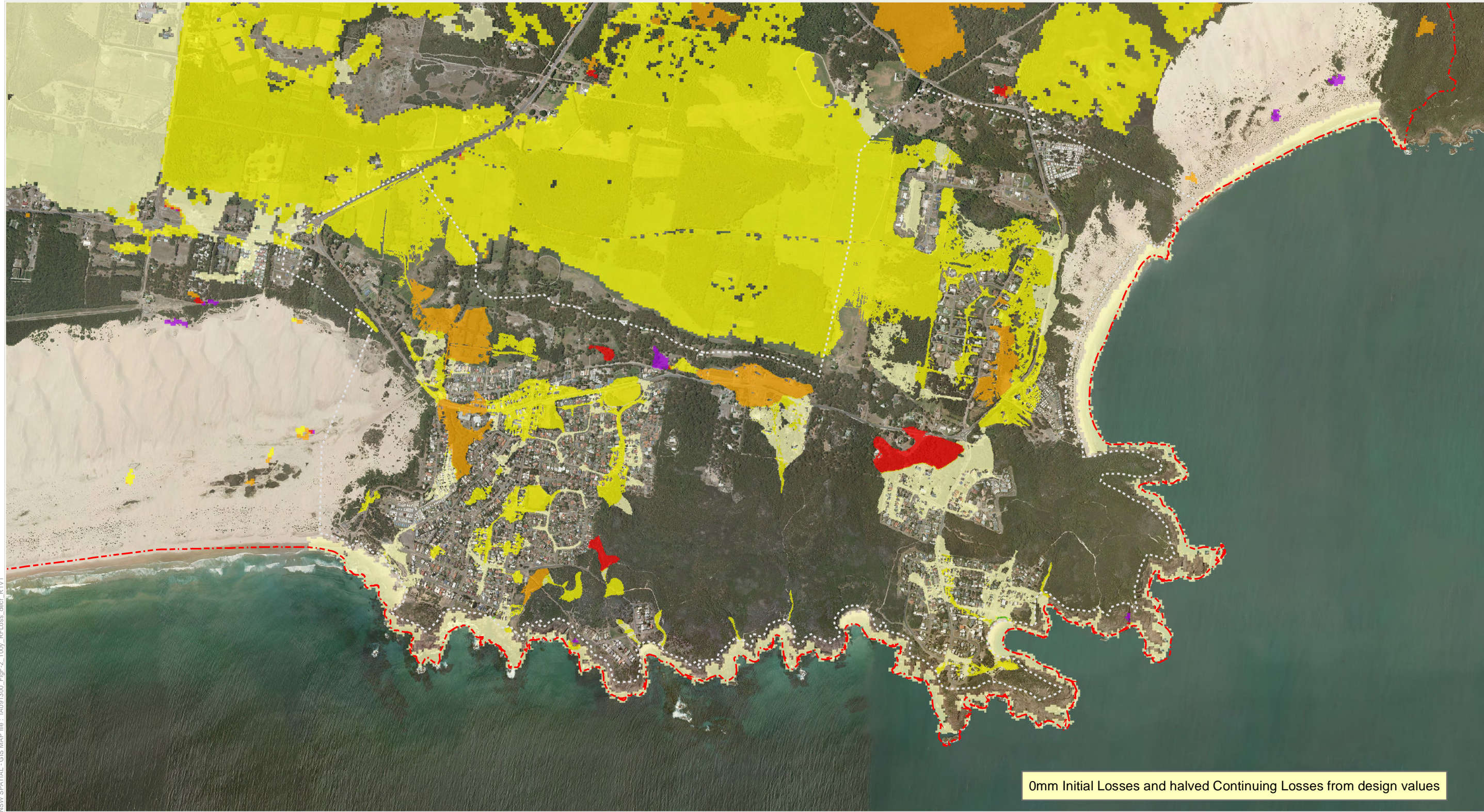
0mm Initial Losses and halved Continuing Losses from design values



1:75,000@ A3

Figure F-2 1% AEP Change in Flood Level - Reduced Rainfall Losses- Overall Study Area View





NSW SPATIAL - GIS MAP file : JA091300_FigF-2_100y_RFLoss_decz_R1V1

Legend

Change in Flood Level (m)

