

Technical Evidence Appendix Report – Part 1 of 2

Coastal Hazard Adaptation Strategy – Phase 4 and 5

Bundaberg Regional Council

03 October 2019





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1 INTRODUCTION

This Technical Evidence Appendix document provides all of the supporting documentation associated with the development of the Phase 4 and 5 Identify Key Assets Potentially Impacted and Risk Assessment in Coastal Hazard Areas for the Bundaberg Region Coastal Hazard Adaptation Strategy.

The analyses undertaken provide an understanding of the coastal hazard challenges and risks. Table 1-1 summarises the content of the Technical Evidence Appendix document.

TABLE 1-1 SUMMARY OF TECHNICAL EVIDENCE APPENDIX DOCUMENT

Part	Description	Appendix
1	Identification and prioritisation of assets exposed to coastal hazard	Appendix A – Asset Identification for 5% and 0.2% AEP Storm Tide Inundation Scenarios Appendix B – Environmental Value Mapping Appendix C – Vulnerability Assessment and Asset Prioritisation
2	Risk assessment of key assets in coastal hazard areas	Appendix D – Environmental Analysis Technical Summary Report and Environmental Consequence Results Appendix E – Economic and Social Analysis Technical Report and Consequence Results Appendix F – Risk Analysis Results



APPENDIX A – ASSET IDENTIFICATION FOR 5% AND 0.2% AEP STORM TIDE INUNDATION SCENARIOS



ASSETS EXPOSED TO COASTAL HAZARD BY COASTAL SETTLEMENT

To represent the full range of available mapped AEP likelihood events, asset counts were undertaken, by settlement, for the present-day 5% AEP and 0.2% AEP likelihood storm tide inundation events.

This provides additional data that contributes to the identification of assets potentially impacted by coastal hazard. The following tables provide the number assets likely to be exposed to storm tide inundation and illustrates the differences in assets likely to be exposed on a settlement by settlement basis.

A-1 Miara, Winfield and Norval Park

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	15	17
Council Buildings	18	29
Parks, Sports and Natural Areas	21.5 ha	32.6 ha
Park Assets	354	503
Stormwater Mains	14 m	41 m
Water Supply	10 m	64 m
Bridge	1	2
Culvert	11	15
Residential Buildings	52	147
Non-Habitable Buildings	14	33
Commercial Buildings		1
Grazing Native Vegetation	852 ha	1280 ha
Marsh / Wetland	978.9 ha	1093.3 ha
Other Minimal Use	410 ha	
Residential and Farm Infrastructure	6.5 ha	13.1 ha
Nature Conservation	122 ha	302.8 ha
Conservation Park	116 ha	145.1 ha
Cropping	0.6 ha	31.4 ha
Irrigated Cropping	309.9 ha	459.2 ha
Reservoir / Dam	5.2 ha	8.1 ha
Irrigated Perennial Horticulture	0.8 ha	0.8 ha
Intensive Animal Production	6.4 ha	21.1 ha
Estuary / Coastal Water	2.0 ha	2.0 ha

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
4WD Tracks	3.2 km	5.4 km
Local Roads	3.9 km	6.9 km
Unsealed Roads	13.6 km	17.6 km
Miara Caravan Site	2	2
Broadcast Transmitters		1
Boat Ramps	7	7
Electricity Distribution substations	3	9
Electricity Power Lines	5519 m	9504 m

A-2 Moore Park Beach

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	10	10
Parks, Sports, and Natural Areas	87.7 ha	149.9 ha
Water Supply	3305 m	12709 m
Water Supply Facilities		5
Council Buildings	11	14
Park Assets	10	239
Bridge	3	4
Culvert	10	14
Stormwater Main	4576 m	7295 m
Non-Habitable Buildings	15	138
Residential Buildings	18	312
Commercial Buildings		5
Moore Park State School Buildings	2	5
Grazing Native Vegetation	40.4 ha	90.3 ha
Irrigated Cropping	712.2 ha	984.5 ha
Irrigated Perennial Horticulture	29.8 ha	39.3 ha
Marsh / Wetland	172.7 ha	178.2 ha
Nature Conservation	661.2 ha	1475.5 ha
Residential and Farm Infrastructure	19.2 ha	97.1 ha
Conservation Park	645.2 ha	727.5 ha
Services	22.0 ha	39.7 ha
4WD Tracks	3.5 km	6.7 km
Local Roads	2.6 km	14.5 km
Unsealed Roads	58.8 m	353 m

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Child Care Centre	1	1
Educational Institution	2	5
Surf Life Saving Club		1
Pipeline	1.7 m	1027 m
Electricity Power Lines	14521 m	30828 m
Electricity Distribution substations	23	40
Moore Park Floodgates	2	2
Fairydale Tide Gates	1	1

A-3 Burnett Heads

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	13	18
Parks, Sports, and Natural Areas	31.7 ha	48.2 ha
Water Supply	2341 m	8763 m
Stormwater Mains	1427 m	5853 m
Council Buildings		31
Park Assets	3	94
Bridge	1	2
Culvert	16	36
Rubyanna WWTP Sewerage Mains	348 m	767.3
Stormwater Mains	1427 m	5853 m
Residential Buildings	37	225
Non-Habitable Buildings	42	157
Commercial Buildings	1	3
Industrial Buildings		11
Grazing Native Vegetation	75.1 ha	193.4 ha
Irrigated Cropping	1774 ha	2851 ha
Irrigated Perennial Horticulture		8.7 ha
Manufacturing and Industrial	47.6 ha	70.8 ha
Residential and Farm Infrastructure	19.8 ha	72.4 ha
Marsh / Wetland	943.7 ha	1005.5 ha

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Nature Conservation	302.7 ha	309.1 ha
Transportation and Communication	0.6 ha	8.4 ha
Conservation Park	213.9 ha	219.1 ha
Services	10.6 ha	22.8 ha
4WD Tracks	5.8 km	11.4 km
Local Roads	14.4 km	34.2 km
Unsealed Roads	2.1 km	5.3 km
Marine Rescue or Coast Guard Station		1
Broadcast Transmitter		1
Electricity Power Line	14052 m	37018 m
Electricity Distribution substation	22	47

A-4 Bargara

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Water Supply	15 m	1436 m
Stormwater Mains	110 m	2299 m
Sewerage Mains	24.4 m	928 m
Council Utility Structure		2
Culvert	2	9
Park Assets	42	393
Council Assets		5
Boardwalk	172 m	189 m
Council Buildings		402
Parks, Sports and Natural Areas	13 ha	30.8 ha
Residential Buildings	1	5
Local Roads	88 m	1637 m
Unsealed Road		305
4WD Tracks	374 m	1298 m
Bikeway / Walkway		225 m
Grazing Native Vegetation	2 ha	8.6 ha
Marsh / Wetland	2.4 ha	2.5 ha
Irrigated Cropping		0.04 ha
Nature Conservation	23.1 ha	38.7 ha
Residential and Farm Infrastructure	6.9 ha	15.5 ha
Services	7.5 ha	23.8 ha

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Electricity Distribution substation		3
Electricity Power Line	108 m	1433 m

A-5 Innes Park and Coral Cove

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Water Supply	44.8 m	630.8 m
Stormwater Mains	0.5 m	171.7 m
Park Assets	78	99
Parks, Sports and Natural Areas	10.5 ha	12.5 ha
Council Land	3	4
Residential Buildings		5
Non-Habitable Buildings		4
Bridge	3	3
Local Roads	16.4 m	316.3 m
Unsealed Roads	127.9 m	481.8 m
Grazing native vegetation	3.3 ha	5.8 ha
Residential and Farm Infrastructure	3.6 ha	7.1 ha
Marsh / Wetland	14.6 ha	15.1 ha
Services	0.09 ha	0.5 ha
Electricity Powerline	50 m	756.5 m

A-6 Elliott Heads

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	3	3
Parks, Sports, and Natural Areas	2.6 ha	12.1 ha
Park Assets	19	100
Council Buildings		4
Culvert	3	9
Stormwater Mains	7.3 m	1064.3 m
Water Supply	1278.1 m	1967.4 m
Residential Buildings	1	3
Non-Habitable Buildings		1
Grazing Native Vegetation	67.8 ha	104.1 ha
Intensive Animal Production	0.5 ha	0.6 ha
Irrigated Cropping	0.02 ha	1.1 ha
Irrigated Seasonal Horticulture		21 m2
Marsh / Wetland	297.6 ha	303.5 ha
Residential and Farm infrastructure	6.9 ha	13.3 ha
Services	3.2 ha	10.6 ha
Local Roads	112.8 m	1015.6 m
Unsealed Roads	5.1 km	6.0 km
Electricity Distribution substation		2
Electricity Powerline	235.2 m	1250.5 m

A-7 Coonarr

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	2	2
Council Buildings	2	2
Park Assets		2
Parks, Sports and Natural Areas	8.4 ha	10.8 ha
Residential Buildings		1
4WD Tracks		2 m
Local Roads	296.3 m	466 m
Unsealed Roads	4.3 km	5.7 km
Residential and Farm Infrastructure	0.3 ha	0.8 ha
Grazing Native Vegetation	14.2 ha	22.8 ha
Nature Conservation	0.45 ha	0.49 ha
Marsh / Wetland	204.7 ha	209.2 ha
Electricity Power Line	282.8 m	484.7 m

A-8 Woodgate Beach and Walkers Point

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Council Land	3	3
Council Buildings	3	9
Parks, Sports, and Natural Areas	116.7 ha	141.2
Waste Management Facilities	2	3
Waste Treatment and Disposal	2.6 ha	5.5 ha
Water Supply Facilities	3	3
Park Assets	4	29
Boat Ramp	8	12
Stormwater Mains	891 m	2155.2 m
Water Supply	789.8 m	2790.4 m
Residential Buildings	2	27
Non-Habitable Buildings		7
Grazing Native Vegetation	12.2 ha	24.5 ha
Marsh / Wetland	319.7 ha	338.6 ha
Nature Conservation	1355.4 ha	2124.4 ha
Residential and Farm Infrastructure	10.4 ha	25.2 ha
Services	2.5 ha	5.6 ha
4WD Tracks	3.2 km	5.6 km
Bikeways / Walkways	570.4 m	1652 m
Local Roads	1.6 km	5.4 km

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
Unsealed Roads	52.6 m	781 m
Bridge	1	2
Culvert	4	5
Telephone Exchange		1
Electricity Distribution substation		3
Electricity Power Lines	1875 m	4785.5 m

A-9 Buxton

Assets	5% AEP Storm Tide Inundation	0.2% AEP Storm Tide Inundation
4WD Tracks	3	260
Bridge	6	6
Council Buildings	31	80
Culvert	1	3
Electricity Power Lines	406	1560
Electricity Distribution substations		1
Grazing Native Vegetation	45	90
Local Road	1052	2645
Marsh / Wetland	96	103
Nature Conservation	30	46
Non-Habitable Buildings		11
Park Assets	35	118
Parks, Sports and Natural Areas	10	16
Residential Buildings	1	34
Residential and Farm Infrastructure	16	32
Unsealed Road	1439	2190



APPENDIX B – ENVIRONMENTAL VALUE MAPPING



Intangible Asset Valuation for Bundaberg CHAS

Introduction

A preliminary method for assigning non-monetary values to habitats has been addressed using a simple methodology using existing mapping. The overall conservation values mapping is provided.

Protocols for the Assessment of Conservation Values for Bundaberg CHAS

A simple additive approach will be used to determine value of ecological units using existing mapping. This will then be weighted by expert review, and stakeholder consultation. Attributes to be used in this assessment, and scoring protocols are summarised in Table 1.

The Regional Ecosystem (RE) Mapping provides a good base layer of mapping polygons for ecosystems down to Highest Astronomical Tide (HAT).

