



BULUWAI CULTURAL HERITAGE SURVEY
LANDS, WATERS, FLORA & FAUNA
Environmental study and conservation
of Wet Tropics land and water ecosystems



STUDY AREA B

LANDS, WATERS,
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TOTEM SPECIES,
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INTEGRATED LANDSCAPES

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Queensland National Parks in relation to the
Wet Tropics World Heritage Area

The Barron Gorge National Park straddles the Barron Gorge and joins protected areas north and south that form the greater Wet Tropics Bioregion (Cook Town to Ingham) and the Wet Tropics World Heritage Area.

Most National Parks in Australia are not World Heritage Areas.

World Heritage Areas are places on Earth with *Outstanding Universal Value* and are listed with UNESCO because the site meets one or more of the 10 criteria.

Queensland's Wet Tropics World Heritage Area satisfies 4 of the 10 criteria for Outstanding Universal Values.

“On the Australian continent, we’re talking about 1,000th of Australia’s continental land area.

A major analysis which looked at the biogeographic and the biological uniqueness and irreplaceability of different ecosystems on the planet – this was over 173,000 different protected areas on the planet – ranked the Wet Tropics World Heritage Area as the 6th most critical and irreplaceable.

Of World Heritage Areas, it was the 2nd most critical and Irreplaceable. I think this gives you global perspective on what we’re talking about here.”

DISTINGUISHED RESEARCH PROFESSOR & AUSTRALIAN LAUREATE
William F. Laurance, PhD, FAA, FAAAS, FRSQ | Prince Bernhard Chair in International Nature Conservation
Director, Centre for Tropical Environmental and Sustainability Science



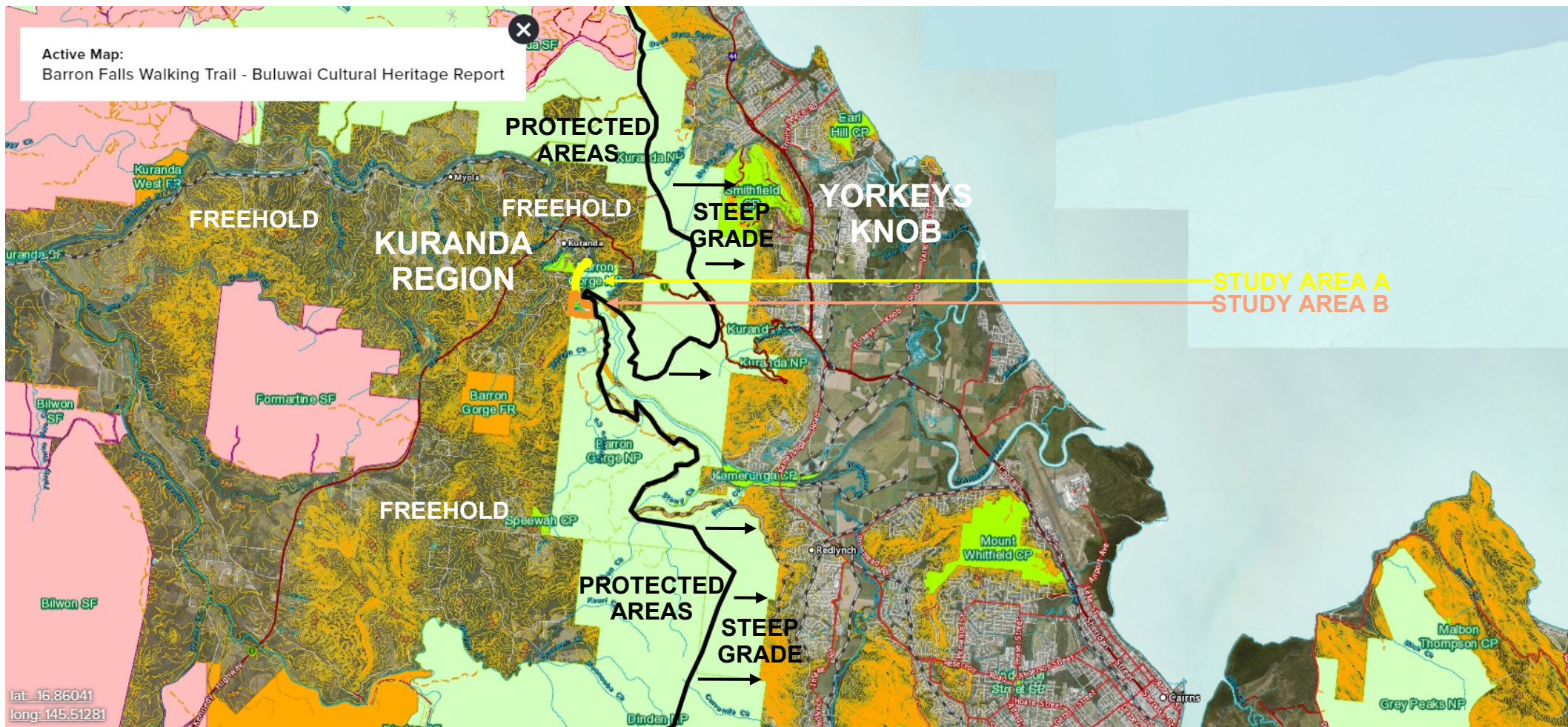
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STUDY AREA A and STUDY AREA B in relation to the Wet Tropics World Heritage Area

