Appendix J

Summary and Ranking of Relevant Issues

Summary and Ranking of Relevant Issues

Table J-1 is a detailed list of the issues and concerns raised during the consultation process for the Haughton River ICMP, and those issues identified in other planning studies and processes. The issues have been given a reference number which is used in the main body of the ICMP, as well as scores based on the number of times the issue was raised and a variety of assessment of the issues from consultation and other reports. Details of the rankings and abbreviations are provided following the Table.

Table J-1 - Issues Summary

			Where and How Often was the Issue Raised?										Score			
Ref #	Assoc. Issue	Issue	SMG	GPM	WPM	MPM	WRP	TT	BB	BR	BCC	BDT	W/loc	Reg	loc	I/r
1		Impacts of land use change-residential, industrial etc	6	▯	▯			▯			▯	▯	10	5	3	6
2		Land use capability and constraint assessment	2						▯	▯		▯	2	3	1	4
3		Impacts of existing urban and industrial areas	1					▯		▯	▯		1	3	1	4
4		Protection of community amenity and eco tourism potential	3	▯				▯					5	1	2	3
5		Land capability as the basis for land use	5						▯	▯		▯	5	3	1	4
6		Fire management	4		▯	▯		▯			▯	▯	8	3	3	6
7		Grazing management and pasture condition	3	▯		▯	▯	▯ ▯		▯	▯	▯	11	4	5	8
8	15, 25	Alteration of natural land contours e.g. land levelling, rail	2	▯					▯				4	1	2	3
9		Allocation and monitoring of NRM funds and projects	2										5	0	1	1
10		Skill level and capacity of Natural Resource managers – needs raising	1						▯	▯			1	2	1	3
11		Integrated NR planning and management – needed	2					▯	▯	▯			2	3	1	4
12		Demonstration sites for Best Management Practice (BMP)	1										1	0	1	1
13	34	Lack of legislative requirements for BMP and other measures	2		▯				▯			▯	4	2	2	4
14		Environmental contamination	2										2	0	1	1
15		Soil degradation-erosion, structure decline, etc	6			▯		▯	▯	▯	▯	▯	8	5	2	7
16		Soil type constraints	2					▯				▯	2	2	1	3
17	30	Pest animals	6	▯	▯	▯	▯	▯	▯	▯	▯	▯	14	5	5	10
18	30	Pest plants	17	▯	▯	▯	▯	▯	▯	▯	▯	▯	28	5	5	10
19		NR condition indicators and monitoring required	3						▯				3	1	1	2
20		Groundwater quality-e.g. salinity from rising groundwater	5		▯	▯			▯		▯	▯	7	3	3	6
21		Salinity from saltwater intrusion	1						▯		▯		1	2	1	3
22	27	Surface water quality-sediment, nutrients, chemicals, etc.	9	▯	▯		▯	▯ ▯	▯	▯	▯	▯	17	5	5	9
23		Impacts of in stream structures eg. flow alteration & fish passage	5	▯	▯		▯	▯ ▯	▯				13	3	5	6

			Where and How Often was the Issue Raised?										Score			
Ref #	Assoc. Issue	Issue	SMG	GPM	WPM	MPM	WRP	TT	BB	BR	BCC	BDT	W/loc	Reg	loc	l/r
24		Impacts of in stream vegetation e.g. flow alteration and silting	3	▯	▯		▯						9	0	4	4
25		Flood impacts and mitigation structures	6	▯	▯				▯				10	1	3	4
26		Erosion-sedimentation-extraction & impacts of changes on streams	7	▯	▯	▯		▯ ▯	▯		▯		15	3	5	7
27		Water use management and allocation	13	▯		▯	▯	▯ ▯	▯	▯	▯		19	4	5	7
28	26	Loss and degradation of vegetation, habitat and biodiversity	16		▯	▯	▯	▯ ▯	▯	▯	▯	▯	24	5	5	9
29		Protection of viable habitat, vegetation and biodiversity	14					▯				▯	14	2	1	2
30	17, 18, 22, 26, 29	Management to maintain and enhance remnant vegetation, production, habitat and biodiversity e.g. control threats	14		▯			▯			▯	▯	16	3	2	5
31		Impacts from upstream sources	7	▯	▯		▯	▯	▯	▯			13	3	4	7
32		Different perspectives, attitudes and learning styles	5	▯	▯			▯		▯		▯	9	3	3	6
33		Lack of information, knowledge, capacity and awareness	12	▯	▯	▯		▯ ▯	▯	▯	▯	▯	20	5	5	9
34	13	Coordination and communication issues	7	▯	▯	▯		▯	▯	▯		▯	13	4	4	8
35		Sugar industry influence and impacts	3	▯					▯				5	1	2	3
36		Rural towns and community viability	1	▯						▯		▯	3	2	1	4
37	9	Appropriate funding for NRM	3					▯		▯		▯	3	3	1	4
38		Link between economic and environmental benefit for action	1						▯	▯			1	2	1	3
39		Acknowledgement of indigenous people's rights and values						▯						1	0	1
40		Waste management						▯						1	0	1

