





Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

# Re: Byron Shire Council submission - Cultural Events Site - State significant Development Application (SSD 8169)

Two concurrent applications are with the Department of Planning and Environment (DPE) for the North Byron Parklands (Parklands) Site.

Firstly, a Modification to Concept Approval MP 09\_0028 is proposed to allow for changes to patron size and to harmonise the conditions to reflect a permanent cultural events site. Further, development consent is sought under Part 4 of the Act for the permanent use of the North Byron Parklands as a cultural events site for up to 50,000 patrons.

The DPE granted Byron Shire Council an extension of time to Friday 9 March 2018 to submit its comments.

Below are Council's issues of concern with the concurrent applications.

## **Traffic impacts**

Council is aware that there have been substantial delays in traffic exiting the site after entertainment closes every evening during the course of the multi day events Splendour in the Grass and Falls Festival.

Council has received feedback that patrons exiting the site have experienced delays of up to 3 hours due to traffic congestion. Patrons attending on multiple days are reluctant to again park on site due to the long delays and congestion. This has resulted in patrons parking offsite. Much of this offsite parking has occurred in "No Stopping" zones, particularly on the busy Tweed Valley Way. This situation is a public health and safety risk, and also requires Council staff to attend and enforce parking zones at night.

# Council comment

Clause 3.3.7 of page 42 (Volume 1) discusses the upgrade of the northern access to Wooyung Road. However, Table 3.4 (Infrastructure Staging) on pages 42 and 43 does not commit to the upgrade of the northern access to Wooyung Road. It is Council's view that the upgrade of the northern Wooyung Road access is essential to the development, whether patron numbers are restricted to a maximum of 15,000 or 35,000 patrons. The lack of an adequate second access already poses significant problems and needs to be addressed irrespective of any approval. This is necessary to take traffic of and ease congestion on the main entrance on Brunswick Valley Way at

Yelgun and to provide an alternate route for patrons to evacuate the site in the event of an emergency.

# Offsite impacts

Demands from off site impacts during the existing Splendour in the Grass and Falls Festival events require Council to put in place additional staff on for enforcement purposes. The skills, training and delegations required to meet this additional resource demand are not readily available from external contractors. These additional resources must be found from within Council's existing enforcement teams. 7 day rosters must meet obligations set by the NSW Local Government Award.

The above mentioned situation means that Council must remove staff from other important duties and priorities. Council is required to give staff rest days and therefore the additional shifts deployed during events at the North Byron Parklands site must be compensated with rest days either side of those event days. This results in a net loss of shifts on other days in the roster where Council officers should be attending to important duties in Byron Bay and other parts of the shire.

The greatest off site impact to the Council enforcement team resources have been South Golden Beach and Brunswick Heads. Complaints from South Golden Beach have been predominantly about illegal camping and therefore regular evening and morning patrols are required in that area.

During the course of Splendour in the Grass and Falls Festival there has been a significant influx of patrons to Brunswick Heads, particularly during the morning. Traffic congestion and parking have been the greatest impact upon Brunswick Heads and therefore Council has had to deploy additional shifts to its roster to manage parking in Brunswick Heads during the course of both events.

The additional influx of visitors to the Shire during these events provides benefits to the local economy; however this imposes impacts upon Council resources, particularly in relation to waste management in our public spaces. As an example Council is currently reviewing the need to install additional waste collection bins in Brunswick Heads during the course of Splendour in the Grass and Falls Festivals. Council may also need to consider deploying additional clean up crews, and parks and garden crews to Brunswick Heads during the course of both events.

The cost of additional resources that Council is required to deploy to manage off site impacts is currently met by Council. There is also a cost to the community of other parts of the Shire that miss having those resources available during these times.

It is Council's understanding that emergency services and the Police are provided on a user-pay basis for events at the North Byron Parklands site, and it is Council's request that a similar user-pays requirement be made for Council to deal with off site impacts.

#### Council comment

Council is concerned in regards to the above mentioned off site impacts of any event greater than 35,000 patrons. Council believes that the applications have not adequately addressed this issue for either the proposed 42,500 or 50,000 patron events.

The proponent has not adequately consulted with Council in regards to the abovementioned off site impacts, or made an offer of funds to support the additional resources that Council must deploy to manage key off site impacts for the existing (or proposed events). This can be done via a Service Agreement.

# On site Wastewater

A Wastewater Assessment for North Byron Parklands has been prepared by Whitehead & Associates (Job Ref: 1912 WWA 131117 sd Rev, 13 November 2017).

Whitehead (2017) states that:

The Site is generally suited to on-site wastewater management and has the capacity to manage the predicted loads from the proposed five-day large events at 6 month intervals, a three-day medium event, five single-day small events, and numerous minor events, plus the operation of a 180 person conference centre and ancillary 120 person overnight accommodation and small day spa.

# Whitehead (2017) recommends:

- Ongoing use of batch style dry compost toilets in dedicated amenities blocks for the festival precinct;
- A mix of micro flush compost toilets (Centrex 2000) at conference accommodation and associated day-spa and flushing toilets at the conference centre;
- Festival kitchen sullage to be collected and trucked offsite to Ballina or Byron Bay STPs (544kL/annum);
- Collection of compost seep, hand basin and shower greywater, urinal water, and conference centre kitchen sullage in a series of pump-wells (EONE 2014IP), and pumping to a master treatment system located approximately at the footprint of the existing temporary holding tanks;
- Installation of 2,200kL storage capacity in eight storage tanks;
- Construction of a custom reed bed treatment system of 400m2 area capable of treating 35kL/day to a secondary standard, with chlorine disinfection. The treatment system consists of four parallel treatment trains for ease of constructability and reliability;
- The treated effluent to be applied to the land over 36,000m2 via surface spray irrigation using travelator irrigators, with a backup short term application area of the existing 24 Intermittently Dosed Sand Filter Beds (IDSFB).

Council's review of the Wastewater Management Proposal has identified the following area of concern:

# **Existing Flow Rates**

• Whitehead (2017) has included assessment of existing flow rates from previous Falls and SITG events, including estimated wastewater unit production values per person for portable toilet/compost toilets/urinals, shower greywater, food preparation and cleaning (Table 7), as well as totals for a number of events (Table 8). The unit values are very low compared to published figures, and according to Whitehead reflect the excellent water use reduction measures employed by NBP and the large event organisers with use of timed showers, compost toilets, and kitchen hygiene practices. The water data is used as the baseline for the design of the permanent OSMS and pump outs rates and therefore is critical.

## Council comment

Further information is required to provide verifiable evidence as to the method of water and wastewater metered that has been used to determine the Litres/per person per day in Tables 7 and 8 of Whitehead (2017). There remains a concern that these figures for wastewater are understated.