** The project area is the last protected Kuranda Region north-south corridor for the WTWHA above the Barron Falls.



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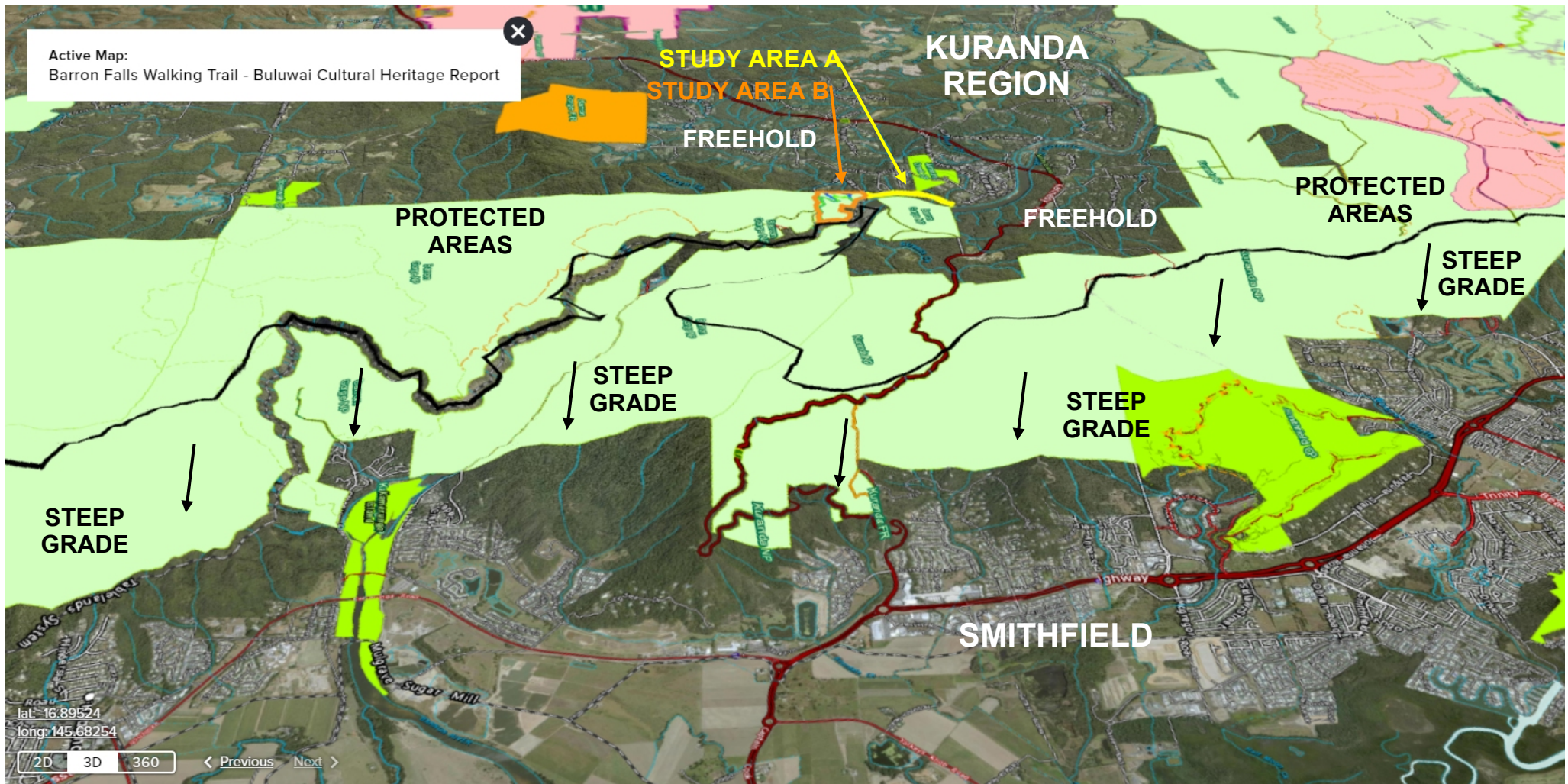
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SLIDE 1 OF 2