There is not (as yet) any similar mapping for ecosystems below HAT, nor for freshwater waterways in the area. The State Wetland Program is progressing with this mapping, however it will not be available for this area in the timeframes of this study.

This needs to be recognised as a major constraint for this assessment.

As a result of this constraint, slightly different methods will be used for the assessment of 'terrestrial' (i.e. areas covered by RE mapping) and aquatic (waterways and below HAT) areas.

Step 1 - Base Mapping of Ecological Units

A base map is required of the individual ecological units in the study area. The Regional Ecosystem mapping and existing mapping of aquatic habitat will be used to create this base map. The base map will comprise polygons of individual Regional Ecosystems (REs), along with their RE code, and polygons for aquatic habitat, as listed for the Habitat Type attribute in Table 1.

The study area is the area that may be impacted by sea level rise, plus the RE's immediately adjacent.

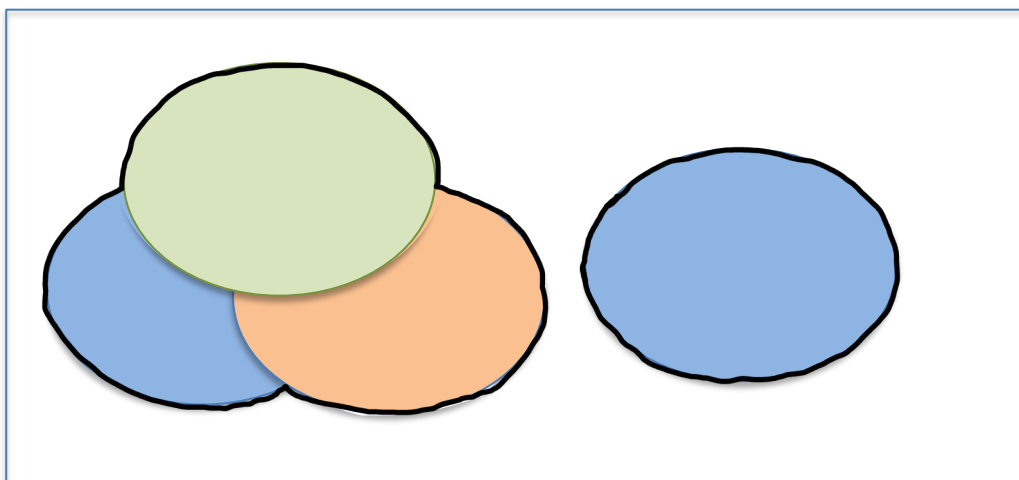
The REs and aquatic habitats provide preliminary base polygons for assessment. These preliminary base polygons will need to be divided where other attributes do not cover an entire base polygon. For example, where only part of an RE polygon is mapped as having Protected Status, then the preliminary base polygon is subdivided into polygons of that RE that have protected status and those that do not.

Step 2 – Mapping the Attributes and Creating Base Polygons

Mapping overlays will be created for each of the attributes in Table 1 i.e.:

- Habitat Type
- Protected Status
- Endangered or of Concern Vegetation
- Key Habitat for Threatened Species
- Wetlands and Groundwater Dependent Ecosystems
- High Ecological Significance Wetlands
- High Ecological Significance Waterways.

Each attribute layer is comprised of all of the mapping layers in the “Source URL” column of Table 1¹ (Figure 1).



¹ Note, many of the Q-spatial data layers are also available on the BRC interactive mapping website, however the Q-spatial data layers should be the most up to date.

Figure 1 Different data sources for each attribute in Table 1 are combined into a single layer.

The preliminary base polygons are then divided according to the distribution of attributes (Figure 2).

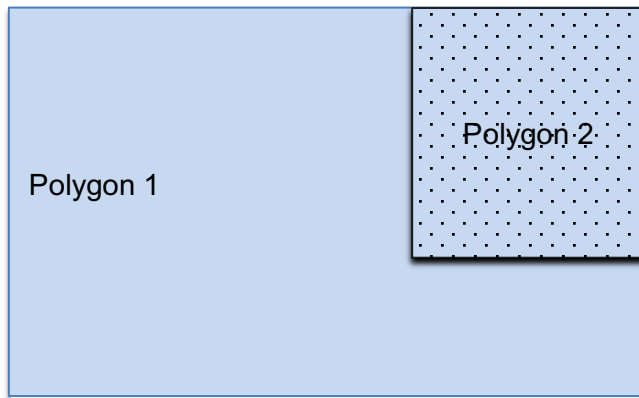


Figure 2 Preliminary base polygons are divided into sub polygons according to the attributes to form final polygons.

Step 3 - Scoring

Polygons are then scored according to the scoring columns in Table 1.

Table 1 Attributes and Assessment Protocols for Value²

Attribute	Source URLs	Score = 0	Score = 1	Score = 2
1. Habitat Type				
Remnant Regional Ecosystem	<ul style="list-style-type: none"> - Vegetation management regional ecosystem map - version 10.1 http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={06ADEB9C-D8DD-40DC-8029-936A16C4A45E} 	Not remnant (i.e. not mapped)	Remnant (i.e. RE is mapped)	
Aquatic Habitats	<ul style="list-style-type: none"> - Open Sandy Beach / Sea Turtle Sensitive Area http://www.bundaberg.qld.gov.au/services/interactive-mapping, Planning Scheme 2015 – overlays >Coastal Protection) and - Seagrass habitat Data sent to Water Technology 20 March 2019 (note incomplete and old data set, use with caution), and - Rocky and Coral Reef Habitat Not currently available, and - Soft Bottom Habitat Not currently available, and - Watercourses: Queensland waterways for waterway barrier works: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={77D35E81-DB9C-45B1-811F-0D2572ADB02A} 	Not mapped	Mapped	

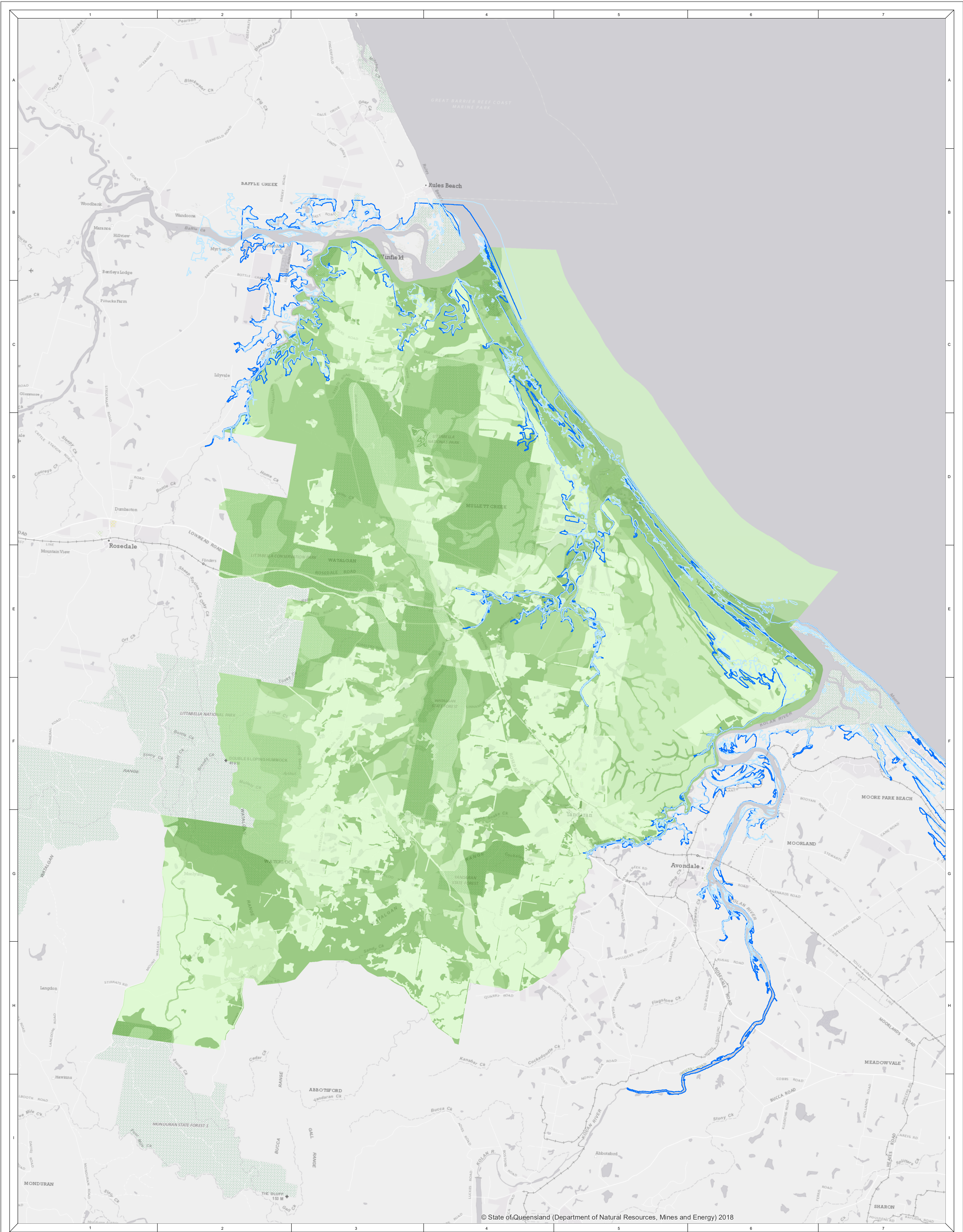
² Within each attribute, data from the source URL's will overlap. Data layers from the source URL's should be saved for assessment of sensitivity and adaptivity, layers within each attribute type need to be amalgamated into a single layer for the value assessment

Attribute	Source URLs	Score = 0	Score = 1	Score = 2
2. Protected Status				
	<ul style="list-style-type: none"> Matters of state environmental significance - Protected area - estates – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={E58BC0F5-3064-4EBB-8727-F810825D6D09}, and Matters of state environmental significance - Protected area - nature refuges – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={EE295293-8C04-43D5-A600-C0CF3529D3F0}, and Matters of state environmental significance - Marine park - highly protected zones – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={67C9ACEA-09AE-4BFD-AEDE-7A6ED4B460C0}, and Matters of state environmental significance - fish habitat area - A and B areas – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={3B638F81-08FE-4341-B55F-4CDCC2A4C384}, and Local Parks, reserves, national parks and forests (Outdoor Recreation): http://www.bundaberg.qld.gov.au/services/interactive-mapping, 	Not in a protected area	In a protected area	
3. Endangered or Of Concern Vegetation				
	<ul style="list-style-type: none"> Matters of state environmental significance - Regulated vegetation - category B endangered or of concern – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={5E77558D-CFF5-43BF-B562-9A6C74C3E5C8}, and 	Not endangered or of concern vegetation	Of concern	Endangered

Attribute	Source URLs	Score = 0	Score = 1	Score = 2
	<ul style="list-style-type: none"> Matters of state environmental significance - Regulated vegetation - category C endangered or of concern – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={002E8C48-D332-4FC0-A3C8-02C2E0BB50D6} <p>OR</p> <ul style="list-style-type: none"> Vegetation management regional ecosystem map - version 10.1: ****Select Endangered and Of Concern REs**** http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={06ADEB9C-D8DD-40DC-8029-936A16C4A45E} 			
4. Key Habitat for Threatened Species				
	<ul style="list-style-type: none"> Matters of state environmental significance - Wildlife habitat - threatened and special least concern animal - Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={3A040370-12A0-4FF3-AD26-DCEE6946E756}, and Matters of state environmental significance - Regulated vegetation - essential habitat – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={BFC E850E-C0C3-43E4-A80D-E17784A7B86D}, and Dugong Protection Areas: https://data.qld.gov.au/dataset/dugong-protection-areas, and Sea Turtle Sensitive Area: http://www.bundaberg.qld.gov.au/services/interactive-mapping, Planning Scheme 2015 – overlays >Coastal Protection 	Not habitat	key	Key Habitat