## Use of Flood Prone Land for Effluent Dispersal/ Disposal

 Whitehead (2017) proposed to use a Floodprone area for surface spray irrigation of secondary treated wastewater. The new area (EMA 2) for disposal/ dispersal is located on a sandy alluvial plain that is flood prone. The natural hydrogeological conditions have been modified by installation of surface drains, thereby improving the ability of the soils to accept additional moisture. The area is a generally unused portion of the Site used for camping at the two main events only, and according to Whitehead (2017) is ideal for surface irrigation to water the expansive grass area at times when the soils are not waterlogged

- Water balance modelling was undertaken to determine sustainable effluent application rates for surface irrigation for 35kL/day, and from this estimate the necessary size of the EMA required for effluent to be applied from a secondary treatment system with disinfection to a surface irrigation area with the existing 24 bed IDSFB field as a back-up area.
- The lower portions of the Site are impacted by flooding as the ground surface is below 3m AHD (Australian Height Datum) Flood levels for the 100 year Annual Recurrence Interval (ARI) are about 3.94m AHD, the 20 year ARI is about 3.62m AHD. The 5 year ARI is about 3.3m AHD.
- The low lying areas of the site are impacted by seasonal waterlogging and periodic flooding
- The upgraded OSMS has been designed such that irrigation on EMA 2 can be a
  beneficial reuse of effluent during drier periods and months, but that EMA 2 will not be
  used during significant rain or flood events, and short term use of EMA 1 will be
  undertaken during those times.

#### Council comment

A review of the Tweed Byron Flood model has identified that the site of EMA 2 is located below the 1:5; 1:20 and 1:100 flood level. The use of flood prone area for effluent dispersal/ disposal is not acceptable, having regards to the potential impacts of receiving waters within both the northern end of the Brunswick River Catchment and the southern end of the Crabbes Creek/ Mooball Creek Catchment which flows northwards into Tweed Shire.

# Use of Surface Spray

- Whitehead (2017) proposes to apply secondary treated effluent with disinfection via surface irrigation within the flood prone area
- A travelling irrigator, such as the Vaughan Irrigators Standard model will be used to distribute effluent within the nominated EMA.
- The irrigator with an 11m boom length is capable of distributing effluent over a 30m diameter and up to 300m runs using an effluent nozzle to minimise aerosol production.

To limit the risk of groundwater and surface water contamination and human contact from the surface irrigation the following will be considered before surface irrigation is undertaken:

The EMA will not be flooded or have stormwater pooling on the ground surface; Rainfall on the day will not exceed 10mm (this occurs on average 2-4 days per month).

An existing NBP weather station is present and useability will be assessed for connection to the OSMS (<a href="http://new.mhl.nsw.gov.au/users/NorthByronParklands-CurrentConditions">http://new.mhl.nsw.gov.au/users/NorthByronParklands-CurrentConditions</a>).

Alternatively, a rain sensor (Hunter "Mini-Clik") on the treatment system connected by solenoid valves to the storage tanks will suspend further wastewater treatment by switching off treatment supply. An anemometer will also be connected to the same controls to suspend treatment on days where wind speeds exceeding 30km/h to limit the risk of spray drift;

Effluent irrigation will be suspended at least two days before the area is to be used for camping and for the duration of time that persons are camping in or within 20m of the

irrigation area;

Once the wet weather storage capacity is exceeded, emergency effluent irrigation and/or application into the existing 24 IDSFB will be undertaken.

#### Council comment

Above-ground spray irrigation requires <u>prior tertiary disinfection</u> of sewage (NSW Health). Within the Byron Shire, spray irrigation of effluent is not favoured due to public health risks from aerosol-transmitted pathogens and the particular need to add toxic substances (such as chlorine) to disinfect the effluent before above-ground release. There may be some circumstances (e.g. on larger agricultural holdings in which the proposed land application area is a considerable distance from any houses, where spray irrigation may be accepted.

The proposal comprises partially treated secondary effluent with disinfection.

**Table 21: Adopted Environmental Buffers (Whitehead 2017)** indicates a 20mbuffer from spray irrigation to *property boundary to pubic areas.* Depending on the nature of spray application and local topography and local wind regime this setback may be insufficient.

# Offsite Disposal of Effluent

It is proposed to continue to remove all medium-large event kitchen waste off-site.
 Festival kitchen sullage to be collected and trucked offsite to Ballina or Byron Bay STPs (544kL/annum). In the event of wet conditions additional wastewater may need to be pumped offsite.

# Council comment

Discussion with Councils Water & Sewer Staff indicate that Council has had problems with the quality of effluent received by the development in the past and may not be keen to receive further effluent from the subject site. The strength of the wastewater (concentration of ammonia) has at times exceeded the Environmental Protection Licence Limit for the Byron Bay Sewage Treatment plant.

The proposed Wastewater Management System is based partly on the acceptance of wastewater by Council. No arrangements been made by the applicant with Council to accept effluent into the future.

There is no evidence that the applicant has consulted with Ballina Shire Council with respect to their ongoing acceptance of effluent for a permanent facility. The view of Ballina Shire Council to continue to accept effluent at their STP is unknown. This should be sought from the applicants.

In this regard this is a critical matter for consideration having regards to the matters for consideration under Clause 45 of Byron LEP 1988 – Provision of Services and Clause 6.6 of Byron LEP 2014 - Essential Services. To date Council is unable to confirm or guarantee it has capacity within existing treatment plants to accept sewage from the development in the future. Council's Water & Sewerage staff advised that they will be making a separate submission on this matter. It is recommended that the Department liaise with staff in relation to capacity issues at the Byron STP.

# **Progressive Installation of Upgraded OSMS**

The Applicant has indicated they wish to implement the upgraded OSMS
progressively as budgeting allows, with full installation prior to opening of the
conference centre. Further engineering design for sewer reticulation and treatment
system is required as well as preparation of treatment system and irrigation area
operation and maintenance plans.

# Council comment:

The progressive installation of OSMS infrastructure with an unknown duration following Development Approval is not acceptable. As part of any future section 68 BSC would require installation of the completed upgrade prior to a clearly nominated time frame agreed to by Council.

# **Soil Chemical Constraints**

 EMA 2 has a number of major constraints: extremely low ph (4.4); Cation Exchange Capacity of 1.1 cmol+kg which is very low; Exchangeable Sodium Percentage (ESP) of 27% which is strongly sodic, increasing the risk of soil dispersion and a Phosphorous Sorption Capacity of 111mg/kg which is low.

# Council comment

The application of treated effluent on EMA 2 (the proposed new Land Application Area on flood prone land) requires treatment in the form of lime and gypsum to improve ability to accept effluent. Details will need to be submitted by the applicant should this be supported in a limited way to enable its use for treatment dispersal/ disposal.

#### **Irrigation Area**

- In Table 5 Soil Physical Constraints Whitehead (2017) state that EMA2 are either a massive medium clay (Class 6c) or sand (Class 1), with sandy loam to clay loam (Classes 2-4) topsoils of up to 0.25-0.6m above the dominant subsoil. A DIR of 4mm/day would be applicable for these soils for long term surface spray irrigation and secondary treated effluent. Whereas in Table 19 Whitehead (2017) base the surface irrigation modelling on a 5mm/day design Irrigation Rate on clay loam soil.
- Water balance modelling was undertaken to determine sustainable effluent
  application rates for surface irrigation for 35kL/day, and from this estimate the
  necessary size of the EMA required for effluent to be applied from a secondary
  treatment system with disinfection to a surface irrigation area with the existing 24 bed
  IDSFB field as a back-up area.

#### Council comment

There appears to be inconsistencies with Table 5 and Table 9 in relation to DIR, with 4mm/day considered appropriate.

Further detail is also required on how the existing 24 bed IDSFB field as a back-up area be sufficient to adequately disperse effluent from the entire load of 50,000 person event?

#### **Noise and Vibration**

Parklands commenced operation as a Cultural Events site in April 2012, following a 3 year development assessment process that culminated in approval of a Concept Plan and Project applications for the new venue. The Concept Plan approval (which provides the land use planning provisions and permissibility for the site) enabled the use of the site for cultural events for a 5 year trial period (up until 2017) capped at 70% of capacity - 35,000 patrons, instead of the 100% capacity (50,000 patrons) sought in the original Concept and Project applications.