STUDY AREA A and STUDY AREA B in relation to the Wet Tropics World Heritage Area

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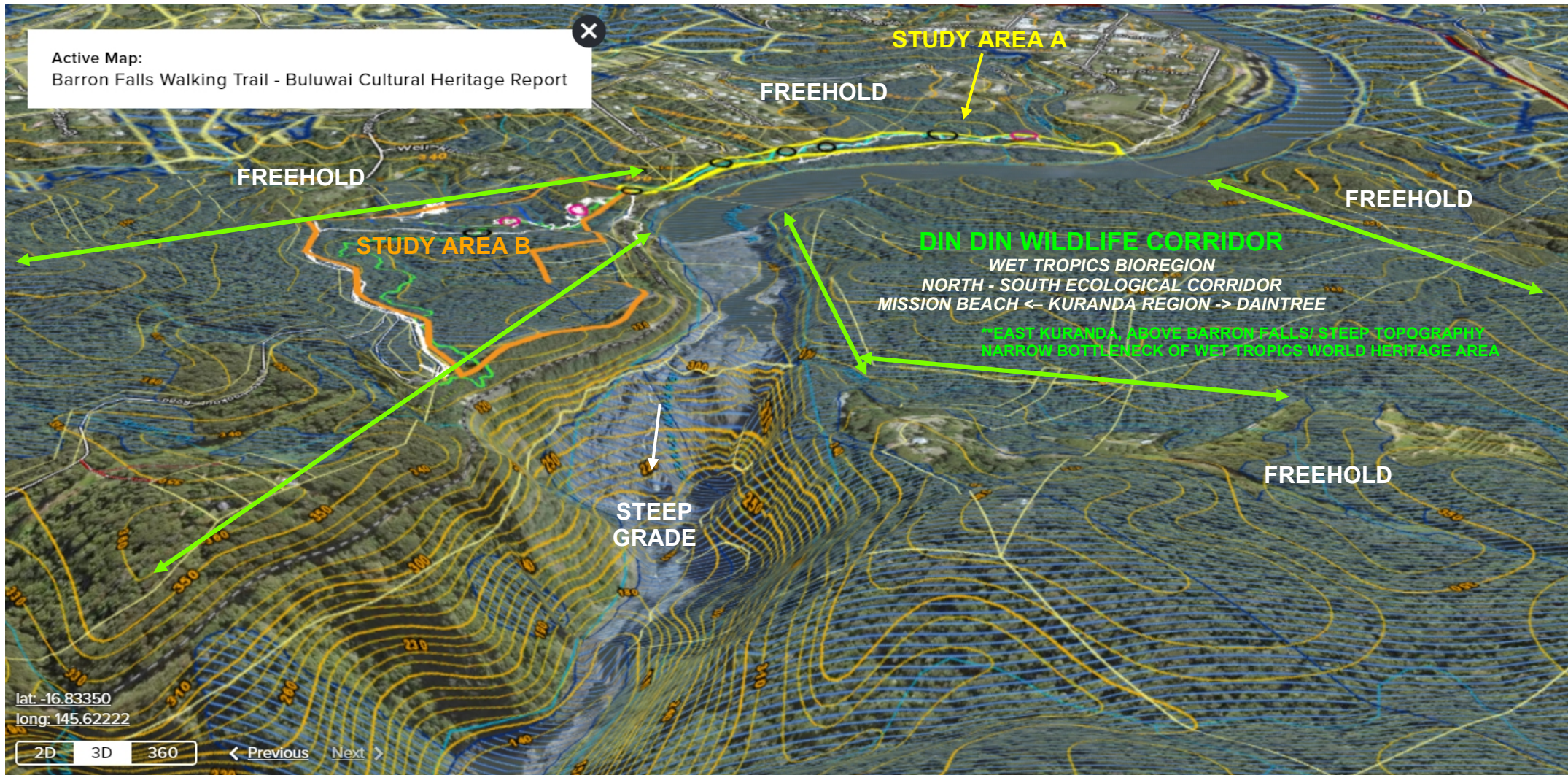
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STUDY AREA A and STUDY AREA B in relation Din Din Wildlife Corridor