Attribute	Source URLs	Score = 0	Score = 1	Score = 2
5. Wetlands and Groundwater Dependent Ecosystems				
	<ul style="list-style-type: none"> - Vegetation management regional ecosystem map - version 10.1: ****Select Wetland REs***** http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={06ADEB9C-D8DD-40DC-8029-936A16C4A45E} - Groundwater dependent ecosystems areas – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={EA222F7D-542C-4665-B8DD-DEE7AFF8A6C4} - Groundwater dependent ecosystem watercourses – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={AC824FA2-D7CF-480F-963E-A5FFA47A05A6} - Groundwater dependent ecosystem springs – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={85366D7B-CE1D-4CC0-9184-0E557790965C} 	Not mapped	Mapped	
6. High Ecological Significance Wetlands				
	<ul style="list-style-type: none"> - Wetland protection area - high ecological significance wetland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={1DAF9C31-F5C5-4590-82CF-728077416FD1}, and - Matters of state environmental significance - High ecological significance wetlands – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={399493AE-5F42-4051-A16E-F9F1B6C1C25B}, and - Matters of state environmental significance - High ecological value waters - wetlands – Queensland: 	Not mapped	Mapped	

Attribute	Source URLs	Score = 0	Score = 1	Score = 2
	http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={BC28DE6C-9C13-4749-AEE8-C3916BCA8146} , and <ul style="list-style-type: none"> Matters of state environmental significance - High ecological value waters - waterways – Queensland: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={23399CAD-3C29-4A65-A376-878659EDA31A} 			
7. High Ecological Significance Waterways				
	<ul style="list-style-type: none"> Queensland waterways for waterway barrier works: http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={77D35E81-DB9C-45B1-811F-0D2572ADB02A} 	Green	Amber, Red	Purple, Grey

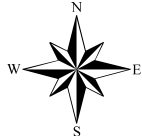


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Storm Tide 1% AEP Extent
Storm Tide 1% AEP 80 cm SLR Extent

Score

0	3	7
1	4	8
2	5	9
	6	

0 500 1,000 2,000 3,000 4,000 5,000 Meters

1:99,000 at A2



Miara, Winfield and Norval Park

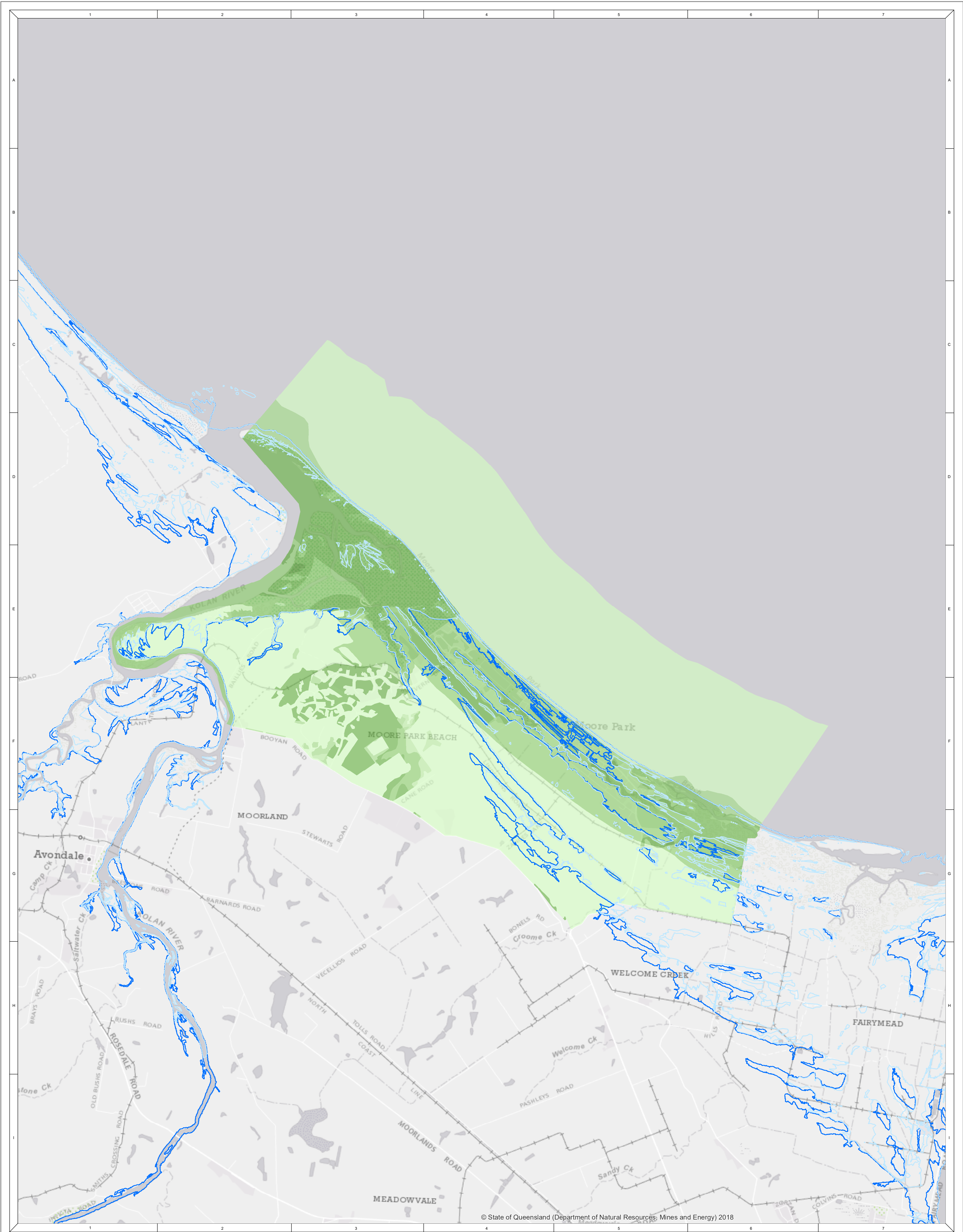
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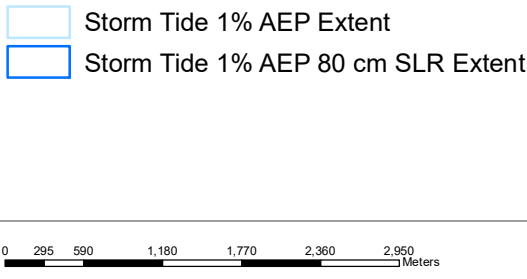


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1:56,500 at A2



Moore Park Beach

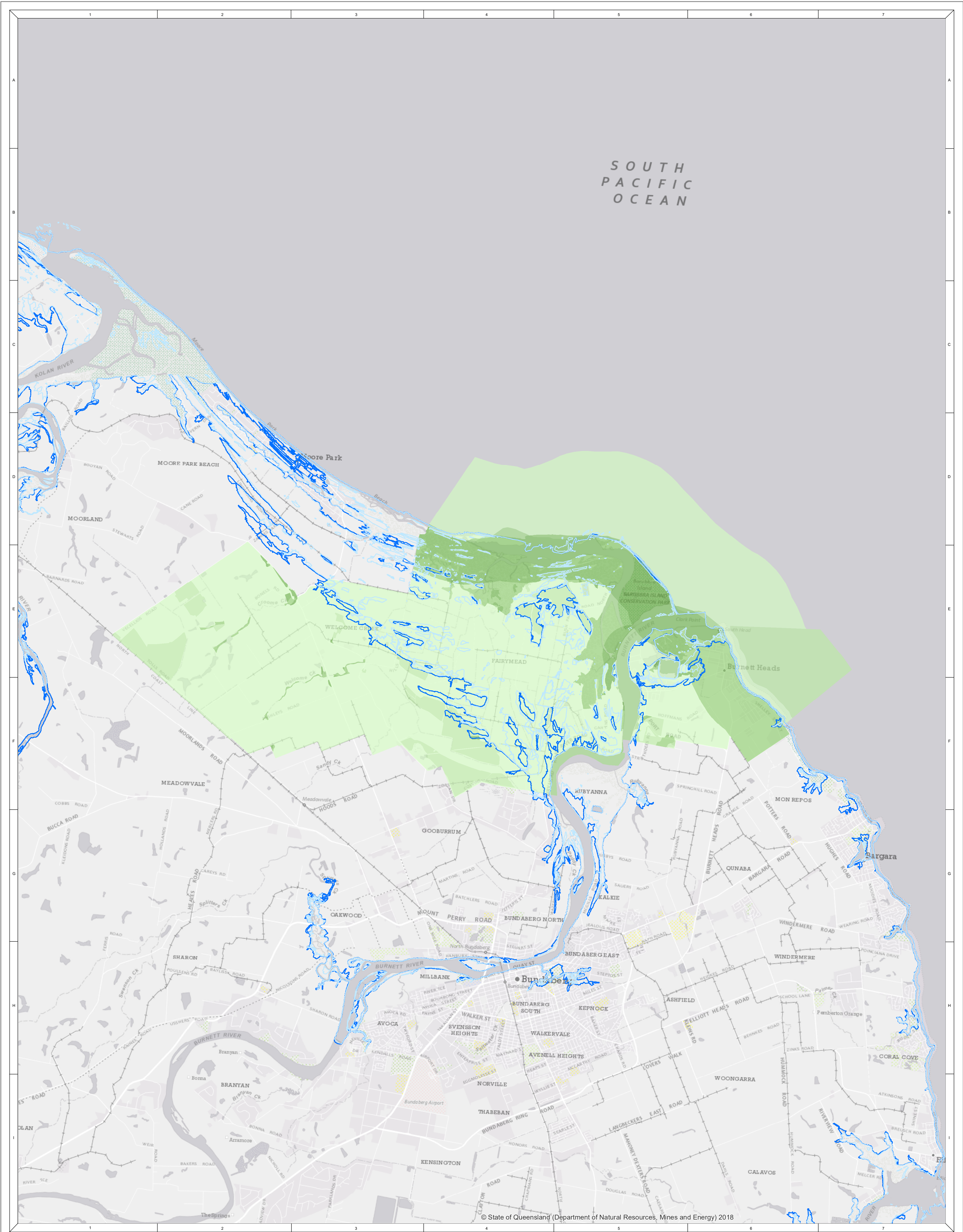
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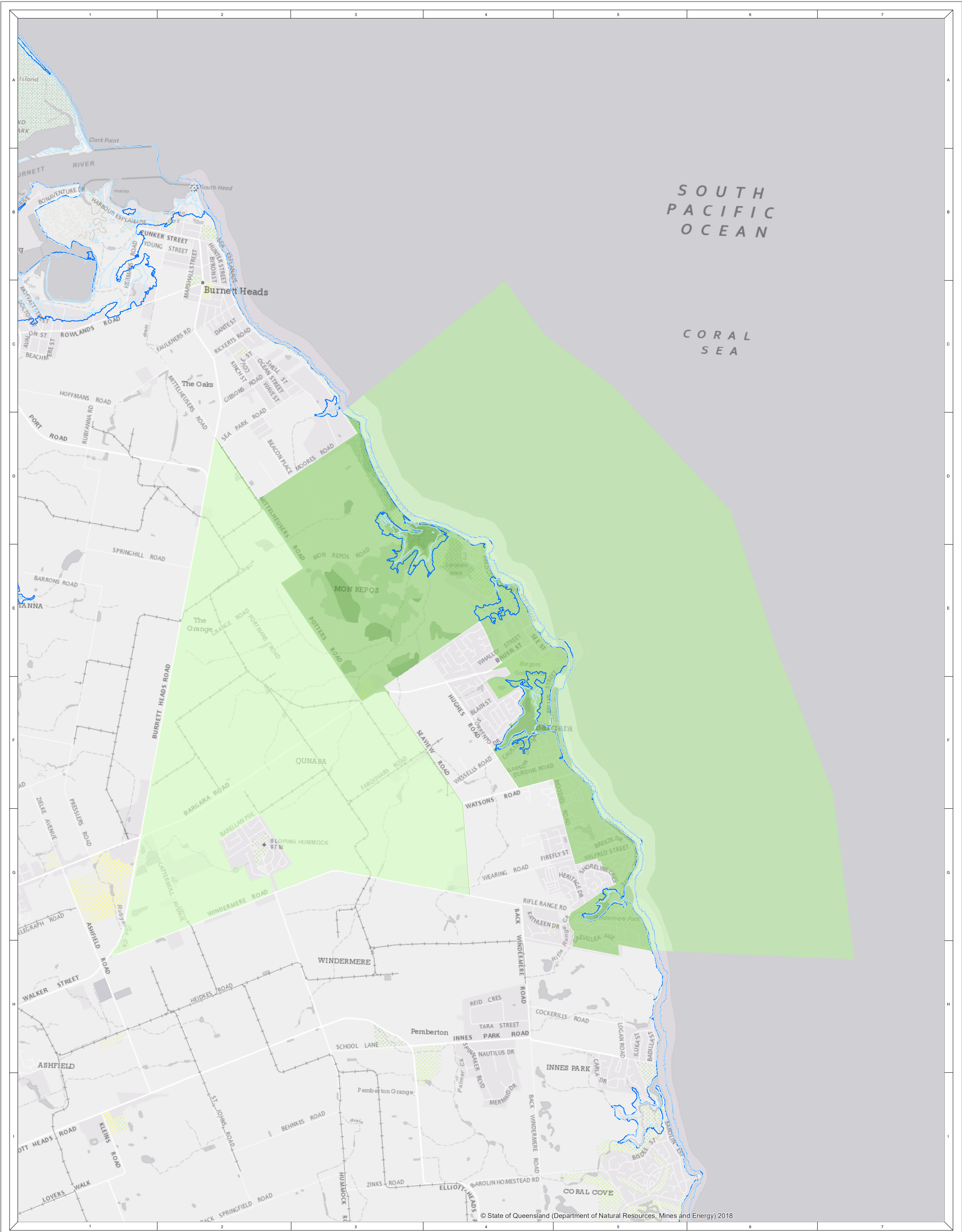
1:82,000 at A2