Key

W/loc = SMG results plus (GPM, WPM, MPM, WRP and TT) x 2
Reg = incidence from TT, BB, BR, BDT and BCC
Loc = incidence from SMG, GPM, WPM, MPM, WRP and TT
l/r = incidence from SMG, GPM, WPM, MPM, WRP, TT, BB, BR, BDT and BCC

Abbreviations

SMG=Stakeholders meeting at Giru
GPM=Giru public meeting
WPM=Woodstock public meeting
MPM=Mingela public meeting
BB=Burdekin Bowen sub regional strategy
TT=Townsville Thuringowa sub regional strategy
BR=Burdekin Rangelands sub regional strategy
TTS=Townsville Thuringowa Strategy
WRP=Burdekin Water Resource Plan Technical Reports (preliminary draft)
BCC=Burdekin Catchment Condition Study (draft)
BDT=Burdekin Dry Tropics regional strategy

Additional Information

Additional comments from public and stakeholder meetings (*-stakeholders meeting) not listed in Table J-1 include:

(8) Impacts of road and rail on the floodplain
(18) Healeys Lagoon and Haughton River
(21) Potential from WIE
(22) * Major Creek, and impacts of Burdekin River water transfer specified
(23) Illegal structures such as sand dams, Major Creek a priority area
(26) * Cungulla specified for erosion, Haughton River banks, Major Creek a priority area
(30) * Horseshoe Lagoon future role?
(31) * Unnatural instream growth and weed seed from Burdekin supplementary flow
(32) * Successional planning, Urban/rural divide
(33) * Rural leadership, Validity of information
(34) * Validity of ICM planning, Red tape, Pest management and revegetation, and St ate lands

Ranking For Main Report (Table 3.2 in the ICMP)

Ranking of issues was done by sorting the various columns in the table above in the following ways:

lsr =sorted by loc, then by SMG, then by Reg
lrs =sorted by loc, then by Reg, then by SMG
rls =sorted by Reg, then by loc, then by SMG
wl =sorted by W/loc, then by l/r
tr =sum of lsr, lrs, rls and wl then sorted ascending

Where issues in any combination had the same score they were ranked the same and the and the ranking below was reduced accordingly e.g. if the two scores at issue rank 12 and 13 were the same then both issues were ranked as 12 and the following issue was ranked as 14.

Table 3.2 in the ICMP document provides a sorted list of the issues based the ranking.

