Independent Planning Commission RE SSD 8169 North Byron Parklands Events Site; Submission by Carmel Daoud and Gary Opit

Our submission details the potential threat posed to the pristine waterway and aquifer within the Billinudgel Nature Reserve and the three endangered ecological communities (EECs) listed under the BC Act because of proposed wastewater to be surface sprayed onto an area designated as EMA2 in RE SSD 8169 North Byron Parklands Events Site.

North Byron Parklands has proposed to dispose of up to 35 kl/day of secondary treated and chlorine disinfected wastewater effluent from on-site treated compost seep, urine, hand basin water, shower grey water and conference centre kitchen sullage to be surface sprayed onto an area designated as EMA2**.** The main drainage from the North Byron Parklands event and camping site leaves the NBP property to the north and north-east flowing through the adjacent private property. The largest drain flows through the north-eastern corner of the North Byron Parklands camping site and travels east beneath Jones Road into the Billinudgel Nature Reserve

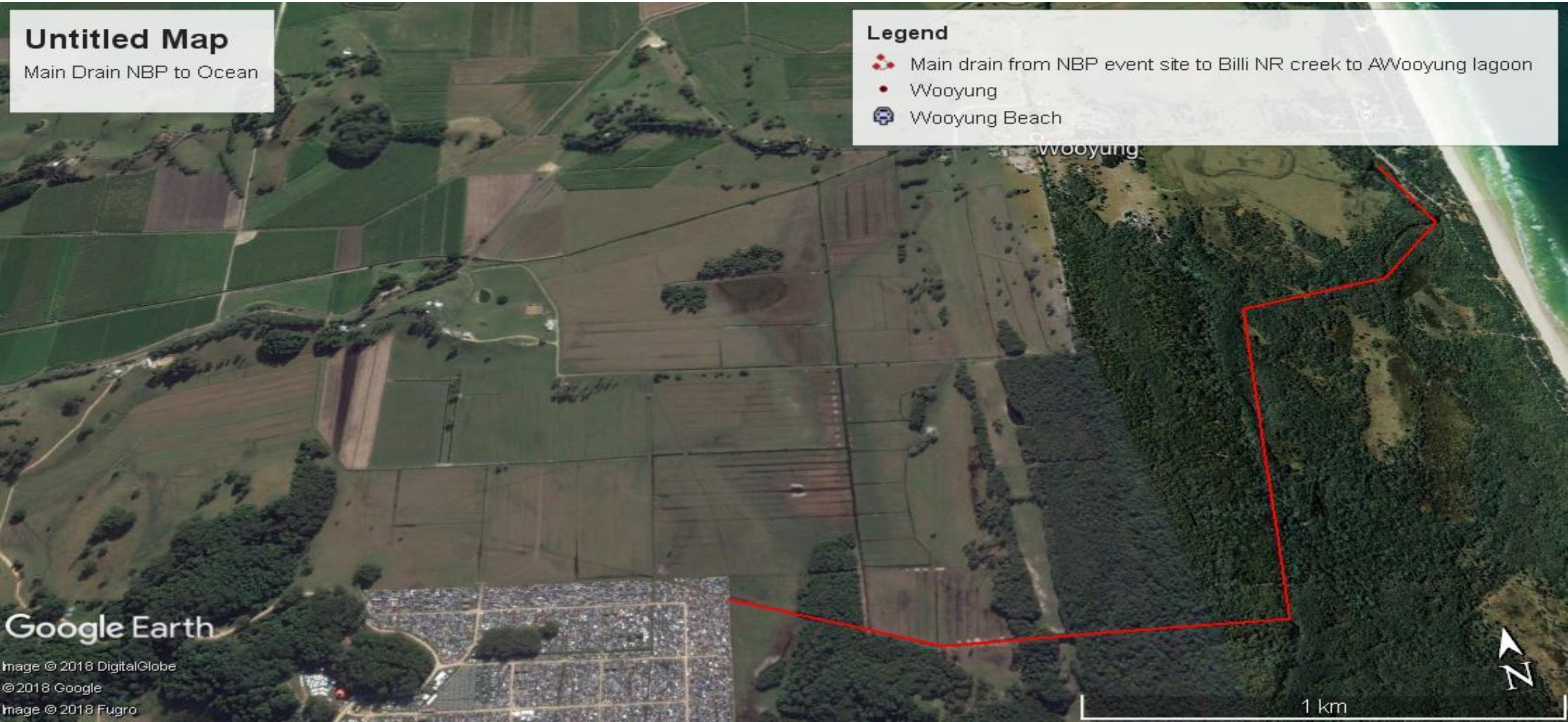
Environmental Impact Statement North Byron Parklands Cultural Events Site North Byron Parklands EIS December 2017

