**Please refer to the following document which explains why I object to any expansion of the North Parklands Events site times to hold events**

**Submission to the** **Independent Planning Commission**

# Submission RE SSD 8169 North Byron Parklands Events Site

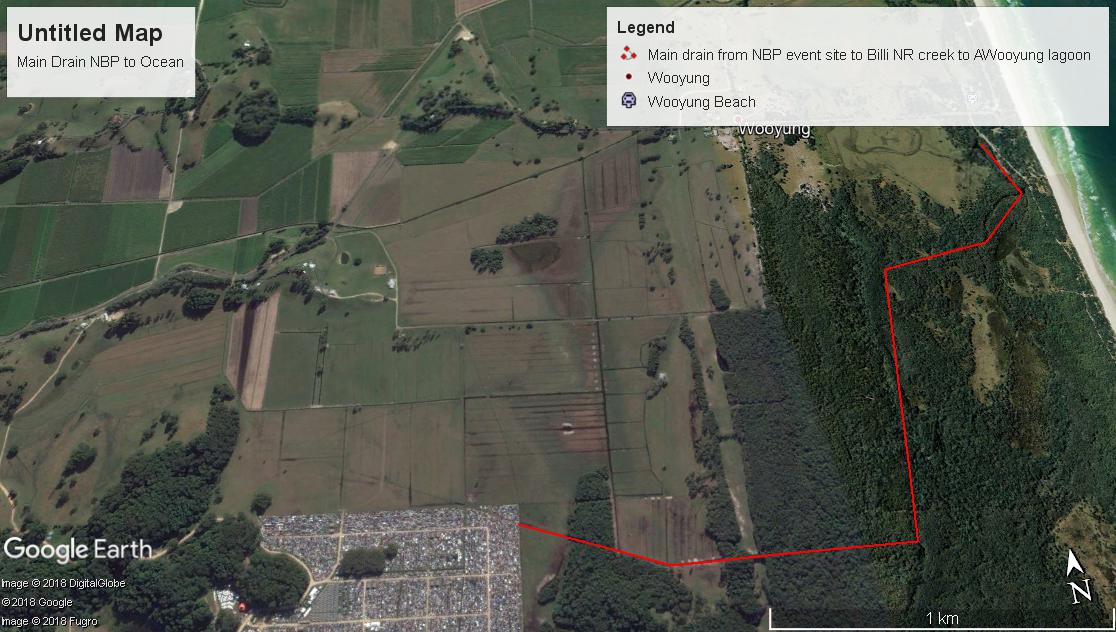
# Proponent: Billinudgel Property Pty Ltd

Submission by Carmel Daoud and Gary Opit,

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We have not made any donations to any political groups.

04 December 2018



**Figure 1: Google Earth Map with red line representing the main drainage from the North Byron Parklands event and camping site through private property and emptying into the least disturbed far north coast New South Wales waterway and SEPP 14 wetlands with three endangered ecological communities in the Billinudgel Nature Reserve. Continuing across another private property the waterway flows east into the Wooyung lagoon before sinking into the western beach dune to regenerate the pristine Wooyung aquifer.**

# Our submission details the potential threat posed to three endangered ecological communities (EECs) listed under the BC Act and the associated pristine waterway and aquifer within the Billinudgel Nature Reserve 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 todispose 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. It then enters the least disturbed and most pristine far north coast New South Wales waterway and SEPP 14 wetlands with three endangered ecological communities in the Billinudgel Nature Reserve. It travels directly through Swamp sclerophyll forest on coastal floodplains of the NSW north coast bioregion EEC, Sub-tropical floodplain forest of the NSW north coast bioregion EEC and Coastal cypress pine of the NSW north coast bioregion EEC.

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 at the eastern end of the Jones Road / Marshalls Ridge wildlife corridor in Byron Shire just south of the Wooyung Caravan Holiday Park. The word “bora” comes from the word “Buhl” which is Bundjalung for “circle” and “buhynbi” means to “to pluck fur and feathers to cover the body for use in youth initiation ceremonies”. 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.

From the heritage-listed Bundjalung Wandaral ceremonial sacred twin Bora Ring site the waterway leaves the Billinudgel Nature Reserve into private property then flows east into the Wooyung lagoon before sinking into the western beach dune to regenerate the pristine Wooyung aquifer in Tweed Shire. This waterway and aquifer are the least disturbed with the purest freshwater. This is the destination for all the waste water from the North Byron Parklands event and camping site. No buffers or filters of any kind are proposed to protect this last pristine aquifer that is covered in protected natural habitat with no previous developmental disturbance.