The objective of the trial project approval was for Parklands to demonstrate that large outdoor events could be managed consistent with a range of key performance indicators (KPIs) to avoid unacceptable impacts on flora and fauna, residents, event goers and on the general community.

Parklands has now held a total of nine large and medium events and undertaken detailed performance monitoring and analysis.

On 16th January 2017 the NSW Office of Environment and Heritage issued Secretary's Environmental Assessment Requirements (SEARs) for preparation of an Environmental Impact Assessment (EIS) for the application for permanent approval of the Cultural Events site at North Byron Parkland. The SEARs specify the following assessment requirements:

Noise and Vibration – including a quantitative noise and vibration impact assessment undertaken by a suitably qualified person in accordance with the relevant Environmental Protection Authority guidelines that is to include:

- assessment of all noise and vibration sources and impacts, including impacts on nearby sensitive receivers, utilising data obtained from the trial events to date;
- cumulative impacts of other developments upon noise impacts at sensitive receivers; and details of the proposed noise management and monitoring measures.

Appended to the SEARs are details of submissions made by regulatory agencies in respect of developing SEARs for the proposal. Of these submission, those provided by Tweed Shire Council and Byron Shire Council identify noise management as an area to be addressed:

#### Tweed Shire Council:

Council has previously provided comment on MP09\_0028 Mod 3 in relation to
acoustic matters. The proponent will need to demonstrate that the proposed
development will comply with the provisions of the NSW Industrial Noise Policy. An
acoustic management plan will need to be prepared, which addresses all aspects of
the proposed development, including low frequency noise and sleep disturbance upon
surrounding properties.

#### Byron Shire Council

- Plan 4.4 (Example Event Layout B) depicts the relocation of the event area to the
  north eastern corner of the premises. An acoustic assessment report based on past
  evaluations is unlikely to be helpful to Plan 4.4 (Example Event Layout B). This
  proposal is a major deviation from the existing site layout and therefore a fresh
  acoustic assessment is required. Any other changes to or expansion of the site layout
  must be subject to a new acoustic assessment.
- The application for permanency includes additional activities to those which have thus far been shown to be manageable, including:
  - Operation of two additional stages during a large scale event (e.g. Splendour in the Grass).
  - Potential to increase the number of patrons.
  - Additional on and of-site traffic.
  - Addition of a conference centre, which may operate year round, including;
  - Accommodation units,
  - Conference and meeting room facilities,
  - Car Parking.

#### Council comment

#### **Noise Criteria**

Noise limits for sensitive receivers in the area surrounding Parklands are provided in Condition B3 of the modified PAC Approval as follows:

For Zone 1 (as shown in Schedule 4 of this approval)

- i. between 11am and midnight amplified entertainment noise from the event at sensitive receivers must not exceed 60dB(A) LAeq,10-minutes AND 70dB(lin) Leq,10-minutes in the 63 hertz 1/1 octave band; and
- ii. between midnight and 2am, amplified entertainment noise from the event at sensitive receivers must not exceed 45dB(A) LAeq,10-minutes AND 60dB(lin) Leq,10-minutes in the 63 hertz 1/1 octave band.

For Zone 2 (as shown in Schedule 4 of this approval)

- i. between 11am and midnight amplified entertainment noise from the event at sensitive receivers must not exceed 60dB(A) LAeq,10-minutes AND 70dB(lin) Leq,10-minutes in the 63 hertz 1/1 octave band; and
- ii. between midnight and 2am, amplified entertainment noise from the event at sensitive receivers must not exceed 45dB(A) LAeq,10-minutes AND 60dB(lin) Leq,10-minutes in the 63 hertz 1/1 octave band.

In accordance with Condition C40 of the PAC approval, noise levels in the camping area between midnight and 8:00 am of each event day shall support peaceful rest for overnight patrons during events.

In accordance with the Modified Approval, Parklands has developed a Noise Management Plan (NMP) for large events held at the venue. The Noise Management Plan has been approved by the NSW Department of Planning and Environment, and is updated on an as-needs basis in response to improvements in the noise management practices adopted for the venue.

In formulating the appropriate noise criteria to adopt for the Modified Approval for Parklands, consideration was given to the range of criteria currently adopted for music entertainment events in Australia.

Given that events at Parklands are typically held over multiple days with entertainment noise extended until 12 am for main stages and 2 am for bars, numeric noise limits consistent with those adopted elsewhere in Australia and overseas were recommended for the Parklands Modified Approval. In addition, an innovative criteria designed to improve the management of low frequency bass noise from the music events was recommended. This defined a noise limit for the 63 Hz noise band. Analysis of the frequency spectra from a range of music genres and previous events at Parklands identified the 63 Hz band as a suitable octave band to represent the maximum low frequency content from low frequency (< 250 Hz) amplified music.

For the purposes of assessing fixed plant noise, the Intrusive Noise Criteria as defined in the Industrial Noise Policy (2000) has been adopted.

The noise assessment includes consideration of potential noise impacts associated with the conference centre use, including:

- amplified entertainment or announcements (e.g. music, presentations);
- vehicle movements;
- outdoor activities; and
- mechanical plant and equipment.

The assessment includes modelling of the combined operation of these noise sources within the conference centre and associated accommodation precinct, with reference to the minimum night-

time criterion under the Noise Policy for Industry (i.e. 35 dB), as well as the applicable sleep disturbance criterion (i.e. 45dBLAmax).

The assessment found that the combined conference centre noise levels would comfortably comply with the applicable criteria at all sensitive receivers, with a maximum of 29 dBLAeq at a receiver location (Receiver 5), and a maximum of 30 dBLAeq at the boundary of the nearest property (Receiver 18).

The assessment also indicates that the operations would not result in any sleep disturbance impacts, with a maximum of 37 dBLAmax at a receiver location (Receiver 5), and a maximum of 36 dBLAmax at the boundary of the nearest property (Receiver 18). If consideration is given to noise attenuation through the conference centre glazing, then LAmax levels would be below 30dB at all sensitive receiver locations.

The Conference centre would operate year round, and cater for up to 180 patrons per day. Accommodation would be provided for up to 120 guests a day in 30 on-site cabins. Accommodation would be limited to guests associated with functions and events only and would be permitted on event days. The hours of operation for the Conference Centre are not nominated in the EIS.

To provide for a complete overview of potential noise sources, and to provide for a conservative assessment of the risk of impacts, all potential sources have been considered to operate simultaneously. The sources included in the acoustic modelling are as follows:

- all assumed plant and equipment (as per Section 5.1);
- 180 patrons at conference centre, in external areas;
- 30 patrons utilising the nature walk or gardens area;
- 30 patrons within the accommodation area;
- 2 cars driving (LAeg) or car door slams (LAmax) in car park area, and
- 2 speakers operating in an open area at a sound power level 10 dB above the level of patrons.

Modelling results for source-to-receiver wind conditions (1 to 3 m/s) or a temperature inversion under calm conditions for the identified surrounding sensitive receivers are presented in Table 4.2. The adopted criteria is based on the historic ambient noise data, having an Assessment (ABL19) or Rating Background Level (RBL) as low as 30 dB(A), targeting background plus 5 dB(A) to minimise impacts, based on the NSW Industrial Noise Policy guidelines for noise from continuous noise sources. This is equivalent to a noise limit of 35 dB(A) based on the requirements of the INP.