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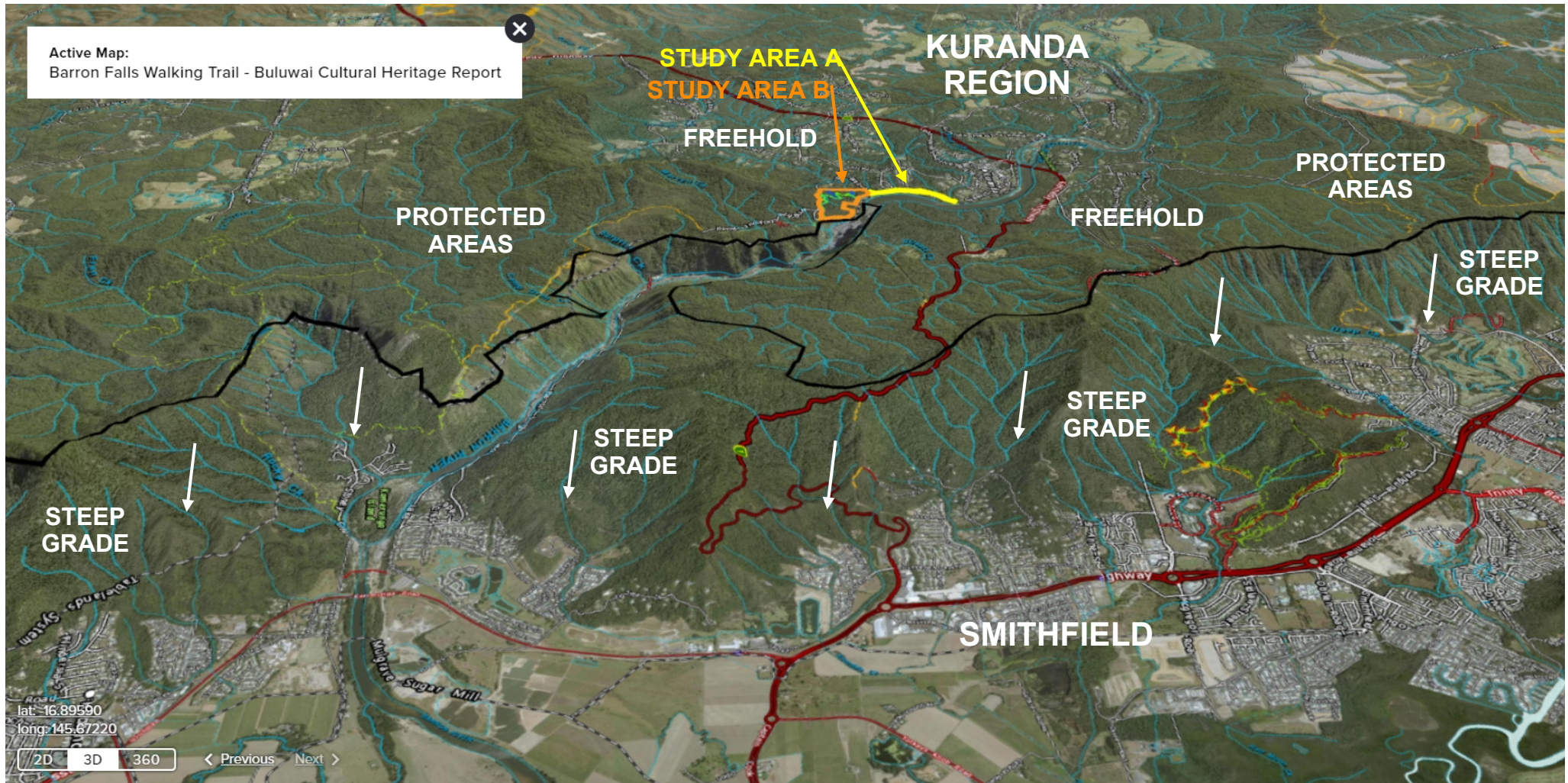
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STUDY AREA A and STUDY AREA B in relation to the Wet Tropics World Heritage Area

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INTEGRATED LANDSCAPESEnvironmental study and conservation of
Wet Tropics land and water ecosystems**Potentially hazardous flora and fauna in Wet Tropics native forests, including the project area**