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.

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.

**3.2 North Coast Regional Plan 2036** in the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, it states “supporting the continued protection and enhancement of the on-site biodiversity values and the adjacent Billinudgel Nature Reserve (Direction 2).

**4.9 Objects of the EP&A Act** in the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, 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).

**5.2 Submissions, 5.2.1 Public Authorities**, in the North Byron Parklands Cultural Events Site Assessment Report RE SSD 8169, it states “the Office of Environment and Heritage raised issues regarding the potential for the development to impact upon the adjacent Billinudgel Nature Reserve.

The GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169; Report for Department of the Environment North Byron Parklands Development Application, 2316318 states;

**Figure 3 Compost burial area**, “a small amount of wastewater can be spilled onto the ground during this process, as also happens when emptying into the long-term greywater holding tanks”.

**3.2 Irrigation of flood prone land** (EMA2), in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states “Festival precinct kitchen sullage and laundry wastes will be trucked for treatment off-site. The remaining balance of wastewater will be stored and gradually treated and irrigated as follows: Up to 35 kl/day of secondary treated and chlorine disinfected wastewater effluent (on-site treated compost seep, urine, hand basin water, shower grey water, conference centre kitchen sullage) to be surface sprayed onto an area designated as EMA2. This area is flood prone and used for camping during the proposed events.”

**Figure 4 Camping area proposed for irrigation** it states, “The camping area has a drainage system comprising of lateral sub-surface drainage pipes feeding into drainage channels”.

**Byron Council’s stated concerns** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states **“**Council’s policies require: No wastewater irrigation on flood prone land; the actual total volume of wastewater generated for the last five years has not been reported to Council and is deemed not verifiable. The proposed wastewater generation for the development is well below any urban design principles and rely heavily on stated water savings measures.”

**GHD comments:** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states; **“***The suggested irrigation value (treated effluent volume) is considered to be very low and much lower than standard volumes adopted for wastewater generation. 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.”*

**4.3 Impacts of wastewater management requirements** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states; “consideration of the risk to soil and groundwater contamination”.

**5.2 Detention time** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states “partially treated wastewater is expected to be discharged from the septic tanks during a large event. The reed bed loading would be expected to be of the order of 1 –2,000 kg BOD/ha. day on days 5 – 7 of a major event, which is considered not acceptable and will represent significant overloading, and consequently chlorine disinfection will be ineffective. Incompletely treated effluent will likely be discharged via the reed beds and disinfection stage to irrigation on days 5 – 7.

The potential for partially treated / contaminated wastewater being irrigated and subsequently

washed into the drainage system is considered a high risk. Drainage water flows off-site entering waterways through neighbouring farmland and native bushland to sea.”

**7. Conclusion** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states “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”.

**8. Recommendations** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states**;** “GHD recommends the following:

Clarification and substantiation are required for water demand and discharge values

proposed.

Confirmation to be sought from the EPA: &A on

a) irrigation allowable on the designated flood prone areas,

b) treated water quality for irrigation

c) wet weather storage requirements and

d) discharge / irrigation control requirements.

On-site wastewater treatment, storage and disposal requirements to be reconsidered in

conjunction with potential hazards and consequences as detailed in the Risk Analysis.

**8.1 Information required** in the GHD Review of EIS Stage 1 Final Report 20180411 SSD 8169, it states**; “**The following information is required for further analysis of the Proposal:

Quantification of solid waste generation, burial area, tree planting area requirements and sustainability analysis.

Substantiation of wastewater generation volumes proposed.

Reconciliation of water demand and wastewater discharge volumes proposed.

Substantiation of wastewater composition (contaminants loading).

Substantiation of treatment efficiency to achieve targeted reduced wastewater contaminants loading.”

Consequently, no sewerage irrigation onto camping grounds should be allowed as all runoff water and rainwater, with any pollutants from the event site & camp site, drains from NBP’s north-eastern corner into the neighbouring private property. It then drains under Jones Road into the Billinudgel Nature Reserve and the undisturbed water way. It then travels north out of reserve into private property until it forms a lagoon just south of Wooyung Caravan Park where it seeps away into the sand dunes. We have walked the entire route several times over the years studying the water movement.

During flooding, water from North Byron Parklands Cultural Events Site also travels north along Union Drain through the village of Wooyung and into the Wooyung Nature Reserve and the Mooball Creek that enters the ocean at Pottsville. There is the possibility of the pollution of this waterway as well, impacting on the health and the economy of the Pottsville Caravan Park and town.