Drainage Catchments

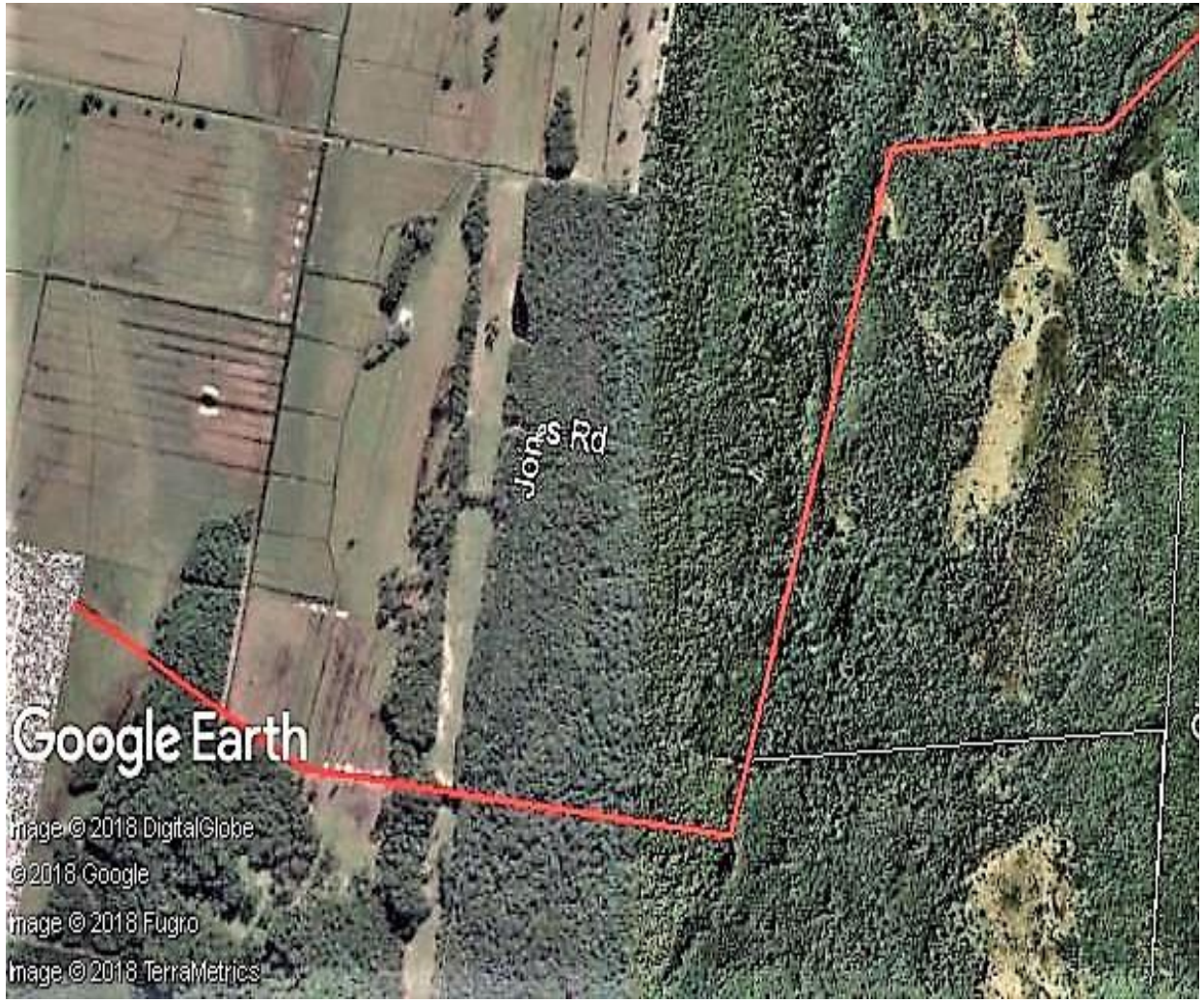
- The North Byron Parklands site is located in two main drainage catchments, divided by the east-west alignment of Marshalls Ridge and Jones Road through the centre of the site. The majority of the northern camping/event area is within the Crabbes Creek floodplain, which forms part of the Mooball Creek catchment. Runoff from the northern part of the site drains generally to the north-east through a series of agricultural drains, discharging to the Crabbes Creek drainage system approximately 3 kilometres to the north-east of the site. Crabbes Creek flows northward along the coast, draining into Mooball Creek which also flows northward along the coast, eventually discharging to the Pacific Ocean at Pottsville. The southern parking area to the south of Marshall Ridge is located within the headwaters of Billinudgel Creek, and also within the Yelgun Creek floodplain, which is a tributary of Marshalls Creek. These creeks are sensitive as they drain into a SEPP 14 wetland to the east of the site within Billinudgel Nature Reserve.