For the inclusion of amplified noise (music or announcements) an additional review against Liquor Licensing conditions have been considered, including consideration of achieving the following criteria:

LA10 >= BG (LA90) in any Octave Band Centre Frequency (31.5Hz – 8kHz inclusive) + 5 dB between 07:00am and 12:00 midnight at the boundary of any affected residence.

LA10 >= BG (LA90) in any Octave Band Centre Frequency (31.5Hz – 8kHz inclusive) + 0 dB from 12:00 midnight to 7 am at the boundary of any affected residence.

Not withstanding compliance with the above, the noise from the licensed premises shall not be audible within any habitable room in any residential premises between the hours of 12:00 midnight and 07:00am.

Ambient octave band frequency data is unavailable for the nearest sensitive receivers. Therefore a screening assessment of the likelihood of inaudibility within any habitable room has been completed assuming a minimum Loct noise level of 30 dB for each Octave Band Centre Frequency from 31.5Hz – 8kHz. For the purposes of defining an assessment criterion, it is assumed that a minimum 5 dB reduction facade attenuation (external to internal) for a habitable room is achieved, giving a criterion

of 25 dB Loct in the Octave Band Centre Frequencies 31.5Hz – 8kHz for a 30 dB Loct background noise level.

This is based on achieving inaudibility, which is typically defined as 10 dB below ambient. It is noted this criteria is only applicable from midnight until 7:00 am, and for the period 7 am to midnight a higher criterion of 35 dB Loct (i.e., background plus 5 dB) would apply.

For the analysis of the live entertainment scenario, it is assumed that all patrons are external to the venue, with no reduction from the walls, roof, or windows of the facility. Similarly the amplified music has been predicted to operate external to the facility. This is a conservative scenario.

Table 2.9: Adopted Criteria - Other Sources

Source/Activity	Adopted Limits	Source of Criteria
Fixed Plant Noise – Conference Centre, Temporary Lighting Towers/Generators	Background plus 5 dB(A)	Industrial Noise Policy
Conference Centre Activities, including amplified music, vehicles, and patrons	Background plus 5 dB(A)	Industrial Noise Policy & NSW Independent Liquor & Gaming Authority
	Inaudibility (12 midnight - 7am)	NSW Independent Liquor & Gaming Authority
Construction Noise	Daytime  (7 am - 6 pm weekdays and 8 am - 1 pm Saturdays): Background plus 10 dB(A)  Background plus 5 dB outside daytime hours Maximum limit of 75 dB(A) at all times	Interim Construction Noise Guideline

Typically, where a licensed premises proposes to host live entertainment, it would be necessary to complete an acoustic Liquor Licensing assessment at the commissioning phase to establish maximum music levels and appropriate management measures to achieve compliance with the liquor licence criteria. The modelling presented in this assessment is intended to identify that live entertainment is feasible for the proposed location, and a more detailed analysis will be required at the commissioning stage to allow definition of specific liquor licence conditions and noise limits, prior to commencement of operations at the conference centre.

It is noted that, if a detailed Liquor Licensing assessment is not completed at the commissioning stage, the operation of amplified entertainment could be restricted to internal speakers only operating at 75 dB(C) measured at 3 m from 7 am – 12 midnight. However this is not an urban environment such as a town centre where it would be normally acceptable for venues to operate late into the evening. The hours of operation for the Conference Centre are not nominated in the EIS. Details in regards to the hours of operation for the Conference Centre should be sought from the applicant. In the absence of any clear details as to the optimum use of the conference centre, and appropriate plans of management, it is recommended that the hours of operation for the Conference Centre should be limited to 10pm Friday and Saturday Nights and 8pm for other days of the week. This reflects the sites location within a rural hinterland environment, the quiet amenity of the locality and the potential for the centre to be used for a range of entertainment activities. Clear conditions should also be imposed on numbers of patrons, use of outdoor areas and other matters relating to a potential liquor license being sort for the Conference Centre.

The use of the modified noise criteria for amplified music from large events is deemed to be appropriate.

The use of the Interim Construction Noise Guideline for construction activities is acceptable.

# **Noise Modelling**

From a potential noise impact perspective, the scope of the proposed future operations at Parklands is very similar to the activities operated since 2013. The proposed change that is of primary relevance from an acoustic perspective is the provision of an additional main stage for large events.

Therefore, the focus of the noise modelling is a detailed analysis of the existing and predicted future community noise levels from large live entertainment events.

In addition, there are further changes associated with the proposed permanent application that may result in changes in community noise levels. These relate to the following issues:

- proposed conference centre;
- continuous noise emissions from fixed and temporary equipment such as lighting towers;
   and
- construction noise impacts.

Based on the predicted noise impacts for the proposed permanent scenario, including the additional main stage, further mitigation scenarios have been considered. In summary, the following modelling scenarios that have been completed:

- Scenario 1: Base case Splendour 2016 Layout (Existing operations to calibrate model);
- Scenario 2: Proposed permanent facility All Proposed Stages;
- Scenario 3: Mitigation investigations; and
- Scenario 4: Volume management scenario.

Overall, the results of the Scenario 2 modelling demonstrate that while exceedance of the LAeq noise limit is predicted to be 1 dB(A) or less off-site, some increase of the LOct–63Hz noise levels are predicted, up to 3 dB(C) above the criteria at some locations.

The mitigation options considered were as follows:

- Full enclosure of large stages on 3-sides, including absorptive linings (e.g. blockwork behind stage footprint).
- Three sided structures behind large stages, tall enough to shield flown arrays noise to sides and rear (e.g. light-weight panels).
- Investigation of tall barriers, earth berms, or a combination for heights of 5m, 10m and 20m, located to the rear of large stages (S1 Amphitheatre, S3 Forest Stage) to reduce the throw to surrounding area.
- Review of potential to construct fully enclosed buildings to house some stages (especially low frequency dominant dance music stages).
- Rotation of specific stages to reduce impacts on the surrounding area, specifically rotating the S3 Forest Stage 180 degrees.
- Acquisition of a formal agreement for properties that have the potential to be impacted beyond the criteria.

Due to the surrounding topography and the distances to the surrounding sensitive receptors, barriers and earth mounds at the boundary of Parklands, at intermediate positions or to the rear of specific stages (e.g. S3 Forest) achieved reductions of less than 1 dB even when very tall barriers (up to 20 m) were included. The main reason for this is that the Parklands venue incorporates a large number of discrete sources of amplified music, distributed over a large site. Because of this, no

single source dominates the sound propagation to surrounding areas. Therefore providing acoustic barriers at specific locations will only address a small number of sources.

Review of rotating specific stages resulted in increased noise to specific areas, with only a minimal reduction achieved within the area they were previously oriented.

Full enclosure of venues was not feasible for safety reasons. Construction of permanent stages would provide for some improvement over and above the existing controls at the temporary stages, however Parklands require flexibility in terms of stage locations for the future hence this option was not pursued further. This operational requirement is consistent with the provision of a large scale music festival event which would usually involve provision of stages and venues on a temporary basis, with potential changes in locations occurring over time.

Noise modelling of live entertainment for the permanent venues indicates compliance at the majority of receptors where mitigation measures are incorporated including venue management initiatives.