- Green tree ants
- Bees and wasps
- Hairy caterpillars
- Australian paralysis tick
 - Bush ticks
- Scrub itch mites
 - Centipedes
 - Leeches
- Whistling spider
- Redback spider
- Funnel-web spider
- Monitor lizards
 - Cassowary
 - Feral pig
 - Hairyman
- Taipan snake
- Eastern or common brown snake
 - Small-eyed snake
 - Rough-scaled snake
 - Red-bellied black snake
- Northern death adder snake
- Tar tree
- Burny bean
- Stinging tree

SOURCE: Tropical Topics – Hazards in the wet tropics <https://www.wettropics.gov.au/site/user-assets/docs/31%20HazardsInTheWetTropics.pdf>SOURCE: Tropical Topics – The venomous side of spiders <https://www.wettropics.gov.au/site/user-assets/docs/67Spiders.pdf>

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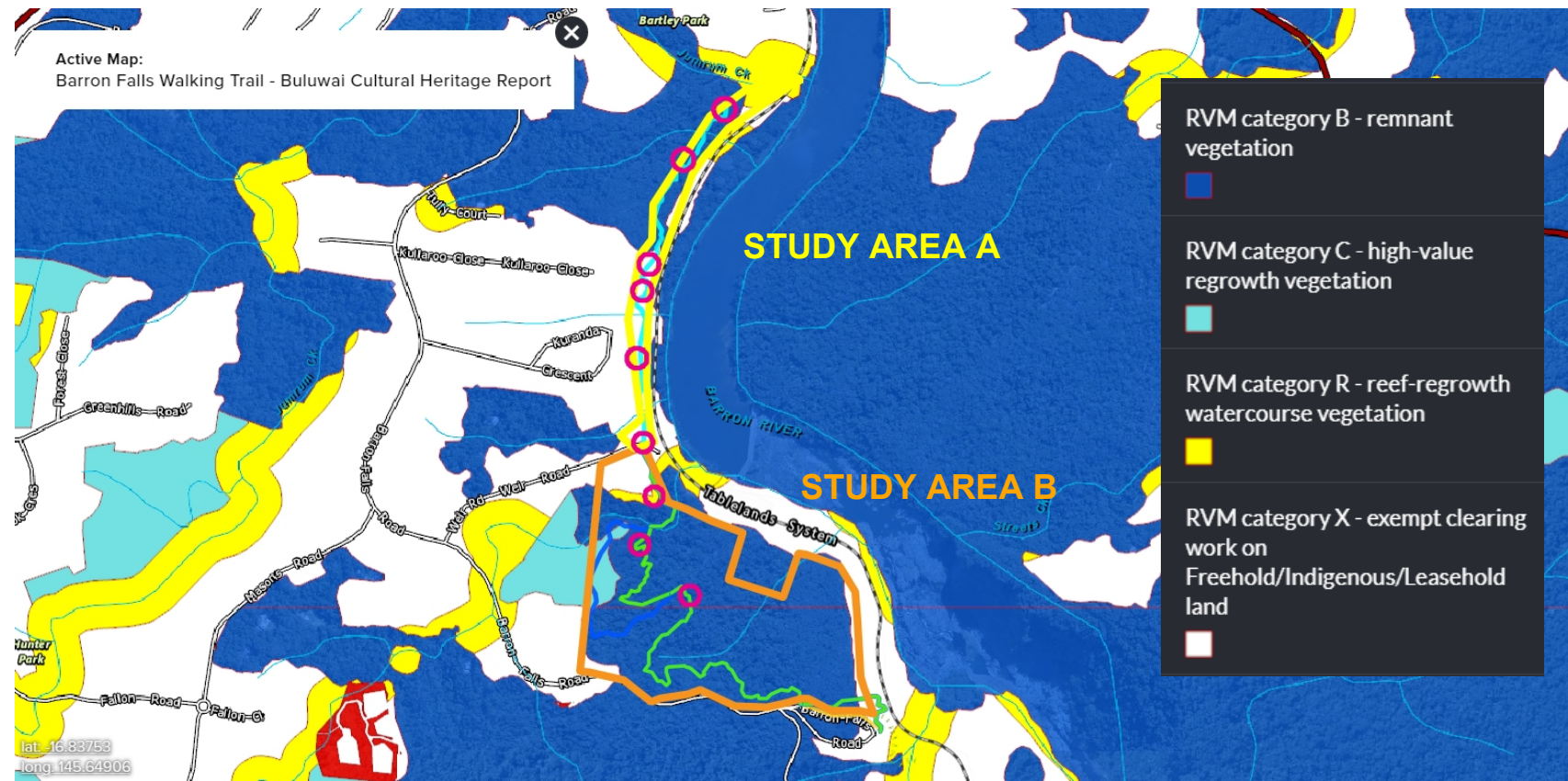
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Remnant and high value vegetation and reef-regrowth watercourse vegetation

STUDY AREA A contains around 50% valuable remnant vegetation, mostly disturbed. STUDY AREA B is mainly remnant with some disturbed areas on the north west corner. STUDY AREA B is an older, less accessible, remnant forest with topographical constraints, and therefore more biodiverse in flora and fauna species.