The GHD Review of EIS Stage 1 Final Report for Department of the Environment North Byron Parklands Development Application, 2316318 states; “The camping area has a drainage system comprising of lateral sub-surface drainage pipes feeding into drainage channels”. *GHD consequently has two significant concerns – there is an error in volume calculation and consequently the irrigation area required is likely to be much greater than nominated and irrigation of flood prone land using (treated) wastewater is not acceptable due to high contamination risk on- and off-site. The stormwater leaching of contaminants into the flood plain and groundwater system is considered a potential risk. The site inspection confirmed that currently, the compost burial area and intermittently dosed sand filter beds (IDSFB) are not bunded. Stormwater run-off from these areas flows into the flood plain area.”*

The North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169 states; 7. Conclusion in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169 “The irrigation of treated wastewater on a flood plain area is considered a contamination risk on and off-site. The stated treated water quality for irrigation is considered not to be achievable especially on days 5-7 of a large event. The proposed disposal of treated wastewater via irrigation on a flood prone area is considered a high risk”.



The main drainage from the North Byron Parklands event and camping site leaves the NBP property to the north and east flowing through the adjacent private property. The largest drain flows through the north-eastern corner of the North Byron Parklands camping site and travels east beneath Jones Road into the Billinudgel Nature Reserve.



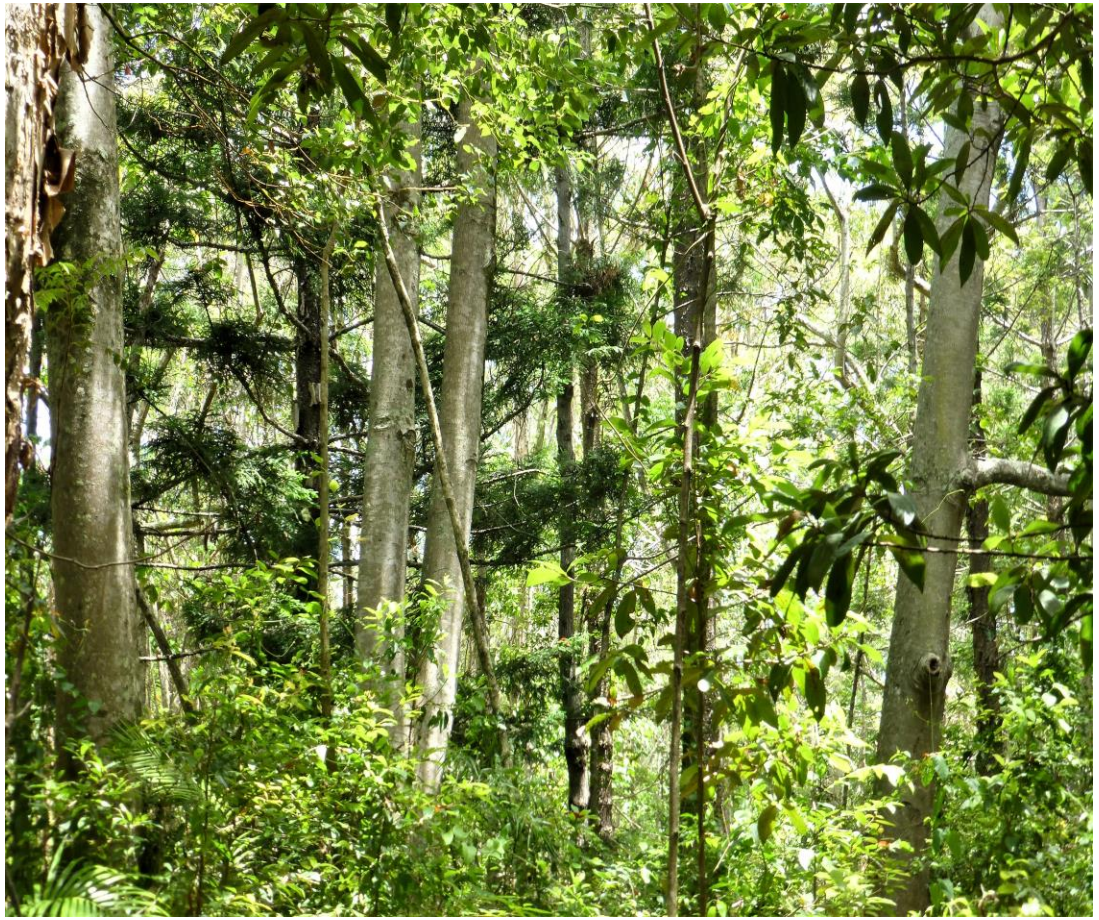