ANE advise that permanent agreements will be made with existing and new receptors that are impacted by excessive noise impacts. However clarification is needed on the number and location of receptors that have noise agreements with the applicant/operator. Further, the Department will need to examine whether such agreements are appropriate for a permanent venue, how such agreements are to be maintained in perpetuity, and should such agreements be registered in terms of restrictions of title and the like to forewarn future landowners when properties change ownership.

Further detail should also be requested to illustrate how the future potential changes in the locations of stages and venues will impact on sensitive receptors.

Consideration should also be given to an Independent Noise Consultant to monitor compliance with any noise related conditions of approval, rather than reliance on the proponents contractor for enforcement. This would also assist the Departments Compliance Officers in terms of any action relating to breaches of consent conditions and to be able to more effectively respond to complaints during an event.

### Potable water

The projected total annual water demand, based on data from historic events, and conservatively assuming full patronage of the proposed events and a 100% occupancy rate of the conference centre, is 15.6ML.

Parklands currently sources much of its water by collecting rainfall from roofs, augmented with water from the Byron Bay or Rous Water systems brought in by tanker truck. Parklands intend to continue with this approach into the future, albeit with less demand on external water supplies.

Based on median monthly and annual rainfall data from nearby weather stations and the roof area of the fully developed site, it is estimated that the potential annual yield is between 15.7ML and 18.1ML of rainwater.

These estimated volumes of collected rainwater are more than the estimated annual demand of 15.6ML. However, they are based on median historic values and therefore it is likely that water will have to be supplied from an alternative source in drier years.

As the demand for water will be concentrated during the larger cultural events a 4.3ML reservoir is proposed. Its is estimated by the applicant that this will provide sufficient storage volume over a year assuming it is replenished with rainwater based on median monthly rainfall, with only a minimal alternative supply of 200kL required in June, July and September to fully replenish the reservoir. The rainwater will be collected and pumped to the storage reservoir then redistributed by a network of water pipes

Water sourced from rainfall on roofs can be considered the least vulnerable to contamination by pathogens and therefore minimal treatment will be necessary. However, it is recommended that for the proposed development additional barriers to the contamination of the rain water are introduced, in particular screened down pipe headers and first flush systems. These will help prevent solids entering the drinking water storage and reduce risk of contamination.

This same basic philosophy for the current water quality assurance program employed by Parklands of monitoring the water for pathogens and dosing with disinfectant will work for the proposed development. However, considering the substantial increase in the size of events a more comprehensive program to demonstrate compliance with the Australian Drinking Water Guidelines will be required. This program will include Critical Control Points in the water supply system for the monitoring of water quality, more frequent water quality monitoring, procedures to identify and isolate the source of any contamination and emergency action plans in the event of detection of high concentration of pathogens during an event.

# Council comment

A comprehensive Quality Assurance Program QAP for the Private Water Supply to demonstrate compliance with the Australian Drinking Water Guidelines and the Public Health Act 2010 and Public Health Regulation 2012 is required.

It is recommended that DPE refer the QAP to NSW Health as required under the Public Health Regulation 2012 for their concurrence. The QAP should be subject to commissioning and annual review by an Independent Auditor. The provision of potable water for drinking and other purposes can not be underestimated. Provision of mains supplied water would assist with mitigating this concern.

#### **Waste Management**

#### Council comment

Implementation of the measures contained in this Waste Assessment will minimise construction waste and promote sustainable waste management at Parklands, consistent with the NSW Waste Avoidance and Resource Recovery Strategy and relevant statutes, policies and guidelines.

Challenges remain with respect to camping ground waste. Despite previous attempts by the operators residual waste from campers appears to be high. Better education, placement of infrastructure, surveillance and regulation is required to improve waste management in the camping ground. Other issues that need to be considered are the appropriate collection, disposal and recycling of plastic waste and the use of glitter products and smaller particles of broken down waste migrating across the site into drains and waterways during rain events

#### **Environmental Health and Safety Management Plan**

Parklands has developed an Environmental, Health and Safety Management Manual (EHSMM) to continuously improve performance across a range of important measures.

Parklands EHSMM is based on the following international and national systems:

- AS/NZS ISO 14001 Environmental Management Systems;
- AS 4804 Occupational, Health and Safety Management Systems:
- AS/NZS ISO 313000:2009 Risk Management Principles and Guidelines;
- AS 3745:2010 Planning for Emergencies in Facilities; and
- AS/NZS ISO 20121 Sustainable Event Management System.

The EHSMM is the primary mechanism for monitoring and measuring the environmental, health and safety performance of specific capacity events held at Parklands.

## Council comment

The EHSMM is a comprehensive document with the exception that there is no reference to standards and management of food premises with the document. A review of the Compliance Report 2016/2017 for the Falls Festival and Splendour in the Grass indicates total compliance with all criteria. A number of non compliances were identified in 2013/2014; 2015/2016.

#### It is recommended that:

- Engage the services of qualified and experienced environmental health professionals to undertake thorough inspections of all food premises prior to and during each event for compliance with the NSW Food Standards Code.
- The applicant update the Environmental Health and Safety Management Manual to address the standard of food premises and food handling within the Festival site as a matter of priority;
- Ensure reticulated water supply is continuous and adequate for every food businesses including direct plumbing of hand washing and cleaning faculties into the network.
- Ensure all food business have a copy of the Council market stall permit on display.
- Ensure the **availability of electricity is explicitly communicated** to allow food businesses to plan temperature control of food stock.
- Ensure, if supplying materials to stall holders is part of the service to stall holders, that food businesses are of high priority i.e. ensure adequate supply of flooring materials, shelving and bench supplies especially for those situations of contract agreements where supply of equipment such as cool rooms is restricted to types and varieties available for use.
- Ensure Council is informed of up to date systems, plans and information that is necessary to assess food safety and public health associate with the operations of the event.
- Food handlers specifically should be given an alternative form of identification rather
  than wrist bands to ensure it does not contradict the food safety standards. These bands are
  not easy to clean, have potential to cross contaminate during food handling and pose an
  OH&S risk when this material is subjected to areas where high heat may affect them such as
  cooking.
- **Build multi use pavilion style structures** that have a raised foundation that offers protection and relief from adverse weather conditions for food businesses that are provided with electricity and reticulated waste and water systems for business to be connected.
- an annual independent audit be undertaken by a an accredited audit team to verify and validate the claims in the compliance report.

# **Contamination**

A site contamination assessment was undertaken by EAL Consulting Services (Southern Cross University) on behalf of Parklands for the original concept plan and project application. The assessment included:

- site history review;
- geological and hydrogeological review;
- site inspection;
- soil and water sampling, including 65 individual soil samples and 1 water sample from the farm dam; and
- analysis for potential contaminants of concern.

The assessment found that prior to the Parklands project, the site had been used for low intensity agricultural purposes since at least 1947. Past agricultural uses included dairy farming, some cropping for bananas (approximately 10 to 12 acres for 3 to 4 years, typically on north-facing slopes),

some cropping for sugarcane (in low-lying areas) and, predominantly, cattle grazing. The soil and water samples were analysed for a range of potential contaminants including hydrocarbons, pesticides and heavy metals. The analysis found that the contaminant levels were all below the applicable criteria, with the exception of:

- chromium and manganese in some samples; and
- total petroleum hydrocarbons (TPH) in one sample near an abandoned car body in a forested area.

The elevated chromium and manganese levels were found to be typical of naturally high background levels in the area rather than any contamination source. The elevated TPH affected soil was minor and localised near the car body, and no remediation (other than removal of the car body) was considered necessary given the natural degradation of the contamination over time.