- < -0.5
- 0.5 - -0.3
- 0.3 - -0.1
- 0.1 - -0.01
- 0.01 - 0.01
- 0.01 - 0.1
- 0.1 - 0.3
- 0.3 - 0.5
- > 0.5

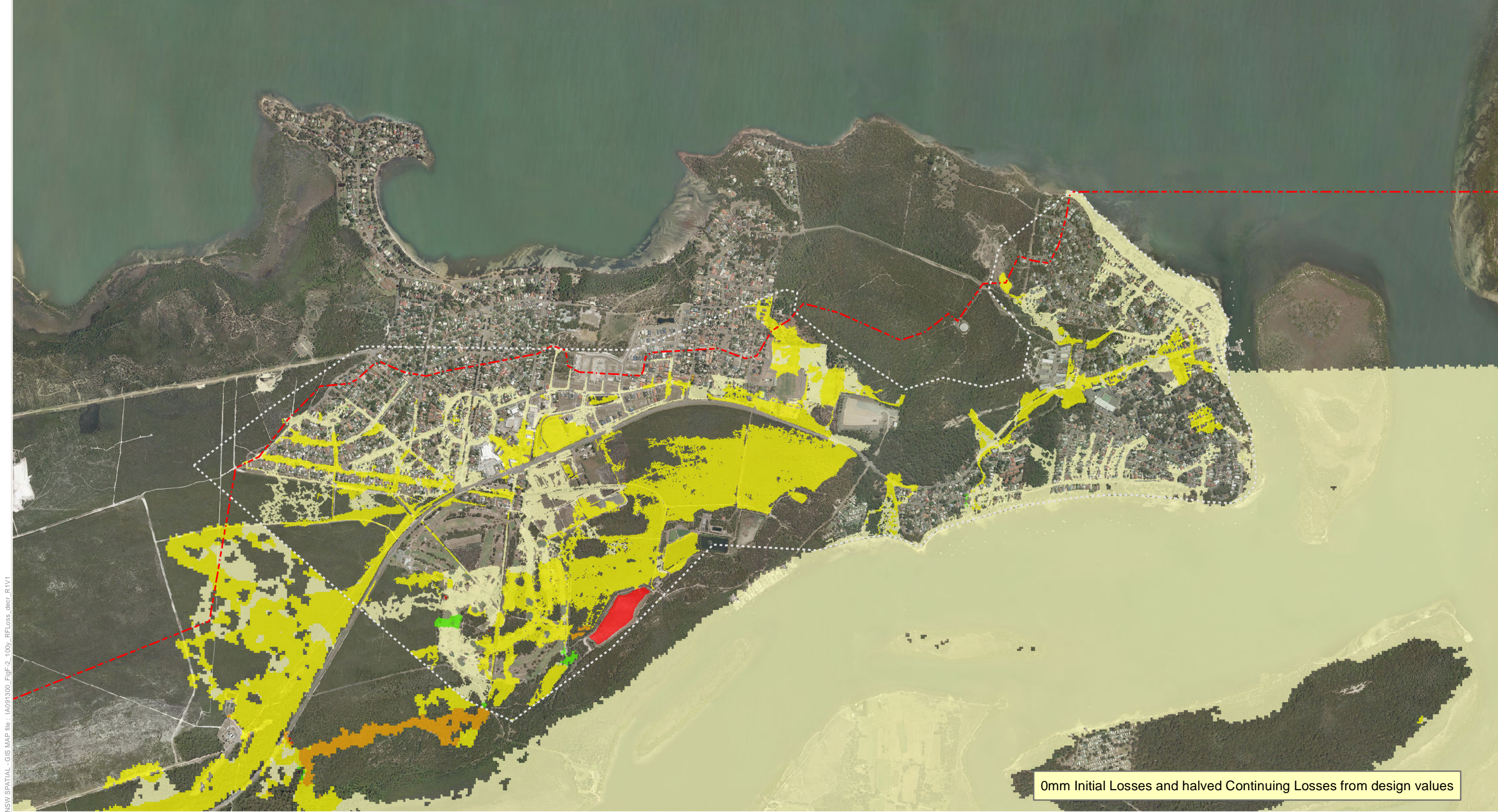
- Study Area
- Urban Area TUFLOW Model (2m grid)