Burnett Heads

Conservation Values Total

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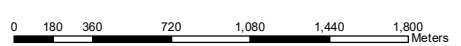
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Storm Tide 1% AEP Extent
Storm Tide 1% AEP 80 cm SLR Extent

Score	
0	3
1	4
2	5
	6
	7
	8
	9

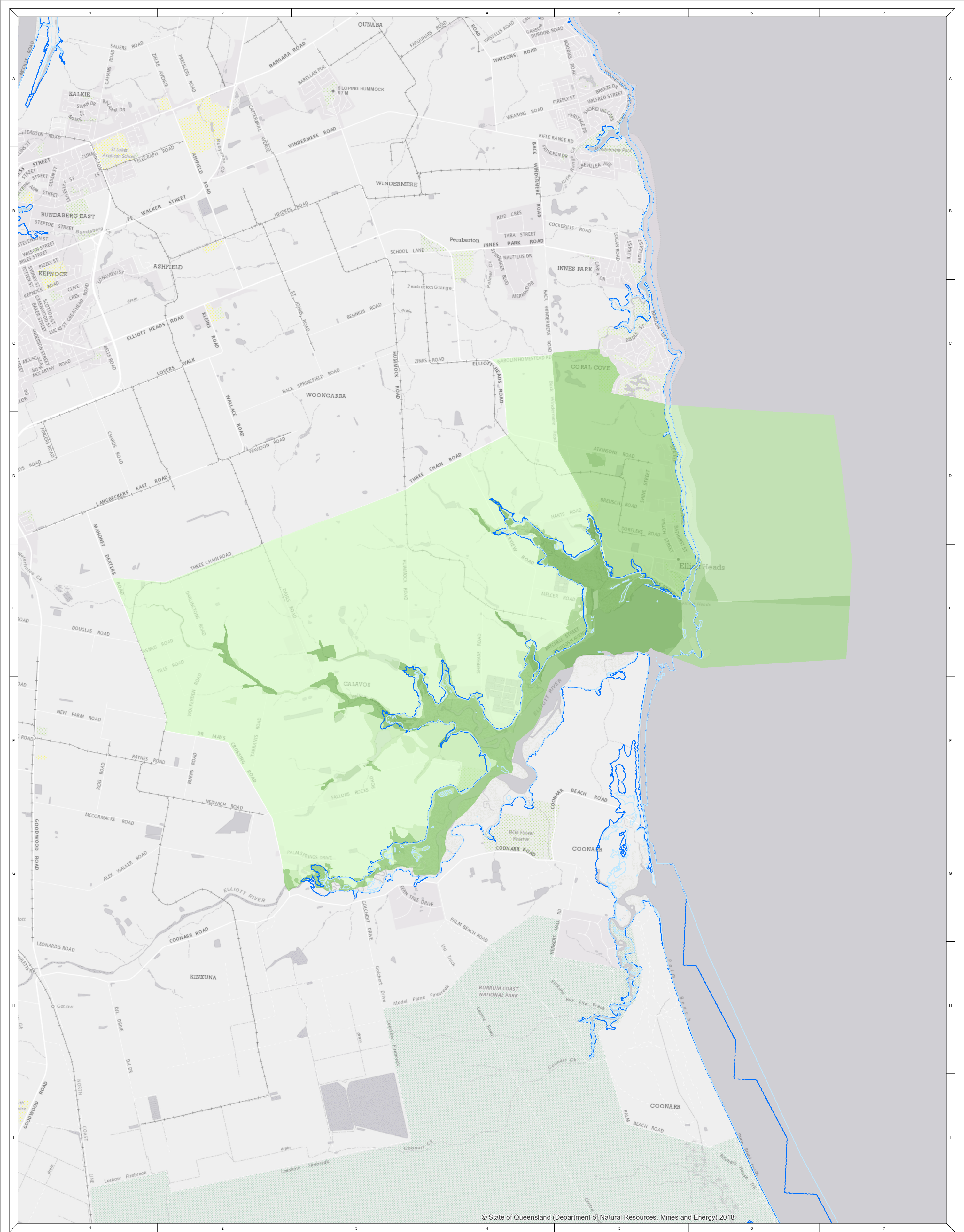


1:34,500 at A2



Bargara Conservation Values Total

REFERENCE: D:\Database\Jobs\5057_Bumby\Conservation\MXD\5057_RE_Total_Conservation_Values.mxd
DATE: 17/05/2019 SHEET: DRAWING NUMBER:



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0 225 450 900 1,350 1,800 2,250 Meters

Score

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

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Elliott Heads

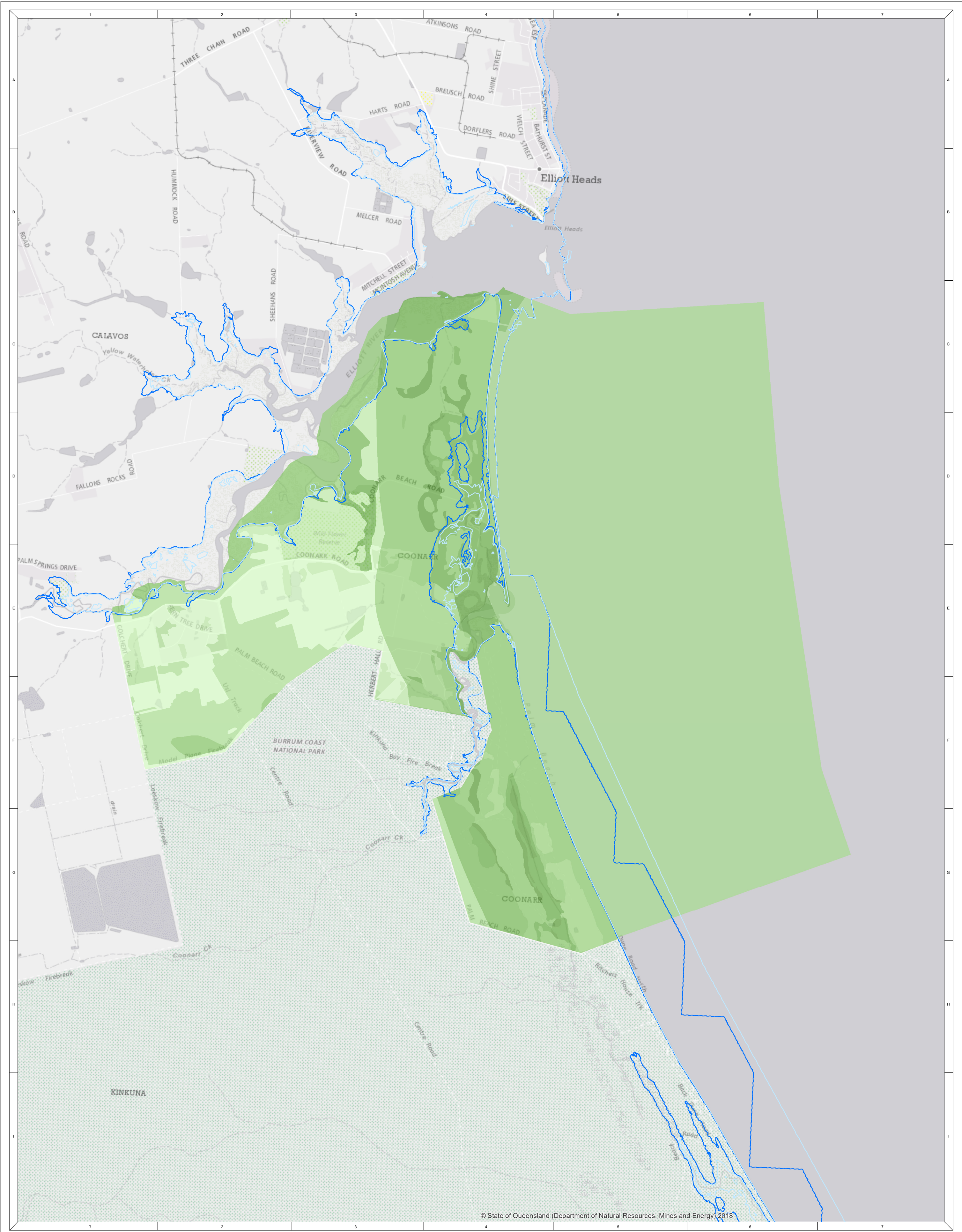
Conservation Values Total

REFERENCE: D:\Database\Jobs\9057_Bundy\Conservation\MXD\9057_RE_Total_Conservation_Values.mxd

DATE: 17/05/2019

SHEET:

DRAWING NUMBER:



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Storm Tide 1% AEP Extent
Storm Tide 1% AEP 80 cm SLR Extent