Appendix K

Regional Ecosystems

Regional Ecosystems

Table K-1 – Description of Regional Ecosystems

Regional Ecosystem Description	RE No.	Status	Area ha
Brigalow Belt REs			
Sporobolus virginicus grassland on marine clay plains.	11.1.1	NCAP [1]	358
Samphire forbland on marine clay plains.	11.1.2	NCAP	533
Sedgelands on marine clay plains.	11.1.3	OC [2]	124
Mangrove forest/woodland on marine clay plains.	11.1.4	NCAP	2,239
Eucalyptus platyphylla-Corymbia tessellaris woodland on sandy coastal plains.	11.2.1	OC	36
Lagoons in coastal swales associated with Quaternary coastal dunes & beaches.	11.2.4	OC	36
Corymbia-Melaleuca woodland complex of beach ridges and swales.	11.2.5	OC	1,271
Eucalyptus tereticornis &/or E. camaldulensis tall woodland on alluvial plains.	11.3.4	OC	63
Melaleuca viridiflora woodland on alluvial plains.	11.3.12	NCAP	2,511
Eucalyptus tereticornis or E. camaldulensis, Casuarina cunninghamiana fringing woodland on alluvial plains.	11.3.25	NCAP	2
Areas dominated by Eucalyptus raveretiana, Melaleuca fluviatilis, Casuarina cunninghamiana +/- Nauclea orientalis	11.3.25a	NCAP	674
Areas dominated by Melaleuca leucadendra and/or M. fluviatilis, Nauclea orientalis, Pandanus tectorius, Eucalyptus tereticornis, Casuarina cunninghamiana, Lophostemon suaveolens and rainforest species	11.3.25b	NCAP	6,362
Freshwater wetlands.	11.3.27	NCAP	390
Eucalyptus crebra, Corymbia dallachiana woodland on alluvial plains.	11.3.30	NCAP	15,006
Ophiuros exaltatus, Dichanthium spp. grassland on alluvial plains.	11.3.31	NCAP	81
Eucalyptus platyphylla, Corymbia clarksoniana woodland on alluvial plains.	11.3.35	NCAP	19,563
Microphyll vine forest ± Araucaria cunninghamii on old sedimentary rocks with varying degrees of metamorphism and folding.	11.11.5	NCAP	170
Eucalyptus persistens +/- Corymbia lamprophylla low open woodland on Mesozoic to Proterozoic moderately to strongly deformed and metamorphosed sediments and interbedded volcanics. Lowlands.	11.11.12	NCAP	42
Eucalyptus crebra woodland on deformed and metamorphosed sediments and interbedded volcanics; undulating plains.	11.11.15	NCAP	2,378
Woodland dominated by E. drepanophylla and/or E. platyphylla +/- vine thicket species	11.11.15b	NCAP	2,378
Eucalyptus crebra woodland on igneous rocks.	11.12.1	NCAP	2,405
Semi-evergreen vine thicket and microphyll vine forest on igneous	11.12.4	NCAP	541
Eucalyptus shirleyi woodland on igneous rocks.	11.12.8a	OC	48
Eucalyptus lamprophylla, E. shirleyi, E. exserta +/- Cochlospermum gillivraei or Eucalyptus peltata, E. drepanophylla +/- E. shirleyi +/- E. dallachiana-similar to ecosystems that occur in the Einasleigh bioregion	11.12.8b	OC	1,497
Eucalyptus platyphylla woodland on igneous rocks.	11.12.9	NCAP	1,942
	11.12.9a	NCAP	1,063
Eucalyptus crebra, Corymbia spp., E. acmenoides woodland on igneous rocks; coastal hills.	11.12.13	NCAP	61
Areas dominated by Eucalyptus acmenoides, E. drepanophylla +/- E. exserta	11.12.1 a	NCAP	2,046
Areas dominated by Forest with Eucalyptus intermedia, Casuarina torulosa, Syncarpia glomulifera and Eucalyptus acmenoides	11.12.13b	NCAP	6,055
Montane shrubland on igneous rocks; mountain tops.	11.12.18	OC	227

[1] NCAP = Not of Concern At Present

[2] OC = Of Concern

Regional Ecosystem Description	RE No.	Status	Area ha
Wet Tropics REs			
Notophyll vine forest dominated by blackwood (Acacia melanoxylon) on cloudy wet granite and rhyolite uplands and highlands	7.12.13	NCAP	1,449
Notophyll vine forest with rose gum (Eucalyptus grandis) emergents on cloudy wet granite and rhyolite upland ridges	7.12.14	NCAP	546
Tall open rose gum (Eucalyptus grandis) forest on cloudy moist granite and rhyolite uplands and highlands.	7.12.21	OC	79
Tall open woodland, with Corymbia intermedia, Allocasuarina torulosa and Lophostemon suaveolens of the moist uplands	7.12.23	OC	139
Forest red gum (Eucalyptus tereticornis) woodland on dry granite uplands and highlands.	7.12.35	NCAP	442
Deciduous microphyll vine thicket on fire protected dry granite	7.12.36	OC	142
Einasleigh Uplands REs			
Eucalyptus camaldulensis or E. tereticornis woodland in channels and on alluvial flats and levees of larger watercourses +/- Casuarina cunninghamiana.	9.3.1	NCAP	81
Eucalyptus crebra and Corymbia dallachiana woodland on yellow earths of Tertiary plains.	9.5.3a	NCAP	10
Eucalyptus spp., Corymbia spp. and/or Melaleuca spp. communities on sandstone plateaus, scarps and ledges, on skeletal soils, sands and earths.	9.10.1x7	NCAP	346
	9.10.1x8	NCAP	104
	9.10.1x9	NCAP	493
Eucalyptus shirleyi woodland on skeletal soils on hills on folded sedimentary and metamorphic rocks.	9.11.1xb	NCAP	14
Narrow-leaved ironbark (Eucalyptus crebra) and ghost gum (Corymbia dallachiana) woodland on shallow texture contrast soils of low hills and lowlands	9.11.2a	NCAP	3,312
Corymbia citriodora, Eucalyptus drepanophylla, E. acmenoides and E. cloeziana open forest on skeletal soils on hills on sedimentary and metamorphic rocks.	9.11.4b	NCAP	9,638
Eucalyptus persistens woodland on shallow texture contrast soils of lowlands and low rises on folded sedimentary and metamorphic rocks.	9.11.5x10	NCAP	888
Dry vine forest and associated woodland on rock outcrop and shallow loams on limestones	9.11.8a	OC	144
Narrow-leaved ironbark (Eucalyptus crebra) and bloodwood (Corymbia spp.) woodland on shallow soils of low hills and ranges	9.12.1	NCAP	5,189
	9.12.1x3	NCAP	6,852
	9.12.1x6	NCAP	46
	9.12.1x13	NCAP	17,625
	9.12.1x16	NCAP	4,918
	9.12.1x17	NCAP	385
	9.12.1x19	NCAP	867
Ironbark (Eucalyptus granitica), white mahogany (Eucalyptus acmenoides) and lemon scented gum (Corymbia citriodora) open forest on shallow soils of hills and ranges	9.12.2x7	NCAP	3,270
	9.12.2d	NCAP	4,235
Broad-leaved ironbark (Eucalyptus shirleyi) low open woodland on skeletal soils of hills and ranges	9.12.4x8	NCAP	777
Dry vine forest on igneous outcrops	9.12.8	NCAP	2,207
Total area (hectares) for individual REs = 134,297 ha			