1:20,000@ A3

Figure F-2A 1% AEP Change in Flood Level - Reduced Rainfall Losses- Anna Bay Urban Area





NSW SPATIAL - GIS MAP file : JA091300_EgIF-2_100y_RFLoss_decR_R1V1

Legend

Change in Flood Level (m)

 < -0.5	 -0.3 - -0.1	 0.1 - 0.3	 Study Area
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5	 Urban Area TUFLOW Model (2m grid)
	 -0.01 - 0.01	 > 0.5	
	 0.01 - 0.1		



1:20,000@ A3

Figure F-2B 1% AEP Change in Flood Level - Reduced Rainfall Losses- Tilligerry Peninsula Urban Area





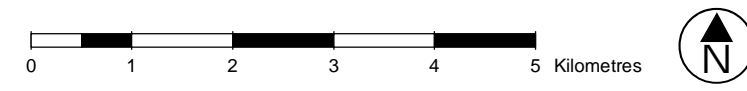
NSW SPATIAL - GIS MAP file : JA091300_FigF-3_20y_Rough_dscr_R1V1

Legend

Change in Flood Level (m)

- | | | | |
|---|--|---|--|
| < -0.5 | -0.3 - -0.1 | 0.1 - 0.3 | Study Area |
| -0.5 - -0.3 | -0.1 - -0.01 | 0.3 - 0.5 | Urban Area TUFLOW Model (2m grid) |
| | -0.01 - 0.01 | > 0.5 | |
| | 0.01 - 0.1 | | |

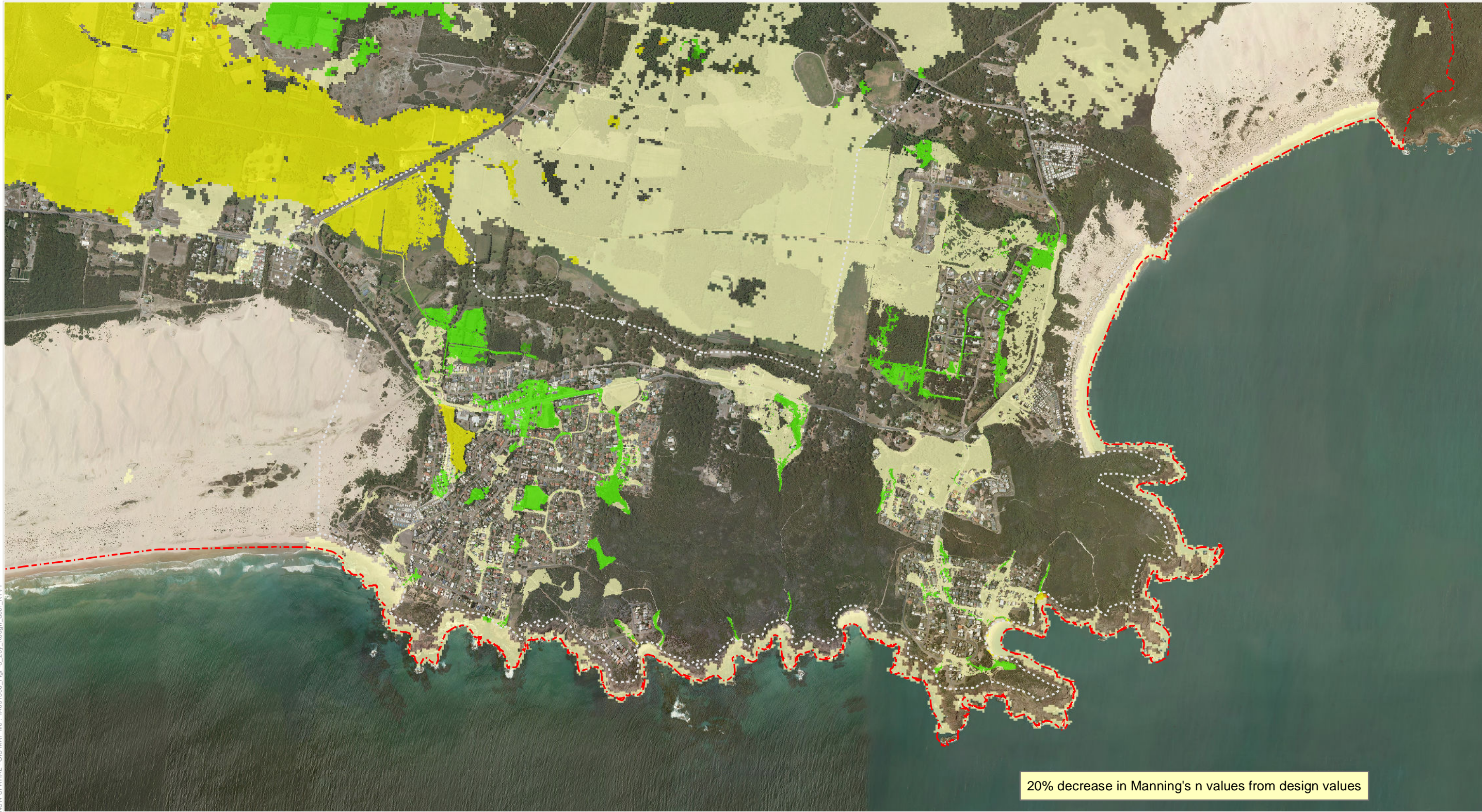
20% decrease in Manning's n values from design values