Score

0	3	7
1	4	8
2	5	9
	6	

0 170 340 680 1,020 1,360 1,700
Meters

1:32,500 at A2



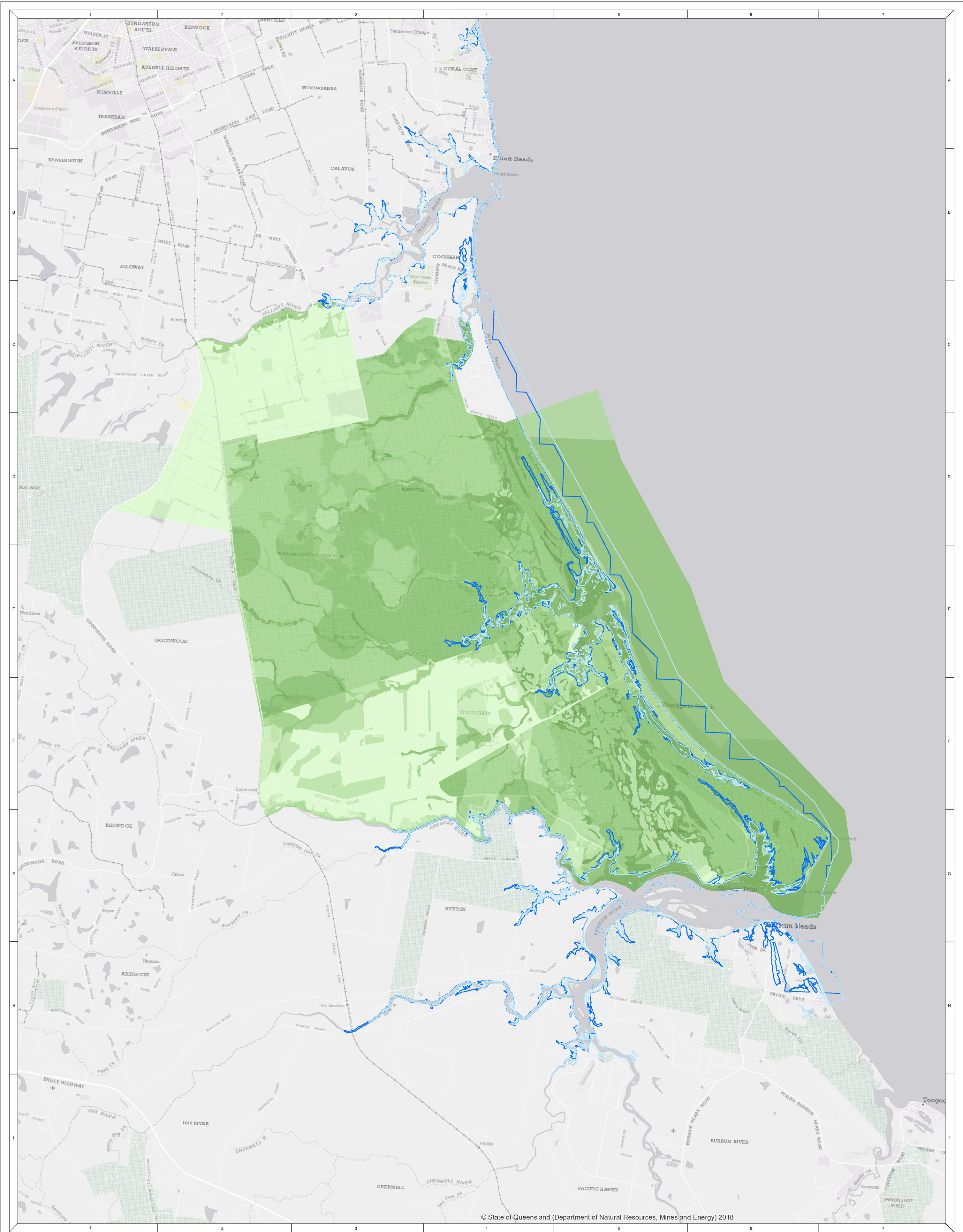
Coonarr Conservation Values Total

REFERENCE: D:\Database\Jobs\6057_Bundj\Conservation\MXD\6057_RE_Total_Conservation_Values.mxd

DATE: 17/05/2019

SHEET:

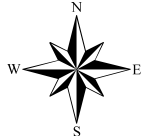
DRAWING NUMBER:



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- Storm Tide 1% AEP Extent
Storm Tide 1% AEP 80 cm SLR Extent
- Score
- | | | |
|---|---|---|
| 0 | 3 | 7 |
| 1 | 4 | 8 |
| 2 | 5 | 9 |
| | 6 | |

0 500 1,000 2,000 3,000 4,000 5,000 Meters

1:95,000 at A2



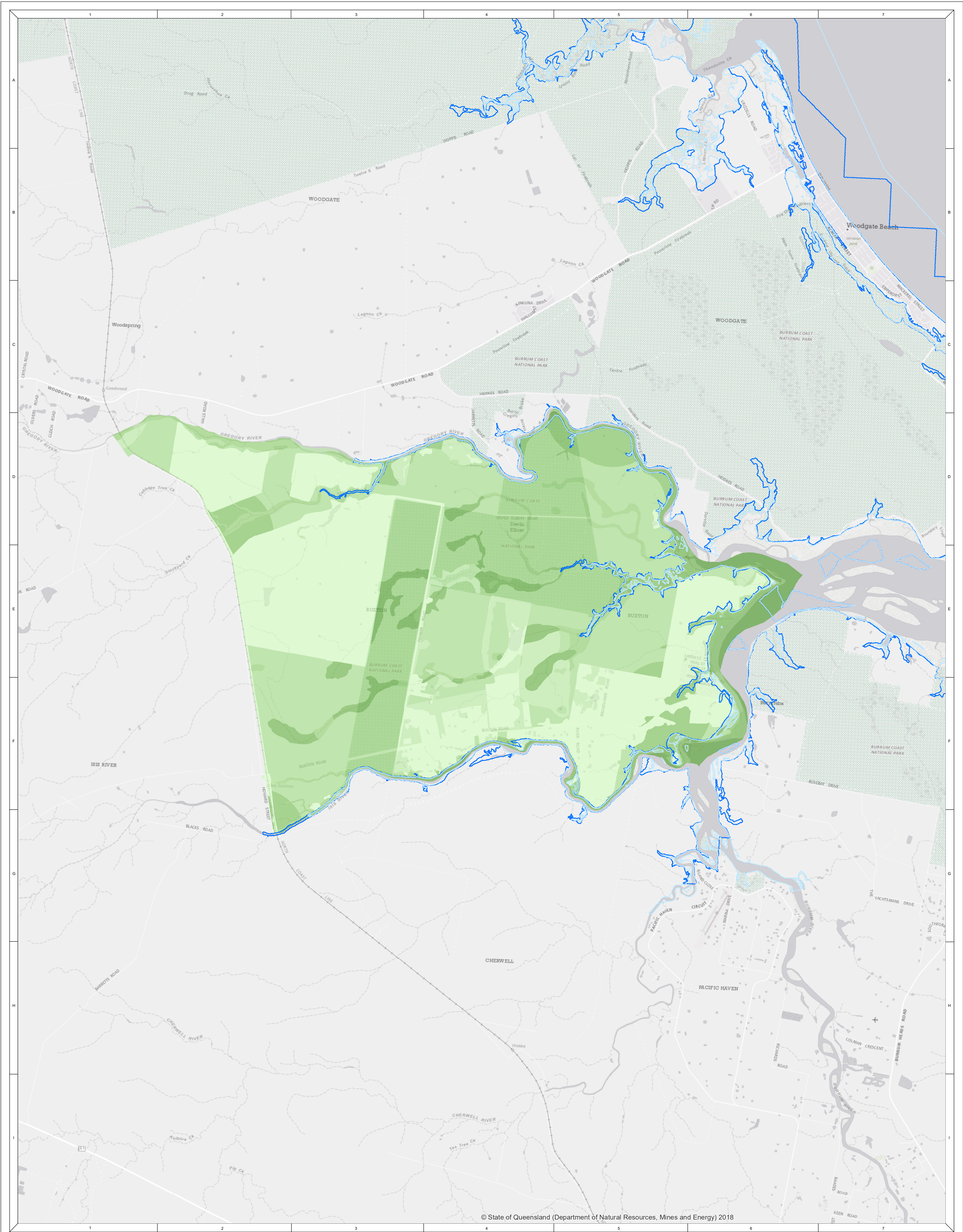
Woodgate Beach Conservation Values Total

REFERENCE: D:\Database\Jobs\5657_Bundy\Conservation\MXD\5657_RE_Total_Conservation_Values.mxd

DATE: 17/05/2019

SHEET:

DRAWING NUMBER:



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Storm Tide 1% AEP Extent
Storm Tide 1% AEP 80 cm SLR Extent

Score

0	3	7
1	4	8
2	5	9
	6	

0 265 530 1,060 1,590 2,120 2,650 Meters

1:51,000 at A2



Buxton Conservation Values Total

REFERENCE: D:\Database\Jobs\6057_Bundy\Conservation\MXD\6057_RE_Total_Conservation_Values.mxd

DATE: 17/05/2019

SHEET:

DRAWING NUMBER:



APPENDIX C – VULNERABILITY ASSESSMENT AND ASSET PRIORITISATION



1 VULNERABILITY ASSESSMENT

1.1 Introduction

The methodology below for developing the vulnerability assessment is based upon the guidance provided by the QCoast 2100 Guidelines (namely, section 2.4.3) that refers to the *South Australian guidelines for developing a climate change adaptation plan and undertaking an integrated climate change vulnerability assessment*.

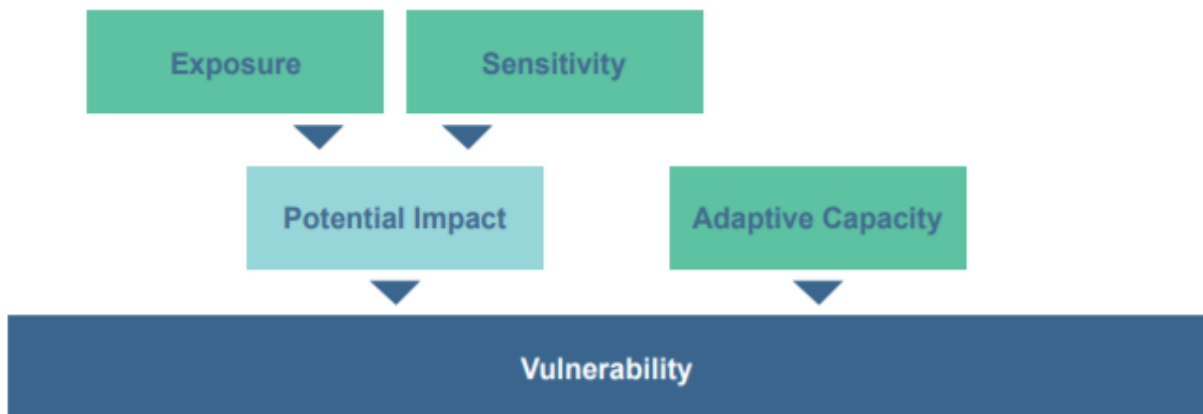


FIGURE 1-1 VULNERABILITY ASSESSMENT COMPONENTS

The methodology is derived from the categorisation and scoring approach developed by the South Australian guidance and applied relative to the specific data availability and context of the Bundaberg region. A vulnerability assessment tool based on the above methodology was developed specifically for this purpose. Local settlement characteristics are included in the vulnerability assessment as part of the Potential Impact component. Specifically, the factors included in the assessment account for:

- Dependency of the settlement upon an asset
- Planned future growth of the settlement
- Extent of the local economy, environment and scale of social vulnerability.

1.2 Exposure scoring



FIGURE 1-2 EXPOSURE ANALYSIS COMPONENTS

The total exposure score for the purposes of the vulnerability assessment was derived using the combination of exposure data per asset class and the addition of a 'zoned future growth factor'. This dual approach enables a locality-specific understanding of both existing assets at risk, and future risk increase borne by existing planned growth controls (in terms of development infill, intensification, and greenfield development) – not just by the effect of climate change on existing assets. This approach assumes that planned growth would increase the amount and type of assets that may be subject to coastal hazard over time,

The percentage of assets exposed per locality is based on the relationship between existing assets exposed to at least the 1% AEP storm tide inundation event, compared to the total asset cohort of each asset type per coastal settlement.

