Proposed Bioenergy Facility – Summary of Submissions and Comments

Issue	Applicants Response[(i)] - Summary	Comments
Impact on wetlands – flora/fauna, hydrology, traffic impact etc *Summary of Issues Raised:* The STP contains valuable habitat for threatened and other protected birds. The development poses a threat to the integrity of the wetlands. Ongoing change makes it difficult for wildlife to adapt and maintain breeding populations. In recent times birdwatchers have noticed marked changes in response of the wetland's birdlife to ongoing disruptions. These can be associated with weed removal, mowing, visitor behaviours, pipeline construction, nearby sports fields, increased vehicle access, severe heat and drought followed by prolonged periods of uniformly high-water levels. There also appears to have been a marked decrease in species diversity and bird numbers over recent months The proposal will significantly heighten disturbance levels during construction. Afterwards, the coming and going of heavy vehicles adjacent to the retention cells is likely to magnify and regularise that disturbance. Access road too close to wetlands Cells D, E, F and G – Lathams Snipe and Black-necked Stork recorded there. Cell H has been set aside and managed as a habitat for threatened Comb-crested Jacana. The bushfire prone nature of the site will mean that additional clearing is required if a fire is imminent. Acid sulfate effects on wetland. Negative affect on the Mitchell's Rainforest Snail. They should not need to be relocated.	Most of the stakeholder concern surrounded potential impacts from the proposed development to the biodiversity values of the surrounding wetlands. Moving the proposed access road to the BEF has addressed the vast majority of the potential concerns raised. <u>Traffic disturbance</u> -The BDAR assessed that even with additional haul truck movements during construction and operation, the effects upon waterbirds will be insignificant because: 1. The vehicles will be travelling at slow designated speeds, thus chance of collision with birds will be extremely low; 2. Vehicles will be travelling on designated roads which threatened birds are not likely to inhabit; and 3. Motor vehicles including light vehicles, and large vehicles evoke shorter flight-initiation distances (FID) than humans on foot (McLeod et al 2013). A study by Pease et al (2005) exposed seven species of dabbling ducks experimentally to walking, biking, a slow truck and a fast truck. Pedestrian and cyclists caused the highest proportion of dabbling ducks to flush relative to automobiles. Appropriate impact mitigation measures will be adopted to address the impacts of vehicle movements prior, during and post construction, and during the operational phase of the project. This includes: • Enforcing low-speed limits as detailed in the additional mitigation measures; • Installing signage to warn drivers of the presence of wildlife crossing roads; and • Educating drivers and operators of the wildlife, in particular wetland birds that are present in the landscape. <u>Ecology – General:</u> The initial development design required the clearing of small patches of native vegetation within the lot. However, the design submitted with the EIS was altered to avoid clearing this vegetation. The retention and protection of all trees surrounding the proposed BEF site was confirmed by an experienced, qualified Consulting Arborist. As a result, and as provided in the Biodiversity Development Assessment Report (BDAR) accompanying the EIS, the development will only require the clearing of 0.52 hectares of non-native vegetation. No clearing of trees is required. Mitchells Rainforest Snail is the only endangered species that occurs within the development footprint, with an additional four vulnerable species predicted to occur. An assessment of	The biodiversity impacts of the proposal have been addressed in the BDAR, which was revised following a request for additional information from Councils assessing officer and following issues raised in public submissions. The BDAR was prepared by an Accredited Biodiversity Assessor and reviewed by Councils Natural Resource Planner and no objections raised subject to conditions. The application was also reviewed by DPIE (Biodiversity and Conservation) who advised that from their review of the BDAR, it appears the impacts of the development are unlikely to significantly affect threatened species, ecological communities, or their habitats. That is, the biodiversity impacts of the development do not appear to trigger entry into the Biodiversity Offset Scheme. In relation to comments made in relation to Latham's Snipe, Councils Natural Resource Planner has advised: *I don't believe a referral to the Department of Agriculture, Water and Environment for approval is required. Under the EPBC Act, an action requires approval from the Environment Minister if it will have or is likely to have a significant impact on a listed migratory species. An action is likely*