The North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, 4.9 Objects of the EP&A Act, in Table 6: Considerations Against the EP&A Act, 1.3(e) it states “As part of the development, the Applicant will continue its habitat restoration works and maintain adequate buffers between the site and adjacent ecological features (the Billinudgel Nature Reserve, SEPP 14 wetlands and the Marshalls Ridge wildlife corridor).” The left hand side photo shows how the main drain from NBP and the private property empties directly into the pristine Billinudgel Nature Reserve and SEPP 14 wetlands.

In the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, at 3.2 North Coast Regional Plan 2036, it states “supporting the continued protection and enhancement of the on-site biodiversity values and the adjacent Billinudgel Nature Reserve (Direction 2). I took these photos yesterday, Sunday 9 December 2018 and the photo shows the forest on Jones Road directly above the drain that empties into the reserve and wildlife was instantly observable.

In the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, 5.2 Submissions, 5.2.1 Public Authorities, it states “the Office of Environment and Heritage raised issues regarding the potential for the development to impact upon the adjacent Billinudgel Nature Reserve.” North Byron Parklands has been constructing buffers to filter water from adjacent the car park to the south of Marshalls Ridge and Jones Road, but no such buffers are proposed to protect the Billinudgel Nature Reserve, Aboriginal sacred site and three endangered ecological communities from all of the flows from the sewerage treatment disposal from the actual event and camping sites north of Marshalls Ridge and Jones Road.

Having left North Byron Parklands the drain flows east across a private property, under Jones Road and empties directly into this Endangered Ecological Community: Sub-tropical floodplain forest of the NSW north coast bioregion.

This unpolluted and undisturbed freshwater creek passes a forest of Blue Quandong and Hoop Pine in the Endangered Ecological Community: Sub-tropical floodplain forest and then flows through the Endangered Ecological Community: Swamp sclerophyll forest on coastal floodplains of the NSW north coast bioregion.