Regional Ecosystem Description	RE No.	Status	Area ha
REs in associations only			
Corymbia spp. woodland on alluvial plains. Sandy soils.	11.3.7	NCAP	
Eucalyptus platyphylla, Corymbia spp. woodland on alluvial plains.	11.3.9	NCAP	
Eucalyptus brownii woodland on alluvial plains.	11.3.10	NCAP	
Grevillea striata on alluvial plains.	11.3.13	OC	
Woodland on alluvial plains dominated by Eucalyptus tessellaris, E. clarksoniana and E. platyphylla	11.3.35a	NCAP	
Lophostemon spp. woodland on igneous rocks; coastal hills.	11.12.14	OC	

Table K-2 – Regional Ecosystem Associations

RE association	Hectares	RE association	Hectares
11.1.1/11.1.2	343 & 29	11.3.7/11.3.9/11.3.12	1,711
11.1.1/11.1.2/11.1.4	116 & 832	11.3.7/11.3.9/11.3.25/11.3.25b	111
11.1.1/11.1.3/11.3.27	2,297	11.3.7/11.3.9/11.3.25b	634
11.1.1/11.1.4	618	11.3.7/11.3.9/11.3.25b/11.3.27	429
11.1.1/11.3.25/11.3.27/11.3.31	996	11.3.7/11.3.25/11.3.25b	31
11.1.2/11.1.4	305 & 164	11.3.7/11.3.31	90 & 2
11.1.3/11.3.7/11.3.9/11.3.25b	428	11.3.9/11.3.12/11.3.30	1,201
11.1.3/11.3.7/11.3.25b	624	11.3.10/11.3.35a	16,676
11.1.3/11.3.9/11.3.13	114	11.3.25/11.3.25b	1,410 & 55
11.1.3/11.3.25b	3		
11.1.3/11.3.27	81	11.12.1/11.12.4	364
		11.12.4/11.12.9/11.12.13/11.12.14	964
11.3.4/11.3.7/11.3.9/11.3.13	278	11.12.13/11.12.14	375
11.3.4/11.3.7/11.3.9/11.3.25b	90		
11.3.4/11.3.25b/1.3.35	2,200	9.12.1x13/9.12.8	703
		9.11.2a/9.11.8a	2,974
Total associations 28		**Total area in associations**	**37,231**

The Regional Ecosystems (REs) have been sorted numerically in ascending order. Dominant REs appear first unless underlined which denotes the dominant RE in the association prior to sorting numerically. Due to sorting descending RE percentages may not be reflected in this list of associations.

Additionally where two areas appear for an association the first area is for the first RE in the association as dominant and the second area is for the second RE in the association as dominant.

Total area of all regional ecosystems and associations 171,500.

Table K-3 RE Status and Area

Individual Res	Number	Area (ha)	Area in associations (ha)
No Concern at Present (NCAP)	45	130,494	12,499
Of Concern (OC)	12	3,806	3,035
Totals		**134,300**	**15,534**

REs in associations only	Number	Area (ha)	Comment
No Concern at Present	4	21,679	
Of Concern	2	?	

The area of regional ecosystems in associations has been calculated on the basis of the dominant RE in an association. The area is then added to the total (column four) of the group of REs, which includes the dominant RE for those associations.

The area of REs that appear in associations only has also been calculated based on the dominant RE in the association. If there is no total it means the REs where not dominant.