Vegetation and land disturbances are an important way to inform discovery of cultural artefacts.

Remnant vegetation (dark blue) is often a sign the land was only 'selectively' logged, ie. all old-growth trees removed for cabinet and building timbers. In these less disturbed areas it is more likely to make cultural finds.



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Threatened Species - List

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Hylidae	<i>Litoria nyakalensis</i>	mountain mistfrog		E	CE	1/1
animals	amphibians	Hylidae	<i>Litoria rheocola</i>	common mistfrog		E	E	21/17
animals	amphibians	Hylidae	<i>Litoria nannotis</i>	waterfall frog		E	E	6
animals	amphibians	Hylidae	<i>Litoria serrata</i>	tapping green eyed frog		V		88/19
animals	amphibians	Hylidae	<i>Litoria myola</i>	Kuranda treefrog		E	CE	32
animals	amphibians	Hylidae	<i>Litoria dayi</i>	Australian lacelid		E	V	13/6
animals	amphibians	Myobatrachidae	<i>Taudactylus acutirostris</i>	sharp snouted dayfrog		PE	EX	1
animals	birds	Accipitridae	<i>Erythrotriorchis radiatus</i>	red goshawk		E	V	4
animals	birds	Casuariidae	<i>Casuarus casuarus johnsonii (southern population)</i>	southern cassowary (southern population)		E	E	100
animals	birds	Estrildidae	<i>Erythrura gouldiae</i>	Gouldian finch		E	E	1
animals	birds	Falconidae	<i>Falco hypoleucos</i>	grey falcon		V		1
animals	birds	Psittacidae	<i>Cyclopsitta diophthalma macleayana</i>	Macleay's fig-parrot		V		201
animals	birds	Turnicidae	<i>Turnix olivii</i>	buff-breasted button-quail		E	E	1
animals	insects	Lycaenidae	<i>Hypochrysops apollo apollo</i>	Apollo jewel (Wet Tropics subspecies)		V		4
animals	mammals	Hipposideridae	<i>Hipposideros diadema reginae</i>	diadem leaf-nosed bat		NT		2/1
animals	mammals	Macropodidae	<i>Dendrolagus lumholtzi</i>	Lumholtz's tree-kangaroo		NT		1
animals	mammals	Megadermatidae	<i>Macroderma gigas</i>	ghost bat		E	V	1
animals	mammals	Pteropodidae	<i>Pteropus conspicillatus</i>	spectacled flying-fox		V	E	22
animals	mammals	Vespertilionidae	<i>Murina florium</i>	tube-nosed insectivorous bat		V		2
animals	reptiles	Crocodylidae	<i>Crocodylus porosus</i>	estuarine crocodile		V		3
plants	land plants	Arecaceae	<i>Archontophoenix myolensis</i>			E	E	2/2
plants	land plants	Athyriaceae	<i>Diplazium pallidum</i>			E	E	2/2
plants	land plants	Euphorbiaceae	<i>Wetria australiensis</i>			V		3/3
plants	land plants	Lycopodiaceae	<i>Phlegmariurus dalhousieanus</i>			E	E	1/1
plants	land plants	Mimosaceae	<i>Senegalia albizioides</i>			NT		1/1
plants	land plants	Rubiaceae	<i>Randia audasii</i>			NT		5/5
plants	land plants	Zingiberaceae	<i>Alpinia hylandii</i>			NT		2/2



Queensland
Government

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records - The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.

Wildlife Online Extract

Search Criteria: Species List for a Specified Point
Species: All
Type: Native
Status: Rare and threatened species
Records: All
Date: All
Latitude: -16.8344
Longitude: 145.6370
Distance: 5

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Threatened Species - Kuranda Tree Frog *Litoria myola*

Kuranda tree frog records – orange circles right – show the species in the first creek at the beginning of STUDY AREA A and also in the creek near where STUDY AREA B starts.

Given the records it is likely that Kuranda tree frog is present in one or both permanent creeks in STUDY AREA B.

Please contact Kuranda Envirocare Inc for a frog survey on these creeks.