The asset classes used in the exposure assessment are provided in the table below, derived from Council's GIS dataset, and regional ecosystem mapping. Not all asset classes are present within all localities.

The environmental assets are also provided in the table below. Note that some assets have been assigned a code based on Regional ecosystem coding ¹.

TABLE 1-1 EXPOSURE ELEMENTS – ASSET CLASSES

Asset Class	Asset Category	Asset Class	Asset Category
Council Land	Settlement Asset	Nature conservation	Environmental Asset
Water supply Facilities	Settlement Asset	Transportation and communication	Settlement Asset
Water supply	Settlement Asset	Conservation park	Environmental Asset
Stormwater mains	Settlement Asset	Intensive animal production	Economic Asset
Sewerage mains	Settlement Asset	Irrigated seasonal horticulture	Economic Asset
Culvert	Settlement Asset	Miara Caravan Park	Economic Asset
Park assets	Environmental Asset	Commercial	Economic Asset
Boardwalk	Settlement Asset	Non-habitable buildings	Economic Asset
Council buildings	Settlement Asset	Electricity substations	Settlement Asset
Parks, sports and natural areas	Environmental Asset	Child Care Centre	Settlement Asset
Residential buildings	Economic Asset	Pipeline	Settlement Asset
Local roads	Settlement Asset	Moore Park State School Buildings	Settlement Asset
4WD tracks	Environmental Asset	Moore Park Beach Holiday Park	Economic Asset
Unsealed roads	Settlement Asset	Waste management facilities	Settlement Asset
Grazing native vegetation	Environmental Asset	Woodgate WWTP	Settlement Asset
Marsh / wetland	Environmental Asset	Boat ramp	Settlement Asset
Residential and farm infrastructure	Economic Asset	Footbridge	Settlement Asset
Electricity power line	Settlement Asset	Waste treatment and disposal	Settlement Asset
Bridge	Settlement Asset	Estuary	Environmental Asset
Rubyanna WWTP Sewerage Mains	Settlement Asset	Small inlet	Environmental Asset
Irrigated cropping	Economic Asset	Beach	Environmental Asset
Irrigated perennial horticulture	Economic Asset	Rocky and coral reefs	Environmental Asset
Manufacturing and industrial	Economic Asset	Seagrass	Environmental Asset

Asset Class	Asset Category	Asset Class	Asset Category
12.1.1 Tidal flats and beaches <i>Casuarina glauca</i>	Environmental Asset	Soft bottom habitat	Environmental Asset
12.2.2 Coastal dunes Microphyll/notophyll vine forest	Environmental Asset	12.3.14 Alluvial river and creek flats <i>Banksia aemula</i>	Environmental Asset
12.2.12 Coastal dunes Closed heath	Environmental Asset	12.3.17 Alluvial river and creek flats Simple notophyll fringing forest	Environmental Asset
12.3.3 Alluvial river and creek flats <i>Eucalyptus tereticornis</i> woodland	Environmental Asset	12.3.20 Alluvial river and creek flats <i>Melaleuca</i>	Environmental Asset
12.3.7 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	Environmental Asset	12.5.2a Old loamy and sandy plains <i>Corymbia intermediate</i>	Environmental Asset
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	Environmental Asset	12.5.8 Old loamy and sandy plains <i>Eucalyptus hallii</i> open woodland	Environmental Asset
12.3.7c Alluvial river and creek flats Billabongs and ox-bow lakes	Environmental Asset	12.8.13 Basalt plains and hills Araucarian complex	Environmental Asset
12.3.11 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	Environmental Asset	12.8.16 Basalt plains and hills <i>Eucalyptus crebra</i> ¹	Environmental Asset

The future zoned growth factor is based on an analysis of future asset provision anticipated by the Local Government Infrastructure Plan (LGIP) contained within the current Bundaberg Regional Council Planning Scheme, with scoring as per the below:

- Coastal settlement outside the current LGIP represents limited future planned growth;
- Coastal settlement within the current LGIP with constant to current level of zoned growth represents moderate future planned growth; and
- Coastal settlement within the current LGIP including expansion of assets or greenfield zoned area represents high future planned growth.

This LGIP assessment acts as a proxy for 'future assets', i.e. those not currently in a coastal settlement but could reasonably be expected to be once future planned growth occurs in line with existing LGIP expectations.

¹ Regional ecosystem coding is based on three elements (Queensland Government 2016)

- The first part refers to the bioregion. Bundaberg Regional Council is in Bioregion 12: South East Queensland.
- The second part refers to the land zone that the Regional Ecosystem occurs on. The land zone is a simplified geology/substrate-landform classification for Queensland.
- The third part refers to the vegetation.

Each regional ecosystem is given a three-part code based on these elements. For example, Regional Ecosystem 12.1.3 is in south east Queensland, is on tidal flats and beaches, and the vegetation is mangrove shrubland to low closed forest.

Therefore, a multiplier factor has been used on the existing exposure metric of the percentage asset exposure in each coastal settlement.

The scale used for these elements of the scoring is provided below.

TABLE 1-2 EXPOSURE ELEMENTS – SCORING

Element	Categorisation	Scale
% Asset exposure per coastal settlement	0 to <5% of asset class exposed	1
	>5% & less than 10% of asset class exposed	2
	>10% & less than 25% of asset class exposed	3
	>25% & less than 50% of asset class exposed	4
	>50% of asset class exposed	5
Zoned future growth factor	Limited Future Growth = outside LGIP	1
	Moderate Future Growth-led exposure = LGIP constant	1.5
	High Future Growth-led exposure = LGIP expansion	2

1.1.1 Sensitivity scoring



FIGURE 1-3 SENSITIVITY ANALYSIS COMPONENTS

The total sensitivity score for each asset type was derived through the interaction of three components – asset sensitivity, the general socio-economic dependency on the asset type, and the application of a 'locality factor' to create locality-specific nuances.

Asset sensitivity was determined as the extent to which an asset is sensitive to damage or the length of time likely for asset recovery. Scores per asset type were determined qualitatively based on professional experience of differing asset types.

Socio-economic dependency on asset was defined as the general extent to which society relies upon the asset for functioning of social or economic systems. Scores per asset type were determined qualitatively based on professional experience of differing asset types.

The scale used for these elements of the scoring is provided below.

TABLE 1-3 SENSITIVITY ELEMENTS – SCORING

Element	Categorisation	Scale
Asset Sensitivity	No sensitivity to damage or no time required for recovery	1
	Limited sensitivity to damage or short time for recovery	2

Element	Categorisation	Scale
	Moderate sensitivity to damage or time for recovery	3
	Highly sensitive to damage or long time for recovery	4
	Critically sensitive to damage or very long time for recovery	5
Socio-economic dependency	No social or economic dependency	1
	Limited social or economic dependency	2
	Moderate social or economic dependency	3
	High social or economic dependency	4
	Critical social or economic dependency	5

The locality factor was derived as a function of the relative importance of the asset category, based on resilience baseline attributes of:

- Economy – the extent of dependence of the local economy on the asset type;
- Environment – the extent of dependence of the local economy/lifestyle on environmental attributes of region (e.g. tourism); and
- Society – the extent of socio/demographic vulnerability in the locality.

The purpose of locality metrics is to influence the relative importance of asset types to vulnerability based on the specific coastal settlement, i.e. is an electrical distribution substation equally critical in Woodgate and Bargara? The metrics included:

- Economic – based on relative percentage of total number of businesses within the locality as a percentage of all businesses the LGA²;
- Environmental – based on relative dependence upon environmental assets to drive lifestyle or economy in each locality; and
- Society – based on relative scoring of SEIFA index of locality compared to LGA average³.

The scale used for these elements of the scoring is provided below.

TABLE 1-4 SENSITIVITY LOCALITY FACTOR – ATTRIBUTES

Resilience Attributes	Measure Locality-based importance of resilience attribute, and of asset to enhancing that attribute	Scale		
		Settlement Assets	Economic Assets	Environment Assets
Economy	Economy is of limited importance to local area	1	1	1
	Economy is valued similarly to other areas	2	2.5	1
	Locality is highly dependent on the local economy for its intrinsic value	3	5	1
Environment	Local economy or lifestyle not dependent on environment	1	1	1
	Local economy or lifestyle moderately dependent on environment	1	2	3

² Derived from an analysis of Australia Exposure Information Platform data for the specific localities, and the LGA, accessed April/May 2019, via <https://www.aeip.ga.gov.au/>

³ Derived from an analysis of Australian Bureau of Statistics data for the specific localities, and the LGA, accessed April/May 2019, via <https://www.abs.gov.au/>

Resilience Attributes	Measure Locality-based importance of resilience attribute, and of asset to enhancing that attribute	Scale		
		Settlement Assets	Economic Assets	Environment Assets
	Local economy or lifestyle highly dependent on environment	3	3	5
Society	Local society more vulnerable than LGA average	1	1	1
	Social vulnerability equal or similar to LGA average	3	1	1
	Local society less vulnerable than LGA average	5	2	1

The subtotal of combined Economy, Environment, and Society scores derives the locality factor, based on the table of scales below.

TABLE 1-5 SENSITIVITY LOCALITY FACTOR – SCORING

Element	Settlement Assets			Economic Assets			Environment Assets		
	Subtotal range			Subtotal range			Subtotal range		
	0 – 3	4 – 6	7+	0 – 3	4 – 7	8+	0 – 3	4 – 6	7
Locality Factor	1	1.5	2	1	1.5	2	1	1.5	2

1.1.2 Adaptive capacity scoring

The adaptive capacity of an asset is its ability to change in a way that enables the asset to ‘adapt’ to climate change⁴. Scoring for this element was developed using a qualitative approach based on professional experience of different asset types. Specifically, scoring was based on metrics including a high cost or long time to adapt vs lower cost or lower time to adapt, depending on the asset type. For example:

- A very low adaptive capacity score of 1 may have a high cost to replace or upgrade the asset type or overall asset system. It may also take a long time to adapt to climate change
- A very high adaptive capacity score of 5 may have a low cost to replace or upgrade the asset type or overall asset system. It is likely to adapt very quickly to climate change.

The adaptive capacity scores reduce the total combined exposure and sensitivity score derived from the previous calculations in sections 1 and 1.1.1.

The scale used for these elements of the scoring is provided below.

TABLE 1-6 ADAPTIVE CAPACITY – SCORING

Element	Categorisation	Scale
Adaptive Capacity	Very Low	1
	Low	2
	Moderate	3
	High	4
	Very High	5

⁴ As noted in the QCoast Guideline (2016), page 20.

1.1.3 Overall asset vulnerability and relative asset criticality scoring

The vulnerability score represents the total calculation derived from the process above for determining vulnerability per asset type and coastal settlement within the study area, plus 10 to ensure the scoring is always positive. It represents a score between 7 (being the minimum, to ensure a positive score), and 40 (being the maximum).

The relative criticality of each asset type per coastal settlement is rated on a scale of 1 – 10, with 1 being most critical, and 10 being least critical. For ease of interpretation, the criticality metric is therefore based on division of the vulnerability score into decile ranges from 0 to 40 (as division of the actual range of 7 – 40 would not create a round number decile range), as per the table below.

Both the total vulnerability scoring and relative asset criticality are scored consistently across the localities within the study area, not within the coastal settlement itself. This means that it is possible that some localities have less (or more) vulnerable assets than others, depending on the relative vulnerability of an asset in a particular location.

The assessment does not explicitly assign the relative asset criticality scale per locality, i.e. so that each locality has an asset that scores one of each decile range from 1 – 10, but rather it assigns its relative to the full study area. Some localities due to their lower overall vulnerability therefore have assets that do not score particularly highly in the relative asset criticality.

Therefore, the relative asset criticality in particular demonstrates the relative vulnerability of certain assets across the study area, allowing specific focus on these assets in these localities in future phases of the CHAS, as per the intent of the assessment outlined above.