The North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169 states;

1.1 Environmental Performance, “the trial period would provide the Applicant with an opportunity to confirm its operational and environmental management plans are effective, and to ensure potential environmental impacts associated with the development are properly managed and minimised.

2.2 Infrastructure and Staging in the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169 there is no mention of drainage, only sewerage infrastructure and treatment. Endangered species within the reserve include the Oxleyan Pygmy Perch, the Giant Dragonfly and the Mitchell’s Rainforest Snail, vulnerable species include the Wallum Froglet and Wallum Sedge Frog, all are susceptible to pollutant runoff from development.

Endangered

Oxleyan Pygmy Perch *(Nannoperca oxleyana)*

Description
The Oxleyan Pygmy Perch is a small freshwater fish that is commonly less than 45mm. The body is moderately compressed, the mouth small in length, and the teeth of the lower jaw enlarged. It is light brown to olive in colour, darker on the back and paler on the sides. Three to four patchy lines extend from the head to the tail. A dark spot with orange margins is found at the base of the tail. A blue ring encircles the eye and, in the breeding season, the fins darken and the tail turns red.

Distribution
Wetlands and watercourses of the coastal strip from about Coffs Harbour in the south to the Mary River catchment in Qld, as well as large sandy islands in southern Qld, such as Fraser, Moreton and Stradbroke Islands.

Habitat
Coastal ‘wallum’ country. Wallum is a banksia-dominated lowland heath ecosystem characterised by acidic waterbodies. The Perch are found in still or slow moving waterbodies such as streams, lakes, ponds and drains, with areas of dense aquatic vegetation and undercut banks for shelter ideal.

Threats
- Clearing and draining of wallum habitat for coastal development and agriculture.
- Pollution of wallum waterbodies.
- Competition with introduced fish species, such as Plague Minnow.
- Illegal collection from the wild for aquaria.

Conservation actions
- Protect coastal wallum habitat from clearing, draining or development.
- Protect coastal streams, ponds and vegetated drains from pollution or disturbance.
- Never transfer fish from one waterbody to another to minimise the risk of spreading introduced species.
- Obtain native fish for aquaria only from licensed dealers and do not collect from the wild.
- Report any sightings of the Oxleyan Pygmy Perch to NSW Fisheries.

Photo: N. Buchanan

Oxleyan Pygmy Perch

Endangered

Mitchell’s Rainforest Snail *(Thersites mitchellae)*

Description
Mitchell's Rainforest Snail is a large native land snail with a shell up to 55mm wide and 50mm high, triangular in profile, and with a thickened lip. The shell is deep reddish-chestnut to black with two prominent yellow bands. The body is black with a thin lighter line along the back.

Distribution
Found only on the coastal plain between Ballina and Tweed Heads on the NSW upper north coast. Clearing for agriculture and urban development in this area has been extensive, and the Snail is now found only in remnant areas of habitat.

Habitat
Remnant areas of lowland subtropical rainforest and swamp forest on alluvial soils. Slightly higher ground with palms and fig trees around the edges of wetlands are particularly favoured habitat. Typically found amongst leaf-litter on the forest floor, and occasionally under bark in trees. Active at night when it feeds on leaf-litter, fungi and lichen.

Threats
- Clearing of lowland rainforest, swamp forest and wetland margins for urban development and agriculture.
- Damage to remnant areas of habitat by fire, weed invasion and grazing by stock.
- Predation of snails by introduced rats.
- Use of herbicides and pesticides in and near areas of habitat.

Conservation actions
- Retain and protect areas of rainforest, swamp forest and forest on wetland margins. Even small areas of habitat can be valuable.
- Report any sightings of Mitchell's Rainforest Snail to the NPWS. Empty shells or photographs of live snails can be sent to confirm identification, but leave live snails.
- Be careful in the use of herbicides and snail baits, and consider alternatives where available.
- Support a local Landcare group or bush regeneration team.
- Prevent ornamental plants and weeds from escaping into native forest and wetland areas.
- Fence rainforest remnants and wetland margins to exclude grazing by stock.
- Control introduced rats in urban areas adjoining areas of potential habitat.