Approval of this proposal may permanently change the nature of this ecologically significant site. What has not been adequately researched is the chemical contamination from 50,000 attendees per day, plus several thousand staff, performers, guests and stall holders. Perhaps most of these persons will be using a range of personal hygiene, medical pharmaceutical and decorative products, including fungicides, plastic glitter and other microplastics, sunscreen lotions and insect repellent. Staff and stall holders will bring onto the site an array of products containing potential contaminants, including insecticides and the 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.

We urge the IPC not the recommend the SSD for permanent approval as there are many major concerns moving from a 5-year trial of three festivals a year capped at 35,000 to the present SSD. It is a massive increase in use beyond the 2016 approved modification that was to allow for more “minor community events.” Those ten additional “minor community event” days have morphed into eight additional big-festival days and only two “minor community event” days. The magnitude of the SSD would take up over half the year with activity creating major disturbance to the wildlife corridor and the surrounding community. The proposed usage has increased substantially and is now:  
5 days for Splendour in the Grass (35,000-50,000) instead of four days,  
5 days for Falls (35,000) instead of three days,  
3 days for other events up to 25,000 (could be three one-day events),  
5 days for other events up to 5,000 (could be five one-day events) and  
2 days for non-music focused minor community events.

With bump in and bump out days of three weeks for large events and two weeks for smaller events means up to thirty weeks of activity, leaving only twenty-three weeks of inactivity in the wildlife corridor. While we acknowledge the major bush regeneration planting on the NBP site which supports the wildlife corridor, the long-term cumulative impact on the wildlife corridor, from major festivals and movement on the site for over half the year on a permanent basis, plus fencing along the corridor, plus the OPTUS tower with its attachments placed on 7K habitat emitting ever increasing electro-magnetic radiation known to effect orientation in small animals, is unknown. Even though NBP will continue to monitor impacts on fauna it is highly unlikely that those impacts can be moderated if they are found to be excessive.

• The proposed modification (MOD3) to the Concept Plan regarding attendance should be rejected. The current ceiling of 35,000 is already creating serious safety, security, and residential amenity issues. The government should not set a significantly higher ceiling of 50,000 in the Concept Plan—the document that sets the parameters for the development.  
  
• There are serious safety concerns about the site and the numbers. The NSW Police Force “is gravely concerned regarding the possibility of a crowd crush incident occurring.”

• “NSWPF also holds concerns regarding the current of medical resources allocated by Splendour in the Grass.

• The site is constrained by a range of natural hazards, it is not serviced by reticulated water or sewer and adjoins Coastal Wetlands, the Billinudgel Nature Reserve and other areas of high value vegetation.

• Waste management for the site has been negatively critiqued by Byron Shire Council. Both West Byron and Brunswick Valley STPs are biological reduction treatment plants. As such they cannot be 'expanded' or 'upgraded'.

• We object to the proposed staged increase in attendance that is conditional on meeting a very limited number of KPIs. This is not an example of “the precautionary principle” as the Department of Planning claims. We object to any increase in attendance numbers, event days, or types of festivals beyond what has already been approved.   
   
• Independent oversight is needed. The Regulatory Working Group needs to be an independent body that is not controlled by Parklands in the way that has occurred during the trial. The RWG should be chaired by an individual who is appointed by Byron and Tweed Councils, who has no connection to Parklands, who remains in close touch with both councils, and who reports directly to the Department of Planning (as the consent authority). The RWG should also include representatives from Tweed Council as well as Byron Council and it should include at least two community representatives from each shire.

• The Department of Planning is recommending that Parklands’ self-monitoring of compliance should continue, but that needs to be augmented with strict independent compliance monitoring that is done collaboratively by the Department of Planning, Byron Council, and Tweed Council. The Councils need to be involved in doing their own monitoring of noise, traffic, and residential amenity issues, and that monitoring needs to be used as part of the Planning Secretary’s ongoing assessment. The additional costs for council monitoring should be borne by Parklands.

• Consent conditions should include specific KPIs related to environmental impacts. Parklands says the festivals cause no impacts or only minor impacts, but experienced ecologists have found serious flaws in Parklands’ ecological monitoring (see in Appendix; A critique of North Byron Parklands ecological monitoring by Dr. Andrew Benwell.)

The Planning Department has ignored the criticisms and has accepted Parklands’ assurances that no one should be worried about ecological impacts. The Precautionary Principle has not been considered and is an essential aspect of this proposed development.