1:75,000@ A3

Figure F-3 5% AEP Change in Flood Level - Reduced Hydraulic Roughness - Overall Study Area View










NSW SPATIAL - GIS MAP file : JA091300_FigF-3_20y_Rough_dscr_R1V1

Legend

Change in Flood Level (m)

 < -0.5	 -0.3 - -0.1	 0.1 - 0.3
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5
	 -0.01 - 0.01	 > 0.5
	 0.01 - 0.1	

-  Study Area
-  Urban Area TUFLOW Model (2m grid)

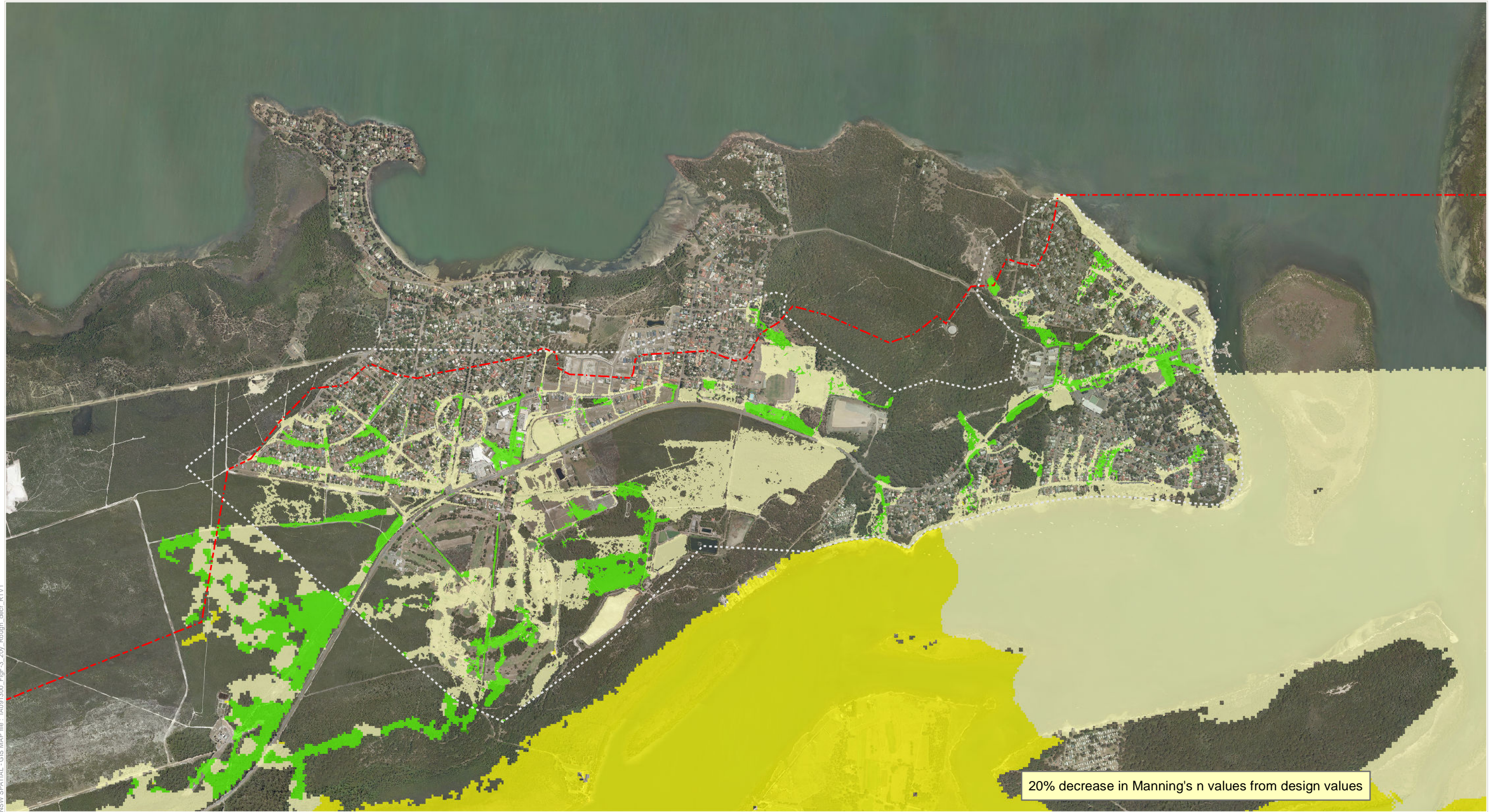


1:20,000@ A3

Figure F-3A 5% AEP Change in Flood Level - Reduced Hydraulic Roughness - Anna Bay Urban Area



NSW SPATIAL - GIS MAP file : JA091300_Egfr-3_20y_Rough_dscr_R1V1



Legend

Change in Flood Level (m)