During the trial period, the site has been used for periodic cultural events, with the main potential sources of contamination including:

- temporary diesel storage for generators;
- other chemical storage (e.g. pesticides, herbicides, cleaning products and small-scale fuel storage):
- leaks and spills from vehicles and plant; and
- wastewater (sewage) treatment and disposal.

The potential for significant or widespread contamination associated with these sources is considered low given the periodic use of the site and the mitigation measures employed by Parklands, which include:

- diesel fuel used in generators during events is stored within the generator units and refuelled
  - from a mobile double-skinned storage tank, and removed from site after each event;
- all permanent fuel and chemicals stored and used on site (the quantities of which are minor,
  - are stored in appropriately bunded (and covered) areas in accordance with AS 1940-2004: The Storage and Handling of Flammable and Combustible Liquids;
- wastewater management is undertaken in accordance with an established on-site sewage management system, and monitoring has not identified any contamination; and
- Parklands' stormwater monitoring program, which has not identified any contamination to date

### Council comment

Notwithstanding the previous approvals, the Department should ensure that the applicant has adequately addressed the requirements of SEPP 55 Remediation of Land to ensure that the subject site is suitable for the proposed development in terms of past land uses and contamination prior to granting approval.

## **Acid Sulfate Soils**

An acid sulfate soils (ASS) assessment was undertaken by EAL Consulting Services on behalf of Parklands for the original concept plan and project application. The assessment included:

- geological and hydrogeological review;
- site inspection;
- review of ASS risk mapping; and
- soil sampling and analysis, including 69 individual soil samples from 17 boreholes.

The assessment found that potential and actual ASS are present in the low-lying areas of the site below approximately 3 to 4 mAHD. Disturbance of these subsoils during excavation works has the potential to affect downstream sensitive environments (through acidic discharges and mobilisation of dissolved metals), and damage structures and services (through acidic corrosion), if not appropriately managed.

According to the EIS in accordance with the recommendations of the ASS assessment and the EPA's Acid Sulfate Soil Manual (1998), a site-specific Acid Sulfate Soils Management Plan (ASSMP) was subsequently prepared for the Parklands site by Ardill Payne & Partners (June 2010). The ASSMP sets out a range of best practice measures for managing actual and potential ASS on the site, including:

- treatment of ASS encountered in construction works using lime in appropriately bunded areas:
- soil sampling and analysis to verify neutralisation of ASS;
- treatment of excavated trenches and other excavations using lime;
- minimising disturbance areas and excavation as far as practicable;
- diverting 'clean' run-on water around disturbance areas; and
- monitoring of downstream drainage lines and waterbodies.

#### Council comment

The proposed development involves the ongoing use and development of the site in a similar manner to the approved development. It is noted that the excavation works required for the proposed conference centre and amphitheatre regrading are largely outside the ASS risk area. The DPE should ensure the development is satisfactory in terms of the relevant planning controls under Byron LEP 2014 for ASS.

# **Hazardous substances and Dangerous Goods**

The proposed dangerous goods storage does not exceed the screening thresholds in the 'Applying SEPP 33 guidelines'. Consequently, the proposed development is not considered to constitute a 'potentially hazardous industry'.

The proposed development has been designed with a number of measures to mitigate the hazard and environmental risks associated with any dangerous goods storage, including:

- the 1,800L diesel storage tank is an existing double skin above-ground tank located within a bunded area inside the workshop building;
- all diesel used during events is stored within *state-of-the-art* generator units and/or double skin mobile tanks, with refuelling undertaken by appropriately authorised personnel; and
- all liquid dangerous goods are stored within buildings and/or appropriately managed facilities.

#### Council comment

Based on the information provided the storage of hazardous materials and dangerous goods appear to be adequate. Any use of fireworks onsite is to be conducted in accordance with the requirement of Safework NSW. It is noted a clear prohibition should be enforced on campers and the potential for a fire within the campground from unauthorised fireworks displays. The matter needs to be considered by the Department in terms of conditions and the risk to patrons attending an event at the site.

# Air quality

The main sources of air and odourous emission associated with the operations of the Parklands project include:

- · Vehicle and plant emission;
- Dust emission during construction works and events; and
- Odour emission from waste and wastewater management.

To manage air quality, odour and GHG related risks associated with the ongoing operation of the Parklands project, Parklands proposes to implement a range of measures that are generally consistent with the existing measures that have been implemented for the project to date. In this regard, Parklands would update and subsequently implement the:

- Construction Environmental Management Plan, including measures to minimise dust emissions during construction works;
- Event Management Plan, including measures to minimise dust and air emissions during events, including continued use of water carts;
- Wastewater Management Plan, including measures to ensure the appropriate management of wastewater and minimise generation of odours; and
- Waste Management Plan, including measures to ensure the appropriate management of solid waste; and
- implement measures to minimise GHG emissions, including:
- minimising traffic (especially single occupant car travel) as far as practicable;
- continuing on-site tree planting and vegetation management programs; and
- continuing to encourage GHG offsetting options for events.

# Council comment

Based on the information provided and the ongoing implementation of various management plans the permanent approval of the subject development is unlikely to have a significant impact on air quality. It would be appropriate for conditions of consent to be applied in this regard.

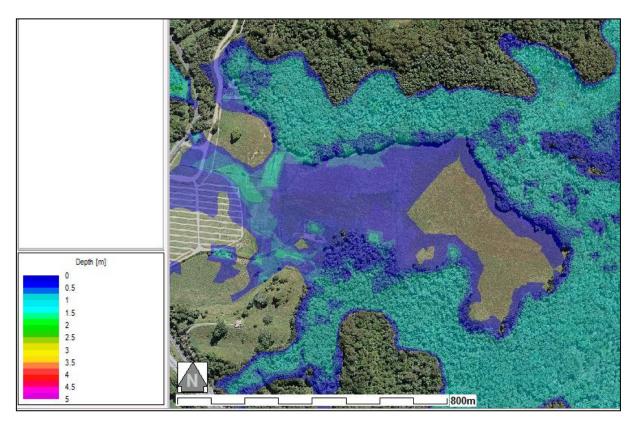
# **Proposed South East Car Park**

A new car park is proposed on the south eastern sector North Byron Parklands site and is discussed on page 41. The proposed car park is depicted in several diagrams including Figure 3.3.

#### Council comment

The proposed car park is located on land below the 1:100 year level flood. The land though is also affected by flooding down to the 1:5 year event. The following maps have been sourced from Council's GIS flood mapping layers. Map 1 depicts the constraints of a 1:5 year event in the vicinity of the proposed south east car park. The land is also identified in Councils mapping as an Ecological Wetland and in terms of the Standard instrument the land is likely to be defined as a wetland and natural waterbody. The proposed south east car park is likely to require filling, land shaping and drainage works.