• The Department of Planning commissioned an independent assessment of Parklands’ economic benefits report. That assessment dismissed the concern that most of the festival profits go overseas, claiming that Parklands is Australian owned. However, since that assessor undertook the economic benefits report, Live Nation, an American company that owns Ticketmaster, has bought the majority of Splendour and Falls and thus collects most festival revenues. Live Nation may be the 100% owner of other events that could be staged at Parklands if this proposal is approved, so the concern that this approval will primarily direct profits to non-Australian business is obvious and should not be ignored by the Independent Planning Commission. North Byron Parklands does not own the festivals.  
  
Regards,

Carmel Daoud and Gary Opit

**Appendix**

A critique of North Byron Parklands ecological monitoring by Dr. Andrew Benwell.

1. No peer or expert review of the ecological monitoring program was required or sought during the design phase. Several weaknesses entered the program that could have been avoided with expert assistance.

2. Key Performance Indicators were required by the original Consent Condition C20(c) but were never implemented.

3. Preconstruction impacts were not assessed as required by Statement of Commitment B6, which formed part of the Concept Approval. That period was critical for the monitoring program because initial impact on species is especially important to identify. It is highly likely that the construction had adverse impacts on the biodiversity in the area and that its conditioned fauna to higher levels of disturbance, which would have then affected later observations.

4. Left unassessed were these noted changes to the site: excavations in pastures, soil stock piling, deployment of mobile phone towers, extensive soil hardening in parking areas, removal of trees to install a water tank, land use conflicts affecting plantings, and delay in protecting the SEPP14 Wetlands. All would have had predictable impacts on the site’s biodiversity.

5. Two of the four designated impact sites were at low impact locations, well away from the event area itself, so essentially there were only 2 impact sites and 8 control (low impact) sites. This distorted the data, leading to no adverse impact conclusions that cannot be justified.

6. The number and location of monitoring sites was changed after Year 1, undermining the

consistency needed for meaningful assessment of impacts.

7. Bird monitoring was not done in forested hill slope areas, including the Wildlife Corridor, which are the main areas of bird diversity on the site and among the areas specifically targeted for monitoring by the consent conditions.

8. The design of the program was flawed. Biased sampling, a low number of impact sites, and high variance all made data analysis susceptible to Type II error: a false conclusion that no adverse impacts had occurred.

9. Baseline data were never collected, as had been required by Statement of Commitment B6, which formed part of the Concept Plan approval, and Consent Condition C20.

10. Raw data from the monitoring were not made available for independent assessment of results and conclusions, despite requests for the data to be shared, which is common among scientists.

11. Data analysis focused on birds as a whole, which resulted in common and opportunistic species dominating the counts. The uncommon, possibly threatened species, got lost in the shuffle.

12. Data from Control and Impact sites were lumped together instead of being compared directly against one another, which undermined the very purpose of the monitoring program.

13. Quantitative evidence of negative impacts on birds that was clearly evident in the reported results was not discussed in the reports.

14. The program did not use the right statistical analysis for the type of data that had been collected.

15. The design of the Event Impact Monitoring was Before After Control

16. Impact (BACI) does not include a During component, which was especially important for this monitoring situation.

17. The Before and After monitoring times varied from about 3 months to 7 months,

Introducing inconsistency.

18. In this monitoring program, the data had a high amount of variability and the number of

Sampling sites was small. That combination often leads to Type II errors (i.e. concluding no significant difference when a difference exists). In this case, the same conclusion was drawn repeatedly: “no adverse impacts”, and in each case, the conclusion had a high risk of being false.

19. The statistical tests used on the data, in each data analysis, did not report tests of the

assumptions on which the tests are based. When the assumptions are violated, the results must be considered invalid.

20. The data of most importance here involved uncommon species, yet those species were lumped together with common species for data analysis. That made it impossible, to assess

impacts on the overall avifauna. In fact, the Performance Reports always state that no adverse effects were detected on fauna *groups*, not fauna *species* even though it is the species, especially threatened species, that are of most interest.

21. The monitoring program provides no information about potential impacts on stress levels and breeding behaviour in birds or other fauna although indirect evidence suggests that such impacts were at work.

22. The reports claim that no impacts on insects were observed although it is not clear if any

concerted attempt at monitoring for such impacts was made, especially during the initial introduction of bright lights, which other research shows has by far the most significant

impact.

23. Over five years, only 4 of 20 threatened bird species known to be in the area were recorded on the festival site and in Billinudgel Nature Reserve, so the impacts of festivals on the rest of the species are simply unknown.

24. Evidence of adverse impacts on fauna can be found in the reports, but that evidence is not discussed or is ignored in favour of no adverse impact conclusions based highly equivocal statistical analysis.