This frog survey could also determine the presence of other threatened frog species, eg. Australian Lacelid *Litoria dayi*

Particular attention should be paid to creek crossing infrastructure design to avoid major creek wall disturbances followed with sensitive installation to avoid silting of breeding riffles.

Habitat can be easily destroyed by interference.



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Threatened Species - Myola Palm *Archontophoenix myolensis*

The mature palm specimen pictured right (and several other specimens, grove pictured below) were sighted on STUDY AREA B and may be identified as endemic species Myola palm as it often occurs as tandem-species to Kuranda tree frog (see previous page).

A professional flora and fauna report is required to properly identify threatened endemic species Myola palm presence on STUDY AREA B and other threatened species.

This creek appears to be unnamed however is known to Willie Brim and others as 'Platypus Creek'. Kuranda's language name is Ngunba which is 'Platypus'.



GPS	
Latitude	16; 49; 57
Longitude	145; 38; 18
Altitude	394



- | | |
|------------------------|----------------------|
| Pigeon | Gulguruwuy |
| Pigeon (Torres Strait) | Nyungga l |
| Pigeon (Wompoo) | Bagam |
| Platypus | Ngunba |
| Possum | Bidul (also Gayarra) |
| Possum (Sugar Glider) | Walburri |
| Possum (Striped) | Gubuguru |

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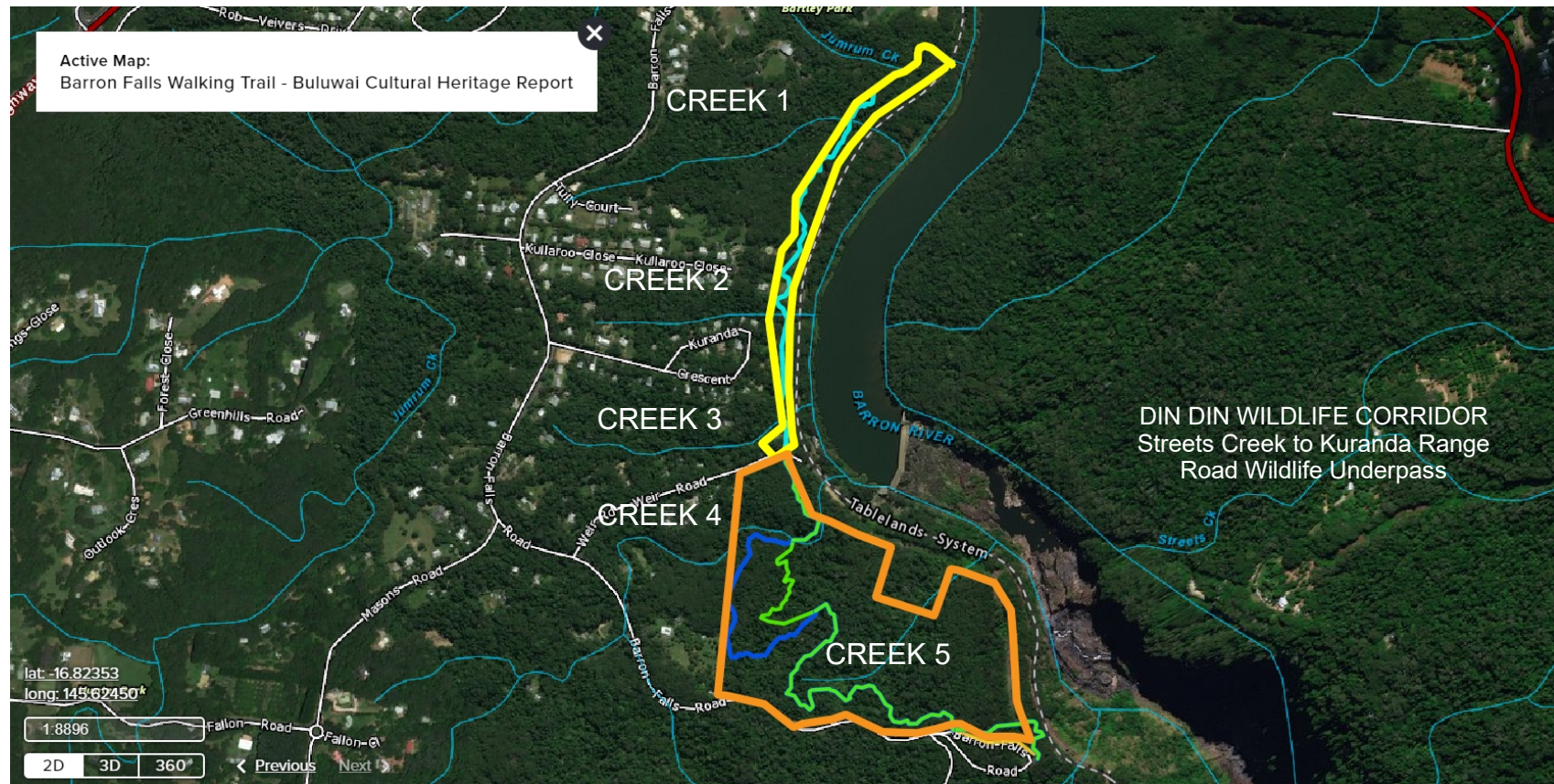
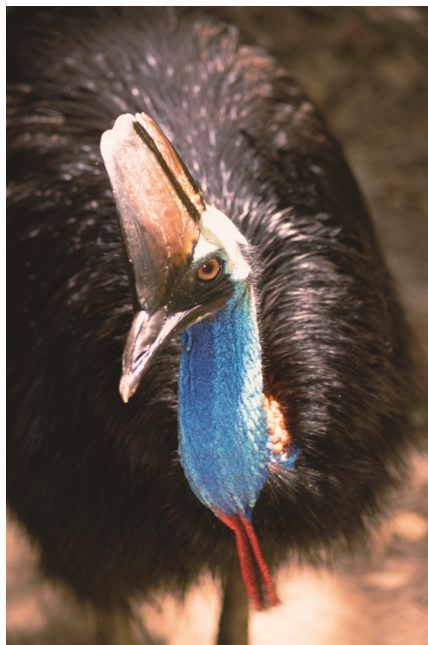
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Threatened Species - Cassowary