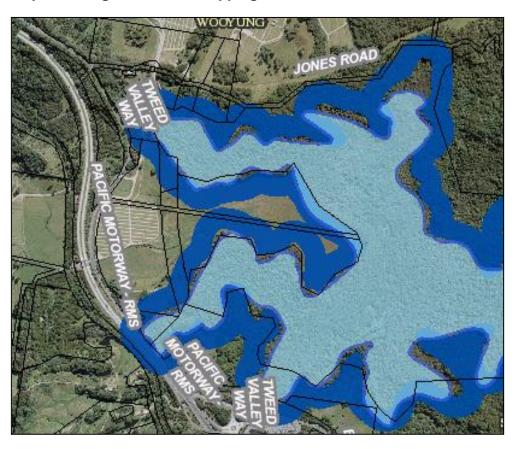
The Department will need to be satisfied the development complies with Clause 24 Development of Flood Liable Land of Byron LEP 1988, which has limitations on filling of flood prone land and Clause 6.3 Flood Planning of Byron LEP 2014 where applicable. Any engineering works in that regard should be carefully modelled so that the full extent on the flood plain can be understood, Ecologically an assessment of the suitability of the site for a car park and environmental impacts on threatened species and in particular wallum frog species is recommended, with the proposed car park area being predominantly within a buffer to SEPP 14 Wetlands and as mapped by the Draft Coastal Management SEPP.



Map 1. 1 in 5 year flood event.



Map 2. Ecological wetland mapping



Map 3. SEPP 14 Mapping (light Blue) and Draft Coastal Wetlands Buffer (dark blue)

#### Additional comments and attachments

Attached to this submission are the following documents providing additional comments from the elected Council.

Annexure 1: Council resolution dated 26 February 2018 providing comments on the North Byron Parklands Proposal.

Annexure 2: Addendum to the Council resolution of 26 February 2018 providing additional comments on the North Byron Parklands Proposal.

# **Previous Approvals**

It is noted that the applicants have not satisfied previous conditions of the concept approval. In particular Conditions B4(3) and C1(2) in terms of works for Stage 2 works include 'a water treatment facility' and 'a wastewater treatment facility'. The conditions state:

B4(3) The stage 2 works must be completed prior to any outdoor event after 2017. C1(2) The stage 2 works must be completed before any outdoor events are held after 2017

It is unclear why these works were never carried out or why the consent was never amended if they were no longer proposed.

## **Regulatory Working Group**

Council notes the difficulties that residents and others including community representatives on the Regulatory Working Group (RWG) have experienced in having concerns addressed by DPE and details issues, complaints and submissions, previously raised by Council, residents, businesses and

others regarding the application or otherwise of approval conditions during the trial period. It is vitally important that Compliance Officers of the Department attend the RWG for debrief meetings, to take on board issues and concerns directly from Community representatives, Emergency Service Personnel (Police, First Aid Providers, Rural Fires Service) and Council

It is understood the Department is to establish a Compliance Office on the North Coast (Murwillumbah), which will also enable the DPE officers to be at hand to monitor the events and be readily available to respond to complaints.

### **Trial Events**

Should the proposal be approved it is strongly recommended that the proposed increase in numbers or frequency of events should not be supported until all required KPI's are met for two consecutive years as verified by independent consultants. Such an approval would need to be structured with clear and transparent performance guidelines and criteria for not only the applicants and the consent authority, but also the Community to review prior to the event proceeding to a permanent site with the numbers now proposed.

#### **Patron Numbers**

This needs to be clearly defined in any approval so that:

- · free tickets to surrounding residents,
- VIP's,
- staff.
- performers;
- emergency service personnel:
- subcontractors; and
- volunteers:

are included in the total amount of people on site at any time.

#### Conclusion

Council has raised significant issues about the veracity and adequacy of the information included in the applications. Due to the above, Council is unable to support these applications at this time progressing.

Council therefore seeks a further meeting with the DPE about these issues and how they will be addressed, prior to any report on these applications being finalised for the Joint Regional Planning Panel.

Council looks forward to your earliest response. If you require any further information or assistance in regards to Council's submission please contact Chris Larkin Manager Sustainable Development on (02) 66267000.

Yours sincerely

Per:Shannon Burt

**Director Sustainable Environment and Economy** 

Attachment 1 – Resolution 18-118

Attachment 2 - Addendum to NoM - North Byron Parkland

#### Attachment 1

# Report No 9.3 - Submission: North Byron Parklands

**TO:** Shannon Burt - Director Sustainable Environment and Economy

COPY TO:

**DATE:** 26 February 2018

**MEETING:** Council Meeting of 22 February 2018

**RESOLUTION NUMBER:** 18-118

Action is required for this item as per the Council Resolution outlined below.

# 18- Resolved: 118

1. That Council notes the Final Determination Report ('determination approval'), Final Concept Approval ('concept approval') and Final Project Approvals ('project approval') of 24 April 2012 in relation to the Yelgun site (North Byron Parklands).

2. That Council notes the statement of the Final Determination Report on page 11 as follows:

After the trial period, the Commission considers that a new application should be lodged with Council for events to continue. In considering any future project applications, the Council must take into consideration the performance of events during the trial, the effectiveness of the management plans, the monitoring results of environmental conditions and the completion of Stage 2 works (on-site sewerage and water infrastructure).

- 3. That Council prepares a submission in relation to *Cultural Events Site State Significant Development Application (SSD 8169)* ('the application') affirming that the environmental and community interests are best served if an application for a permanent events site were to be assessed, considered and determined by Byron Shire Council in accordance with the statement of the Planning Assessment Commission (PAC) set out in 2 above.
- 4. That the submission to DPE note with concern that the application is proceeding without the following conditions of the concept approval being met.
  - B4(3) The stage 2 works must be completed prior to any outdoor event after 2017. C1(2) The stage 2 works must be completed before any outdoor events are held after 2017

Note: Stage 2 works include 'a water treatment facility' and 'a wastewater treatment facility'.

5. That the submission notes the difficulties that residents and others including community representatives on the Regulatory Working Group (RWG) have experienced in having concerns addressed by DPE and details issues, complaints and submissions, previously raised by Council, residents, businesses and others regarding the application or otherwise of approval conditions during the trial period.

- 6. That the submission states that the proposed increase in numbers or frequency of events should not be supported at least until all required KPI's are met for two consecutive years as verified by independent consultants.
- 7. That the submission also acknowledge issues regarding noise, traffic, flooding, fire, terrorism and other safety issues alongside employment, cultural enrichment, economic development and financial support for wider community organisations and projects. (Rich

# Addendum to NoM - North Byron Parklands

# Comments to the Bushfire Emergency Evacuation Plan (BEEP)

\* P23 Section 3.4 Evacuation Trigger

Quotes "Egress time to evacuate the site by vehicle is approximately four to five hours" - says this figure is quoted from the Molino Stewart Flood Risk Management Plan 2011, but this is in direct contradiction to the Molino Stewart Flood Risk Management Plan 2017 (MS FRMP 2017) page 24, submitted with the current application which quotes vehicle evacuation times of 12.5 hours for 35,000 patrons if 2 exit lanes are available reducing to 10 hours if 3 exit lanes (3rd lane is Tweed Coast Road) is available.