- < -0.5
- 0.5 - -0.3

- 0.3 - -0.1
- 0.1 - -0.01
- 0.01 - 0.01
- 0.01 - 0.1

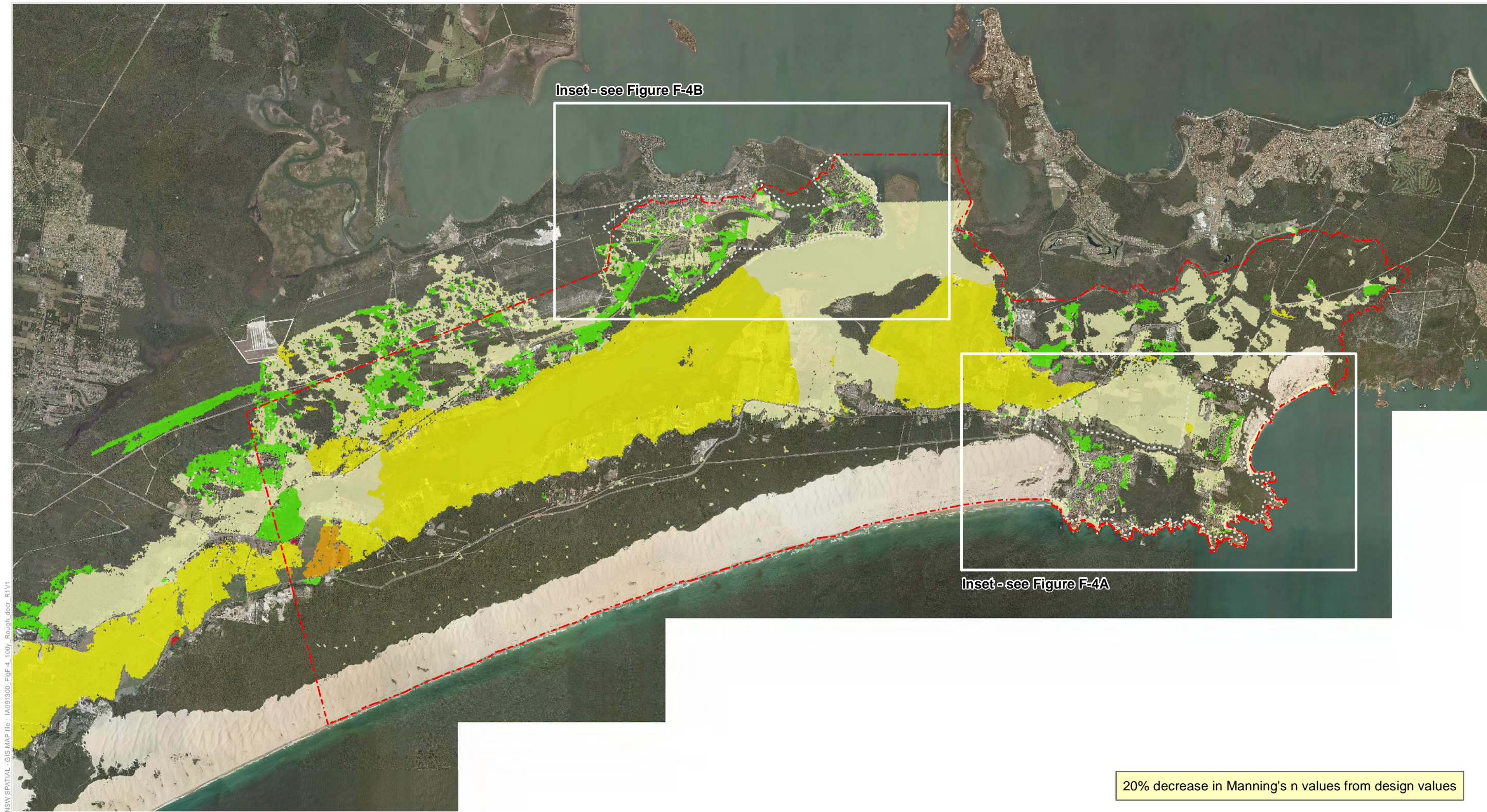
- 0.1 - 0.3
- 0.3 - 0.5
- > 0.5

- Study Area
- Urban Area TUFLOW Model (2m grid)



Figure F-3B 5% AEP Change in Flood Level - Reduced Hydraulic Roughness - Tilligerry Peninsula Urban Area















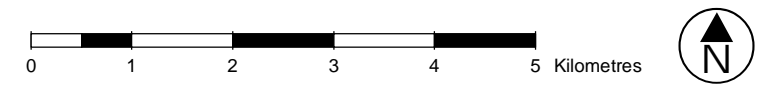
NSW SPATIAL - GIS MAP file : JA091300_FigF-4_100y_Rough_decr_RTVI

Legend

Change in Flood Level (m)

 < -0.5	 -0.3 - -0.1	 0.1 - 0.3	 Study Area
 -0.5 - -0.3	 -0.1 - -0.01	 0.3 - 0.5	 Urban Area TUFLOW Model (2m grid)
	 -0.01 - 0.01	 > 0.5	
	 0.01 - 0.1		