TABLE 1-7 OVERALL VULNERABILITY SCORING & RELATIVE ASSET CRITICALITY

Vulnerability Score	Relative Asset Criticality
>36 – 40	1 (most critical)
>32 – 36	2
>28 – 32	3
>24 – 28	4
>20 – 24	5
>16 – 20	6
>12 – 16	7
>8 – 12	8
>4 – 8	9
0 – 4	10 (least critical)

1.2 Vulnerability Assessment Results Tables

The vulnerability analysis was performed using a specifically developed Microsoft Excel tool for the purpose. Detailed results of the analysis per locality and asset type are provided in the following tables.

1.3 Asset Prioritisation

1.3.1 Vulnerability scoring and relative asset criticality

Assets have been prioritised based on the relative asset criticality assigned to each asset exposed to coastal hazards. Relative asset criticality was derived as a function of the total vulnerability score for each asset type in each location. The following tables provide an overview of the assets that contribute most to settlement vulnerability per locality, and thus the relative criticality of that asset per location. These are the assets of highest importance to each settlement.

Please note, assets which have been scored an asset criticality level of 1 to 5 are considered **highest priority assets** to be put forward for adaptation options after consideration of the priority risks.

TABLE 1-8 MIARA AND NORVAL PARK

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Residential	24.5	4
Bridge	24.5	
Beach	24.5	
Miara Caravan Park	22.5	5
Commercial	21	
Local roads	21	
Electricity Substations	23	
12.1.1 Tidal flats and beaches <i>Casuarina glauca</i>	21	
12.2.2 Coastal dunes <i>Microphyll/ notophyll</i> vine forest	22.5	
12.2.12 Coastal dunes Closed heath	22.5	
12.3.3 Alluvial river and creek flats <i>Eucalyptus tereticomis</i> woodland	21.5	
12.3.7 Alluvial river and creek flats <i>Eucalyptus tereticomis</i>	21.5	
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	22.5	
12.3.7c Alluvial river and creek flats Billabongs and ox-bow lakes	21.5	
12.3.17 Alluvial river and creek flats Simple <i>notophyll</i> fringing forest	20.5	
12.5.2a Old loamy and sandy plains <i>Corymbia</i> intermediate	21.5	
Council buildings	19	6
Culverts	18.5	
Residential and farm infrastructure	18.5	
Estuary	17.5	
Small Inlet	17.5	
Rocky and Coral Reefs	20	
Seagrass	19.5	
Soft Bottom Habitat	17	

TABLE 1-9 MOORE PARK BEACH

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Water supply	32.5	2
Electricity power line	32.5	
Bridge	30.5	3
Moore Park State School	31.5	
Local roads	28.5	
Childcare centre	31.5	
Electricity substation	31.5	
Beach	31.5	
Moore Park Beach Holiday Park	25	4
Culverts	27	
Stormwater mains	27	
Pipeline	26	
12.1.1 Tidal flats and beaches Casuarina glauca	26.5	
12.2.2 Coastal dunes Microphyll/notophyll vine forest	28	
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	27	
12.3.17 Alluvial river and creek flats Simple notophyll fringing forest	25.5	

TABLE 1-10 BURNETT HEADS

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Rubyanna WWTP Sewerage Mains	34	2
Bridge	36	
Electricity power lines & Substations	34/33	
Beach	29.5	3
Waste Treatment & Disposal	31	
Council buildings	29	
Water supply	32	
Transportation & communication	32	
Local roads	30	
Culvert	27	4
Stormwater mains	27	
Manufacturing & industrial	26	
Pipeline	27	
Rocky & Coral Reefs	26.5	
Seagrass	24.5	
12.1.1 Tidal flats and beaches Casuarina glauca	26	
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	25.5	
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	25.5	
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	27.5	
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	25.5	

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
12.5.8 Old loamy and sandy plains Eucalyptus hallii open woodland	24.5	
12.8.13 Basalt plains and hills Araucarian complex	24.5	

TABLE 1-11 BARGARA

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Beach	34	2
Rocky & Coral Reefs	29	3
Residential	27	4
Water supply	25	
Electricity Power Line	25	
Estuary	25	
Small Inlet	25	
Seagrass	25	

TABLE 1-12 INNES PARK AND CORAL COVE

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Beach	29	3
Water supply	25	4
Rocky and Coral Reefs	25	
Seagrass	24.5	
Sewerage mains	23.5	5
Residential & farm infrastructure	23	
Estuary	22.5	
Soft Bottom Habitat	22	
12.8.16 Basalt plains and hills Eucalyptus crebra	20.5	

TABLE 1-13 ELLIOT HEADS

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Water supply	26	4
Electricity power line	24.5	
Beach	27	
Residential	22	5
Local roads	21.5	
Rocky and Coral Reefs	22.5	
Seagrass	22	

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
12.1.1 Tidal flats and beaches Casuarina glauca	23.5	
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	23.5	
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	23.5	
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	23.5	
Unsealed roads	19.5	6
Park assets	16.5	
Marsh/wetlands	17	
Culvert	19	
Stormwater mains	19	
Estuary	20	
Small Inlet	20	
Soft Bottom Habitat	19.5	
12.8.16 Basalt plains and hills Eucalyptus crebra	20	

TABLE 1-14 COONARR

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Beach	24.5	4
Local roads	21	5
Electricity power line	24	
Rocky & Coral Reefs	21.5	
12.2.2 Coastal dunes Microphyll/notophyll vine forest	22.5	
12.2.12 Coastal dunes Closed heath	22.5	
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	21.5	
12.5.2a Old loamy and sandy plains Corymbia intermediate	21.5	
Unsealed roads	17.5	6
Estuary	17.5	
Small inlet	17.5	
Soft Bottom Habitat	18.5	
12.1.1 Tidal flats and beaches Casuarina glauca	19.5	

TABLE 1-15 WOODGATE BEACH

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Woodgate WWTP	29	3
Bridge	29	
Beach	31.5	
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	28.5	
Water supply facilities	26/24	4

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Electricity power line	24.5	5
Rocky and Coral Reefs	24.5	
Seagrass	24.5	
12.1.1 Tidal flats and beaches <i>Casuarina glauca</i>	26.5	
12.2.12 Coastal dunes Closed heath	28	
12.3.7 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	27	
12.3.11 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	27	
12.3.14 Alluvial river and creek flats <i>Banksia aemula</i>	27	
Residential	22	5
Local roads	21.5	
Parks/Sports areas	22.5	
Waste management facilities	20.5	
Culverts	20.5	
Footbridge	21	
Stormwater mainss	22	
Waste treatment/disposal	20.5	
Estuary	22.5	
Soft Bottom Habitat	21.5	

TABLE 1-16 BUXTON

Vulnerability Score and Relative Asset Criticality Level (Highest Rated Assets per Locality)		
Asset	Vulnerability Score	Asset Criticality
Bridge	26.5	4
Residential	21.5	5
Local roads	21	
Electricity Power line	24	
12.3.7 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	21.5	
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	21.5	
12.3.11 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	21.5	
12.5.8 Old loamy and sandy plains <i>Eucalyptus hallii</i> open woodland	21.5	6
Council buildings	17	
Park assets	17	
Culverts	18.5	
Unsealed roads	17.5	
Estuary	17.5	
Small Inlet	17.5	
Seagrass	19.5	
Soft Bottom Habitat	17	

VULNERABILITY ASSESSMENT TABLES BY COASTAL SETTLEMENT

C1 – Miara, Winfield & Norval Park

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Culvert	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	18.5	6
Park Assets	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13	7
Miara Caravan Site	Economic Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	22.5	5
Council Buildings	Settlement Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19	6
Council Land	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	12.5	7
Commercial	Economic Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21	5
Residential	Economic Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity:	Moderate	3	24.5	4

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
													High social or economic dependency				
Non-Habitable (Sheds, other)	Economic Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	No sensitivity to damage or no time required for recovery	1	Limited social or economic dependency	2	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	12.5	7
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21	5
4WD Tracks	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	11.5	8
Unsealed Roads	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	14.5	7
Bridge	Settlement Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24.5	4
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13	7
Marsh/wetland	Environmental Asset	>5% & less than 10% of asset class exposed	2	Limited Future Growth = outside LGIP	1	2	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	11.5	8

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Irrigated Cropping	Economic Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	15	7
Residential and farm infrastructure	Economic Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	18.5	6
Electricity substations	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	23	5
Estuary	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Small Inlet	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Beach	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	High	4	24.5	4
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	20	6
Seagrass	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	19.5	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17	6
12.1.1 Tidal flats and beaches Casuarina glauca	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	Limited social or economic dependency	2	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21	5
12.2.2 Coastal dunes Microphyll/no tophyll vine forest	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	22.5	5
12.2.12 Coastal dunes Closed heath	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	22.5	5
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	22.5	5
12.3.7c Alluvial river and creek flats Billabongs and ox-bow lakes	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
12.3.17 Alluvial river and creek flats Simple notophyll fringing forest	Environmental Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	20.5	5
12.5.2a Old loamy and sandy plains Corymbia intermediate	Environmental Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21.5	5

C2 - Moore Park Beach

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Fairydale and Moore Park Drainage System	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	35.5	2
Council Land	Settlement Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	19	6
Parks, Sports and Natural Areas	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	21	5
Water Supply Facilities	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	32.5	2
Council Buildings	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	2	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	20.5	5
Moore Park Beach Holiday Park	Economic Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	25	4
Park Assets	Environmental Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18.5	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Bridge	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	30.5	3
Culvert	Settlement Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
Stormwater Mains	Settlement Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
Water Supply	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	31	3
Non-Habitable (Sheds, other)	Economic Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	No sensitivity to damage or no time required for recovery	1	Limited social or economic dependency	2	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	12.5	7
Residential	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	22	5
Moore Park State School Buildings	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Critically sensitive to damage or very long time for recovery	5	Moderate social or economic dependency	3	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	31.5	3
Grazing native vegetation	Environmental Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18.5	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Irrigated Cropping	Economic Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18	6
Irrigated Perennial Horticulture	Economic Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	19.5	6
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	18.5	6
Nature Conservation	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	19.5	6
Residential and farm infrastructure	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19	6
Conservation Park	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	22.5	5
4WD Tracks	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18	6
Local Roads	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	28.5	3

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Unsealed Roads	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	High	4	20.5	5
Bridge	Settlement Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	32	3
Child Care Centre	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Critically sensitive to damage or very long time for recovery	5	Moderate social or economic dependency	3	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	31.5	3
Electricity Power Line	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	32.5	2
Pipeline	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Critically sensitive to damage or very long time for recovery	5	Moderate social or economic dependency	3	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	26	4
Electricity substations	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Moderate	3	31.5	3
Estuary	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very High	5	22.5	5
Small Inlet	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very High	5	22.5	5

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Beach	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	High	4	31.5	3
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	21.5	5
12.1.1 Tidal flats and beaches Casuarina glauca	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Limited social or economic dependency	2	2	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	26.5	4
12.2.2 Coastal dunes Microphyll/no tophyll vine forest	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	28	4
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
12.3.17 Alluvial river and creek flats Simple notophyll fringing forest	Environmental Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	25.5	4

C3 - Burnett Heads

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Council Land	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	19	6
Parks, Sports and Natural Areas	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	23	5
Waste Treatment and Disposal	Settlement Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	High social or economic dependency	4	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	31	3
Council Buildings	Settlement Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	2	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	29	3
Park Assets	Environmental Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	20	6
Bridge	Settlement Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	36	2