- \* The BEEP also does not distinguish in estimated evacuation times for the 50,000 patron event whereas the figure provided in the MS FRMP 2017 for vehicle evacuation times for 50,000 patrons if 2 exit lanes are available is 14 hours reducing to 10.5 hours if 3 exit lanes (3rd lane is Tweed Coast Road) is available.
- \* Importantly the MS FRMP 2017 also advises evacuation times will be lengthened by impacts of: Night evacuation, and possible patron intoxication and that this needs to be considered in evacuation circumstances.
- \* This section also quotes that safe egress to the Primary Assembly area is less than one hour based on pedestrian modelling. The BEEP does not appear to consider the possibility that the primary assembly point is located about 130m directly north of the camping area on a neighbouring property and that if the wind is in a northerly direction this assembly point may be rendered unusable due to smoke impacts.
- \* Emergency evacuation required due to Terrorism threat has not been considered in this section. I have not found it considered in any section yet, but it may be in those I have not read. Please make sure it has been considered as it is potentially a highly likely future target.
- \* P27 Figure 4 Many of the evacuation routes identified for use in bushfire emergencies are tracks which include large sections through forested areas, are single lane unsealed roads which may be susceptible to impacts during a fire event.
- \* P28 It is stated that if evacuation to an off-site Assembly area is required by NSW Police, event management will follow the instructions of the lead agency" but it is not clear if consideration has been given to where uop to 50,000 patrons will be evacuated to in this event.
- \* P29 of BEEP states that no vehicles will leave the site until all patrons and staff are in the Assembly Point. This necessarily adds a delay which has not been considered. It also states that people affected by drugs / and or alcohol will be treated as patrons with special needs in the first instance but does not appear to consider the impact this may have on evacuation times.
- \* BEEP does not distinguish between large or moderate events, timing of event, the location of patrons etc
- \* Page 34 NBP Standard 006 says BEEP is only required for large or moderate events, but small

events up to 5000 patrons and community events with up to 1500 school children also need to have a BEEP in place. This document also lists that fires permitted by the DPE are permitted but does not place restrictions on being off the peat soil etc.

- \* Page 37 NBP Standard 009 advises Evacuation Plan is only required by lkarge or moderate events. These plans need to be required for small (up to 5,000 patrons) and small community (up to 1500 patrons) also. The threat to safety exists equally for these smaller events.
- \* The above page also says that Evacuation must be carried out in accordance with the Parklands Flood Risk Management Plan 2011 instead of the current MS FRMP 2017.
- \* P39 NBP Standard 011 says it is only required for large or moderate events but for safety this should be required for all events which include on site camping.
- \* P43 Fire Risk associated with mature canefields growing adjacent to the emergency exit which is one of two emergency egress labelled in Figure 4 as available exit from the northern camping area to Wooyung Rd does not appear to be considered. This figure also does not include a 10m defendable zone around the Forest Block located in the Camping area. This block presents a high hazard due to the history of patron incursions into this block as evidenced in previous Ecological reports attached to the Performance Review and the presence of highly flammable tent setups. To reduce this risk a 10m defendable zone should be placed around the forest block and was in the trial application and the camping area should have the minimum separation of 2.5m between setups as required for fire safety in all Council camping areas.
- \* P44 Figure 5 shows the Emergency Assembly Point for up to 50,000 patrons located on a neighbouring property. This arrangement, identified in Appendix D Primary Evacuation Area Plan, is dependent on the agreement of the neighbouring landowner and may be subject to change without notice and consideration should be given to the possibility of providing the primary evacuation area on the land subject to the Approval.
- \* In the Feedback from Other Agencies section, the Rural Fire Service requested specific layers to be included in the Environmental assessment. It is not clear if all of these were provided.

# Comments on Molino Stewart Flood Risk Management Plan.

- \* The definition of Patron" has now been changed to those holding a paid ticket. Security, workers and regulatory personel are listed separately in terms of number of people present on the site. It is unclear where the many hundreds of complimentary ticket holders such as all residents of Yelgun and Wooyung Rds who receive 6 free tickets will be counted in this calculation of total numbers of people at risk.
- \* The quoted number of vehicles on site in Table 3, page 8, exceeds the number of vehicle spaces available in the respective areas on the site as listed at the beginning of this document. The 25,000 patron events says will have a distribution of vehicles of 8216 in the northern areas but according to the parking section there is only a capacity of 6,700 in the north?
- \* Page 9 lists upgrading the access track to Wooyung rd to be above the 1:100 ARI to allow access and egress of emergency vehicles but does not address the need to ensure this upgrade does not

interfere with surface water flows of flood water or exacerbate flooding on neighbouring properties. It also does not address low points of Wooyung Rd which are below the 1:100 ARI. (and the 1:5 ARI)

- \* Low points in the surrounding road network are identified by the 1:100 ARI but many of these points are also underwater in the 1:5 ARI events and it would be good to provide this figure to the DP&E.
- \* Lighting of the campground (which will assist in times of flood evacuation) are run by diesel generators. These need to be located above possible floodwaters.
- \* Page 11. Table 4. Assessment of probabilities underestimate risk of events with large numbers of patron on site occurring during each flood event as the table does not separate out the camper arrival days where up to 20,000 campers may arrive on site prior to any camping event, these should be included in risk calculated for event days.
- \* In order to increase flood risk information available and mitigate flood safety risks, is it possible to suggest a river height gauge is installed at NBP's cost on both Burringbar creek and Mooball creek as both of these have an impact on how much and how fast water backs up onto the site.
- \* The MS FRMP quotes floodwater heights in the campground in the 1:5 ARI event as being up to 0.9m deep but in the 1:50 ARI event floodwaters are listed as up to 1.5m deep and unsafe for cars or pedestrians. Council has provided photographic evidence of a minimum of 3, greater or equal to 1:50 ARI events in the last 8 year occurring on the site and yet the FRMP fails to mention more then one of these.
- \* P23 Refers to a new dedicated egress exit to Wooyung rd but neglects to mention that this egress point has been used for patron bump out every large event on site to date except for the most recent Splendour (SITG) where an accident on this internal route made it unusable for much of the exit period. It also does not address specific engineering problems related to this exit and its attachment to Wooyung rd. The use of this exit as a patron exit has been recorded in this applications traffic assessment for only 2 of the large events but the Minutes of the Regulatory Working Group confirm it was used in the 2014 and 2015 events also.
- \* The FRMP states on page 43 that ""all below capacity events must use areas out of greatest flood risk and ""that Camping will be kept away from the farthest edge of the north east boundary "but it is unclear how these directives have been incorporated into the Management plans and it may be sensible to include these requirements as conditions of any future approval.

#### **Notes to traffic Assessment**

- \* The summary states that "departure volumes are constrained to avoid overloading the surrounding network". It must be noted that these measures will not be available in times of evacuation and evacuation times need to consider the overloading of the surrounding road network.
- \* This assessment states that the Wooyung Rd exit (labelled Gate E on p25) which is proposed to become a camper and patron entry and exit for parking only vehicles arriving from the Tweed Coast rd was used to exit patrons in SITG 2013 and SITG 2016 but photographic evidence and Minutes of the Regulatory Working Group show that this exit was also used to exit patrons in the 2014 and 2015 events as well due to "stress and anxiety of patrons exiting the site".

- \* Traffic assessment says that Tweed Valley way is under care of the Byron Shire Council.
- \* Traffic assessment states that Wooyung bridge has a 14T limit but does not mention that Wooyung road itself has a 14T limit and as such is not suitable for coaches or service vehicles such as water deliveries or wastewater removal.
- \* It appears that the problems recorded for traffic have mostly all been on patron arrival and exit days and as such the one day events with 25,000 day patrons or 50,000 events with up to 30,000 day patrons requiring daily transport are likely to cause most impact on the surrounding traffic network. It would seem a further trial period to assess the road capability for these uses (which to date have been able to be spread across a camper arrival day and event days rather than all on one single event day) is a good suggestion rather than providing permanent approval at this point.
- \* P12 Section 2.4 Notes limited usage of 18 days per year as limiting risk of bushfire, but application is for 20 event days and bump in / camper arrival days also have thousands of patrons and associated personnel present, so days where there are likely to be upwards of 1500 people on site are 23 days per year