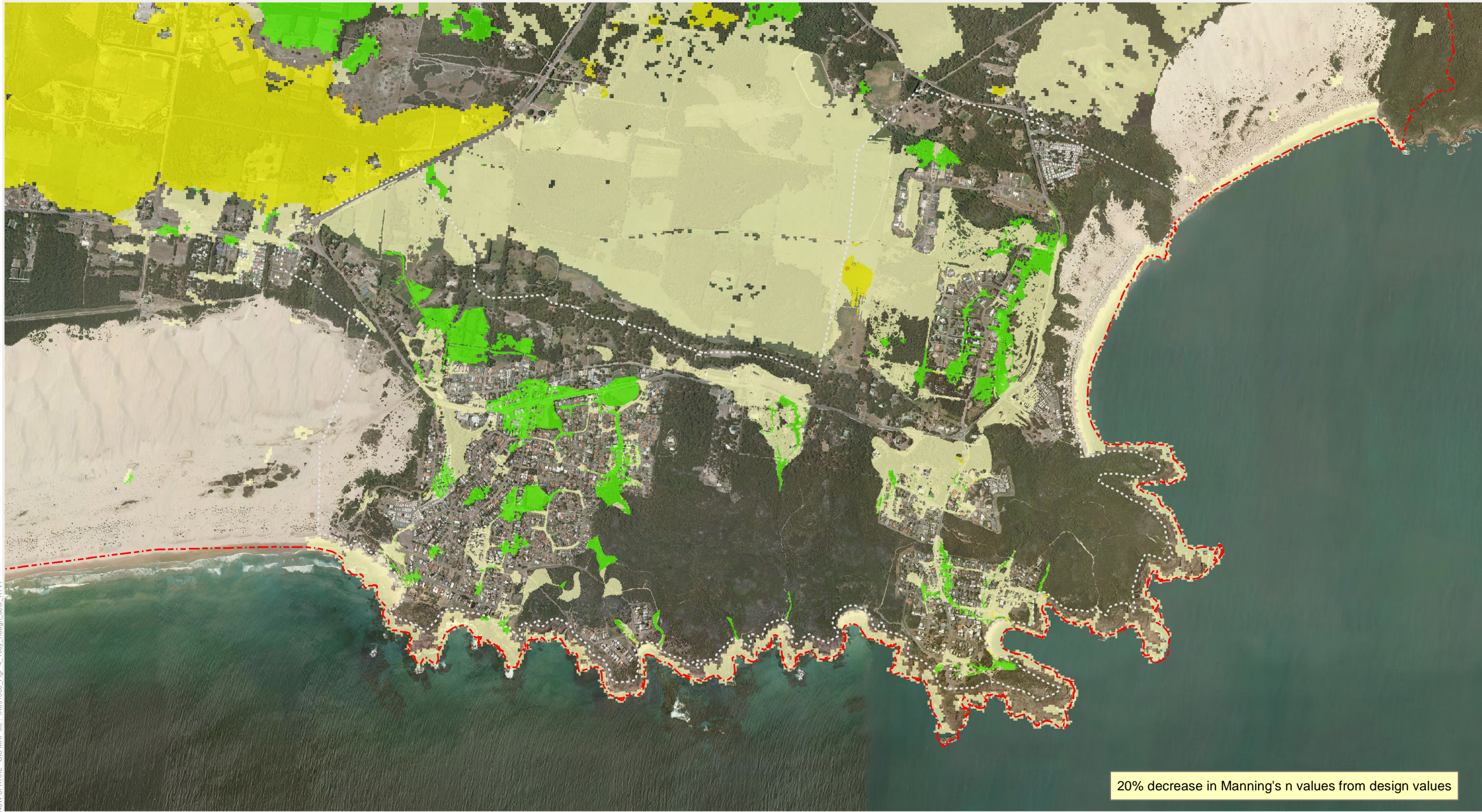
20% decrease in Manning's n values from design values



1:75,000@ A3

Figure F-4 1% AEP Change in Flood Level - Reduced Hydraulic Roughness - Overall Study Area View







NSW SPATIAL - GIS MAP file : JA091300_FigF-4_100y_Rough_decr_RTVI

Legend

Change in Flood Level (m)

	< -0.5		-0.3 - -0.1		0.1 - 0.3
	-0.5 - -0.3		-0.1 - -0.01		0.3 - 0.5
			-0.01 - 0.01		> 0.5
			0.01 - 0.1		

-  Study Area
-  Urban Area TUFLOW Model (2m grid)



1:20,000@ A3

Figure F-4A 1% AEP Change in Flood Level - Reduced Hydraulic Roughness - Anna Bay Urban Area







NSW SPATIAL - GIS MAP file : JA091300_EgIF-4_100y_Rough_decr_RT1V1

Legend

Change in Flood Level (m)

	< -0.5		-0.3 - -0.1		0.1 - 0.3
	-0.5 - -0.3		-0.1 - -0.01		0.3 - 0.5
			-0.01 - 0.01		> 0.5
			0.01 - 0.1		

-  Study Area
-  Urban Area TUFLOW Model (2m grid)



1:20,000@ A3

Figure F-4B 1% AEP Change in Flood Level - Reduced Hydraulic Roughness - Tilligerry Peninsula Urban Area