The trail falls on the eastern Kuranda Din Din Wildlife Corridor - north-south corridor for cassowary and other terrestrial Wet Tropics species. Rainforest creeks are integral ecological connections for many species including cassowaries. Streets Creek on the other side of the Barron River is the ecological corridor that crosses the Kuranda Range Road and enables wildlife access to northern WHA.

Preferable CREEK 4 is given a high boardwalk crossing to allow cassowary unhindered movement in the waterway to the Barron River. CREEK 4 joins National Park south with Streets Creek on northern Barron River to form DIN DIN WILDLIFE CORRIDOR.



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FLORA & FAUNATOTEM SPECIES,
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Wet Tropics land and water ecosystems**Particular attention on land-water, permanent and seasonal creeks**

In the Wet Season the monsoon rains come we can see metres of rain fall in days. The land swells, the gullies take the land run-off and become torrents of water rushing toward the Barron River. All creeks in Kuranda, whether permanent or seasonal, have a landscaping function. When not in flood (most of the year) many plants and animals use these critical land-water corridors to traverse the landscape.

The TRAIL should not impact the way water currently moves through the landscape and infrastructure should keep people up and away from these sensitive land-water environments for least interference.

No steps on the trail please. The concrete steps on Jumrum Walk, while cost effective at the time, are both a hazard for walking visitors and inhibiting for natural water flow in the creek.

Preferable ALL CREEKS are given a high boardwalk crossing to allow wildlife unhindered movement in the waterway to and from the Barron River. There are numerous SEASONAL GULLIES which take a volume of water in the Wet Season. Boardwalks above the high watermark in seasonal gullies to protect the TRAIL infrastructure, preferably at cassowary friendly height.

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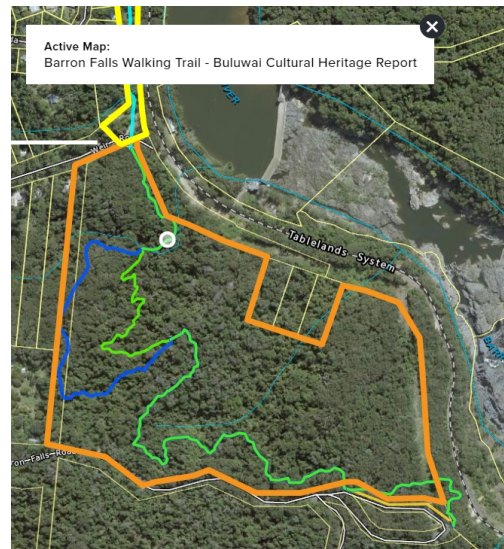
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Particular attention on land-water, permanent and seasonal creeks

Location: -16.8341666, 145.6375



Location: -16.8325, 145.63833



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Location: -16.834444, 145.6383333



Location: -16.835833, 145.639722