Photo: Michael Murphy

Mitchell's Rainforest Snail

Within the Coastal cypress pine of the NSW north coast bioregion EEC this waterway flows directly adjacent the heritage-listed Bundjalung Wandaral ceremonial sacred twin Bora Ring site listed in the National Estate within the Billinudgel Nature Reserve. Bundjalung tradition states that it was here that the very first pair of Wandarahn or Bora Rings was built, and they are the only pair to survive today, and in their natural environment. Bundjalung tradition states that the very first “Wandarahn” or “Wandaral”, meaning “teaching of the law or cultural behavior”, ceremony was undertaken at this site. It was here that Yarbirri first made the law. It was from here that the law travelled north, south and west with Yarbirri and his brothers, Birrung and Mamoon along the Song Line from the most sacred of all Bundjalung sites to the rest of the continent.

The waterway then flows through wet heathland, fern and grassland, habitat of endangered Grass Owl, where we have seen them directly behind the beach dunes. Two different waterways then flow north into private property into the Wooyung lagoon before sinking into the ground to regenerate the pristine Wooyung aquifer in Tweed Shire and continue north into Mooball Creek and Pottsville. This waterway and aquifer are the least disturbed with the purest freshwater. No buffers or filters of any kind are proposed in the event and camping sites north of Jones Road to protect this last pristine aquifer that is covered in protected natural habitat with no previous developmental disturbance. Billinudgel Nature Reserve already has problems with people smashing national park gates down to have illegal doofs and the dump their rubbish.

- We are concerned that, from our reading of the documentation, there has not been adequate research into the potential chemical contamination from between 25,000 and 50,000 attendees per day, plus several thousand staff, performers, guests and stall holders, several times a year. Perhaps most of these persons will be using a range of personal hygiene, medical pharmaceutical and decorative products, including sunscreen lotions, insect repellent, fungicides, insecticides, plastic glitter and other microplastics. Staff and stall holders will bring onto the site an array of products containing potential contaminants. Motor vehicles and generators, while operating, are producing large quantities of particulate matter. Chemicals from micro-rubbish and micro-sewerage will likely seep into the waterways and soil, on a permanent basis within the heart of a state significant wildlife corridor and adjacent nature reserves.
- There does not appear to have been an investigation into the effects of chemical contamination on the invertebrates that make up the basis of the ecosystems that support common, rare, threatened and endangered flora and fauna species and migratory fauna species that exist within and adjacent the site. There has been a recent massive collapse of invertebrate biomass, essential for the survival of human society, with the rapid extinction of food crop and wild plant pollinators and seed dispersers and essential predators, particularly birds, lizards and mammals, that control crop pests in the northern hemisphere because of the massive increase in development and its widespread increase in chemical contaminants.
- Consequently, the ecosystems of the wildlife corridor and nature reserves may be compromised and degraded. With the massive amount of vehicle and people movement on the site, the ecological values may be slowly diminished and destroyed.

The Australian Heritage Database, Place Details, List Register of the National Estate, North Ocean Shores-Natural Area, Jones Rd. Billinudgel, NSW is listed as an Indicative Place ID 19922 *Under Description, "The Jones Road ridge forms a major wildlife corridor allowing movement of wildlife between the Billinudgel Swamp area and the Upper Brunswick Inner Pocket and Burringbar areas. This is the only area on the far north coast which affords an unbroken link of natural vegetation between the coast and the World Heritage rainforests of the Mt Warning caldera. It is the most easterly corridor in the Byron Shire and is therefore the most easterly corridor on the Australian mainland."*

- All World Heritage properties in Australia are 'matters of national environmental significance' protected and managed under national legislation, the *Environment Protection and Biodiversity Conservation Act 1999*. This Act is the statutory instrument for implementing Australia's obligations under a number of multilateral environmental agreements including the World Heritage Convention. Importantly, this Act also aims to protect matters of national environmental significance, such as World Heritage properties, from impacts even if they originate outside the property or if the values of the property are mobile (as in fauna). It thus forms an additional layer of protection designed to protect values of World Heritage properties from external impacts.