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Culvert	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
Rubyanna WWTP Sewerage Mains	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	34	2
Stormwater Mains	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
Water Supply	Settlement Asset	>5% & less than 10% of asset class exposed	2	High Future Growth-led exposure = LGIP expansion	2	4	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	32	3
Residential	Economic Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	22.5	5
Grazing native vegetation	Environmental Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Irrigated Cropping	Economic Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18	6
Irrigated Perennial Horticulture	Economic Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	14	7
Manufacturing and Industrial	Economic Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	26	4
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	19.5	6
Nature Conservation	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	20.5	5
Transportation and Communication	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	32	3

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Conservation Park	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	23	5
4WD Tracks	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	20.5	5
Local Roads	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	30	3
Unsealed Roads	Settlement Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	High	4	24	5
Bridge	Settlement Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	36	2
Electricity Power Line	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Low	2	34	2

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Pipeline	Settlement Asset	>5% & less than 10% of asset class exposed	2	High Future Growth-led exposure = LGIP expansion	2	4	Critically sensitive to damage or very long time for recovery	5	Moderate social or economic dependency	3	2	16	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
Electricity substations	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	2	20	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Moderate	3	33	2
Estuary	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	22.5	5
Beach	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	High	4	29.5	3
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	26.5	4
Seagrass	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	24.5	4

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	22	5
12.1.1 Tidal flats and beaches Casuarina glauca	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Highly sensitive to damage or long time for recovery	4	Limited social or economic dependency	2	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	26	4
12.3.3 Alluvial river and creek flats Eucalyptus tereticornis woodland	Environmental Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	25.5	4
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	25.5	4
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	27.5	4
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	25.5	4
12.5.8 Old loamy and sandy plains	Environmental Asset	>10% & less than 25% of	3	High Future Growth-	2	6	Critically sensitive to damage or	5	Limited social or	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for	Low	2	24.5	4

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Eucalyptus hallii open woodland		asset class exposed		led exposure = LGIP expansion			very long time for recovery		economic dependency				recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency				
12.8.13 Basalt plains and hills Araucarian complex	Environmental Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	24.5	4

C4 - Bargara

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Water Supply	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	25	4
Stormwater Mains	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19.5	6
Sewerage Mains	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	High social or economic dependency	4	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	23.5	5
Culvert	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19.5	6
Park Assets	Environmental Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	20	6
Boardwalk	Settlement Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	No sensitivity to damage or no time required for recovery	1	No social or economic dependency	1	1.5	3	Asset Sensitivity: No sensitivity to damage or no time required for recovery AND / OR Socio-economic Sensitivity: No social or economic dependency	High	4	15	7

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Council Buildings	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	18	6
Parks, Sports and Natural Areas	Environmental Asset	>10% & less than 25% of asset class exposed	3	High Future Growth-led exposure = LGIP expansion	2	6	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	21	5
Residential	Economic Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	Moderate	3	27	4
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	22	5
4WD Tracks	Environmental Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	14	7
Unsealed Roads	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	15.5	7

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	16	7
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	21	5
Residential and farm infrastructure	Economic Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	23	5
Electricity Power Line	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	25	4
Estuary	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very High	5	25	4
Small Inlet	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very High	5	25	4
Beach	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure	2	10	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic	High	4	34	2

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
				= LGIP expansion									Sensitivity: Critical social or economic dependency				
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very Low	1	29	3
Seagrass	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	27	4
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	24	5

C5 - Innes Park & Coral Cove

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Water Supply	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	25	4
Stormwater Mains	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19.5	6
Sewerage Mains	Settlement Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	High social or economic dependency	4	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	23.5	5
Park Assets	Environmental Asset	>5% & less than 10% of asset class exposed	2	High Future Growth-led exposure = LGIP expansion	2	4	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	16	7
Parks, Sports and Natural Areas	Environmental Asset	>5% & less than 10% of asset class exposed	2	High Future Growth-led exposure = LGIP expansion	2	4	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	17	6
Unsealed Roads	Settlement Asset	>5% & less than 10% of asset class exposed	2	High Future Growth-led exposure = LGIP expansion	2	4	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17.5	6
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	14	7

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Marsh / Wetland	Environmental Asset	>25% & less than 50% of asset class exposed	4	High Future Growth-led exposure = LGIP expansion	2	8	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Residential and farm infrastructure	Economic Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	23	5
Estuary	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	22.5	5
Beach	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	High	4	29.5	3
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	25	4
Seagrass	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	24.5	4
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	High Future Growth-led exposure = LGIP expansion	2	10	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	22	5
12.8.16 Basalt plains and hills Eucalyptus crebra	Environmental Asset	0 to <5% of asset class exposed	1	High Future Growth-led exposure = LGIP expansion	2	2	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	20.5	5

C6 - Elliott Heads

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Parks, Sports and Natural Areas	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	14.5	7
Park Assets	Environmental Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	16.5	6
Culvert	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19	6
Stormwater Mains	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	19	6
Water Supply	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	26	4
Residential	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	22	5
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13.5	7

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17	6
Intensive Animal Production	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13.5	7
Irrigated Cropping	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13.5	7
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21.5	5
Unsealed Roads	Settlement Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	19.5	6
Electricity Power Line	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24.5	4
Estuary	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	20	6
Small Inlet	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	20	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Beach	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	High	4	27	4
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	22.5	5
Seagrass	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	22	5
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	19.5	6
12.1.1 Tidal flats and beaches <i>Casuarina glauca</i>	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Limited social or economic dependency	2	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	23.5	5
12.3.3 Alluvial river and creek flats <i>Eucalyptus tereticornis</i> woodland	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	23.5	5
12.3.7 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	23.5	5
12.3.11 Alluvial river and creek flats <i>Eucalyptus tereticornis</i>	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	23.5	5

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
12.8.16 Basalt plains and hills Eucalyptus crebra	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	20	6

C7 - Coonarr

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Council Land	Settlement Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	14.5	7
Parks, Sports and Natural Areas	Environmental Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	16	7
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21	5
Unsealed Roads	Settlement Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17.5	6
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13	7
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	14.5	7

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Nature Conservation	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	15.5	7
Electricity Power Line	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24	5
Estuary	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Small Inlet	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Beach	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	High	4	24.5	4
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	21.5	5

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	18.5	6
12.1.1 Tidal flats and beaches Casuarina glauca	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	No social or economic dependency	1	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	19.5	6
12.2.2 Coastal dunes Microphyll/no tophyll vine forest	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	22.5	5
12.2.12 Coastal dunes Closed heath	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	22.5	5
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5
12.5.2a Old loamy and sandy plains Corymbia intermediate	Environmental Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21.5	5

C8 - Woodgate Beach

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Council Land	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	13	7
Parks, Sports and Natural Areas	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	22.5	5
Waste Management Facilities	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	20.5	5
Water Supply Facilities	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	26	4
Woodgate WWTP	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Critically sensitive to damage or very long time for recovery	5	High social or economic dependency	4	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	29	3
Boat Ramp	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	19.5	6
Culvert	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	20.5	5
Footbridge	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	21	5

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Stormwater Mains	Settlement Asset	>10% & less than 25% of asset class exposed	3	Moderate Future Growth-led exposure = LGIP constant	1.5	4.5	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	22	5
Water Supply	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24.5	4
Residential	Economic Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	22	5
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	15.5	7
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	18.5	6
Nature Conservation	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13.5	7
Waste Treatment and Disposal	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Moderate sensitivity to damage or time for recovery	3	High social or economic dependency	4	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	20.5	5
Conservation Park	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	16.5	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
4WD Tracks	Environmental Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	2	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13.5	7
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21.5	5
Unsealed Roads	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	15	7
Bridge	Settlement Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	29	3
Electricity Power Line	Settlement Asset	0 to <5% of asset class exposed	1	Moderate Future Growth-led exposure = LGIP constant	1.5	1.5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24.5	4
Bikeways/ walkways	Settlement Asset	>5% & less than 10% of asset class exposed	2	Moderate Future Growth-led exposure = LGIP constant	1.5	3	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	17.5	6
Estuary	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Very High	5	22.5	5
Beach	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	2	18	Asset Sensitivity: Critically sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Critical social or economic dependency	High	4	31.5	3

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Rocky and Coral Reefs	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very Low	1	24.5	4
Seagrass	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	2	10	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	24.5	4
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	2	8	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	21.5	5
12.1.1 Tidal flats and beaches Casuarina glauca	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Highly sensitive to damage or long time for recovery	4	Limited social or economic dependency	2	2	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	26.5	4
12.2.12 Coastal dunes Closed heath	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	28	4
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	Environmental Asset	>50% of asset class exposed	5	Moderate Future Growth-led exposure = LGIP constant	1.5	7.5	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	28.5	3
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
12.3.14 Alluvial river and creek flats Banksia aemula	Environmental Asset	>25% & less than 50% of asset class exposed	4	Moderate Future Growth-led exposure = LGIP constant	1.5	6	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	2	14	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	27	4

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Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Council Land	Settlement Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	15.5	7
Parks, Sports and Natural Areas	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	14	7
Water Supply Facilities	Settlement Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	28	4
Council Buildings	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Moderate sensitivity to damage or time for recovery	3	Moderate social or economic dependency	3	1.5	9	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	17	6
Park Assets	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17	6
Bridge	Settlement Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	26.5	4

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Culvert	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	Moderate social or economic dependency	3	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	18.5	6
Residential	Economic Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	Critical social or economic dependency	5	1.5	13.5	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Moderate	3	21.5	5
Grazing native vegetation	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	Limited social or economic dependency	2	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	13	7
Marsh/wetland	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	14.5	7
Nature Conservation	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	11.5	8
4WD Tracks	Environmental Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Limited sensitivity to damage or short time for recovery	2	No social or economic dependency	1	1.5	4.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	11.5	8

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Local Roads	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Highly sensitive to damage or long time for recovery	4	High social or economic dependency	4	1.5	12	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21	5
Unsealed Roads	Settlement Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17.5	6
Electricity Power Line	Settlement Asset	0 to <5% of asset class exposed	1	Limited Future Growth = outside LGIP	1	1	Critically sensitive to damage or very long time for recovery	5	Critical social or economic dependency	5	1.5	15	Asset Sensitivity: Highly sensitive to damage or time for recovery AND/OR Socio-economic Sensitivity: High social or economic dependency	Low	2	24	5
Estuary	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Small Inlet	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Limited sensitivity to damage or short time for recovery	2	Moderate social or economic dependency	3	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Very High	5	17.5	6
Seagrass	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	Limited social or economic dependency	2	1.5	7.5	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	Moderate	3	19.5	6

Asset Class	Asset Category	Asset Exposure	Score	Future Zoned Growth Factor	Score	Total Exposure Score	Asset Sensitivity	Score	Socio-economic Dependency of Asset	Score	Locality Factor	Total Sensitivity Score	Descriptor	Adaptive Capacity	Score	Total Vulnerability Score	Relative Asset Criticality
Soft Bottom Habitat	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Moderate sensitivity to damage or time for recovery	3	No social or economic dependency	1	1.5	6	Asset Sensitivity: Limited sensitivity to damage or short time for recovery AND / OR Socio-economic Sensitivity: Limited social or economic dependency	High	4	17	6
12.3.7 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5
12.3.7b Alluvial river and creek flats Naturally occurring instream waterholes and lagoons	Environmental Asset	>50% of asset class exposed	5	Limited Future Growth = outside LGIP	1	5	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	22.5	5
12.3.11 Alluvial river and creek flats Eucalyptus tereticornis	Environmental Asset	>25% & less than 50% of asset class exposed	4	Limited Future Growth = outside LGIP	1	4	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Moderate	3	21.5	5
12.5.8 Old loamy and sandy plains Eucalyptus hallii open woodland	Environmental Asset	>10% & less than 25% of asset class exposed	3	Limited Future Growth = outside LGIP	1	3	Critically sensitive to damage or very long time for recovery	5	Limited social or economic dependency	2	1.5	10.5	Asset Sensitivity: Moderate sensitivity to damage or time for recovery AND/OR Socio-economic Sensitivity: Moderate social or economic dependency	Low	2	21.5	5

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