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No information concerning the emissions from the burning of the gases (from the flare) and impact on avifauna. The environmental achievements of the constructed wetlands should be acknowledged in the proposal. Fails to recognise the principles of ESC as it doesn't take into account the precautionary principle. There are alternative access routes into the property to avoid the use of the access road adjacent to the wetlands. Important ornithological surveys that Council has were ignored in the Biodiversity Report. The site is important for scientific study which the proposal puts under threat. Latham's Snipe is a migratory shorebird that breeds in northern Japan and migrates to eastern Australia. The protection of wetland habitats in Australia is a high priority to ensure that snipe are in adequate condition to survive their long-distance migration. Lathan's Snipe is listed among 36 other migratory shorebirds as a matter of national environment significance under the *Environment Protection and Biodiversity Conservation Act 1999*. Therefore, any sites that support or might support this species should be subject to a detailed assessment prior to any development that could cause significant impact on the population. If numbers exceed the minimum threshold for national importance (18 snipe) under the *EPBC Act*, a referral will be required to the Australian Government Department of Agriculture, Water and Environment.	whether the proposed impacts on these species are serious and irreversible was undertaken as part of the EIS. No threatened ecological communities occur within the development footprint. The BDAR determined there will be no loss of any extent of threatened ecological community because of the proposed development. The BDAR also determined that it was unlikely there would be any appreciable indirect impacts on biodiversity arising from the proposal that have not been addressed in this EIS. This takes into consideration the nature and scale of the proposed development in conjunction with the proposed impact mitigation measures, and also in relation to the character of the study area, the historic disturbance and fragmentation, and maintenance of vegetation within the property. The proposed development does not trigger the Biodiversity Offset Scheme (BOS) as it does not involve clearing of native vegetation from any area mapped 'Biodiversity Values' further, the development does not exceed the 'vegetation area clearing threshold'. The development will not cause a significant impact to any threatened species or ecological community Acid sulfate soils – The ASSMP has been updated. Any contaminated water will be captured and retained on-site, pumped out and disposed of to a licenced facility.	*to have a significant impact on a migratory species if there is a real possibility that it will:* *• substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species* *• result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species, or* *• seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.* *Based on the information provided I don't expect the amended proposal to result in any of the above for the Latham's snipe (Gallinago hardwickii) or any other migratory species.* Commonwealth referral was made with respect to the Mitchells Rainforest Snail. The delegate for the Minister for the Environment decided that the proposed action is not a controlled action provided that it is undertaken in accordance with the decision document. The ASSMP was assessed by Councils EHO and found to be satisfactory subject to conditions. The EPA has

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		also assessed this issue and provided GTA's for the proposal. Bushfire management measures are proposed that do not require additional clearing. Based on these assessments, and with the imposition of identified management measures and consent conditions, the potential biodiversity impacts of the proposal have been demonstrated to be satisfactory and refusal of the application on this basis is not warranted.
Impact to wildlife corridors *Summary of Issues Raised:* The BDAR states that the proposal will not impact on fauna corridors with one reason being that the development is in a cleared and developed site. This land provides valuable hunting grounds for prey species.	The BDAR indicates: The proposed development is not likely to impact upon any fauna movement or corridors. This is because: 1. The development is located in a cleared and historically developed site that is already a barrier to fauna movement 2. The finished structure will be similar in height and form to existing infrastructure associated with the existing, operational STP 3. Existing habitat corridors that surround the Subject Land will continue to exist, unhindered by the proposed development.	Refer to comments above.
EIS should have been on all wetlands, not just the 0.8ha development envelope **No assessment of indirect impacts to biodiversity within the larger STP wetlands** *Summary of Issues Raised:*	Indirect impacts were assessed in the original BDAR accompanying the EIS, specifically in Section 5 and Section 6 of the BDAR. The BDAR has been updated to provide further clarification and justification that no significant indirect impacts are expected due to the proposed BEF. The applicant acknowledged the suggestions of Byron Bird Buddies and BirdLife Northern Rivers in design modifications which will further reduce indirect impacts to biodiversity, especially wetland birds.	Refer to comments above. The BDAR addresses potential indirect impacts and considers the larger wetlands.

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No attempt has been made to evaluate the impacts of the proposal beyond the small footprint upon threatened and protected species and communities. Doesn't take into account the cumulative impact over the entire reserve. Bigger picture BDAR is required.	A thorough suite of impact mitigation measures has been proposed that will address any potential indirect impacts to wetland biodiversity. A summary of these are as follows: • Operational areas (other than truck turning) are enclosed to minimise noise; • Blowers and pumps are enclosed in technical corridors to minimise noise • Access road can be redesigned to run through middle of the STP; • Low vehicle speed limits will be enforced; • Quantity of stormwater discharged from the site is no more than current rate of discharge from the mown grass grounds of the STP; • Stormwater is retained and filtered before being dispersed into adjacent wetland area; • No leachate will be stored in open dams or discharged from the site (it will all be contained in tanks, reused in the process, and pumped out and disposed of in a licensed facility if absolutely necessary); • Boundary 'living' fence installed to create a visual and noise screen using local flora; • No vehicle or personnel movements outside the site boundary fence except through the current wetland access point (SE corner) already used by the community and council staff; • All trees surrounding the BEF will be retained and protected (as per Arborist report); and • Higher building fire rating adopted to avoid clearing asset protection zones. It is unlikely there will be any appreciable indirect impacts on biodiversity arising from the development proposal that have not been addressed in the EIS, especially when considering the nature and scale of the proposed development; the character of the site; the historic disturbance and fragmentation, and maintenance of vegetation within the property in conjunction with the proposed impact mitigation measures listed above. Only the direct impacts associated with vegetation clearing and construction of the proposed BEF are expected. Section 5 of this report provides a thorough summary of how the proposed development meets the objectives of Chapter B1 Biodiversity in the Byron DCP, which outlines non-prescriptive and prescriptive measures with regards to maintaining biodiversity values.	
Impact of flare on fauna	The updated BDAR assessed the potential for the flare to impact on fauna (i.e. birdlife). As chimney is insulated and no open flame and no heat at the surface of the flare, there is little to no risk of fire in adjacent areas and little to no risk to birds that fly over the chimney or attempt	Noted. The applicants response satisfactorily addresses this issue.

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	to perch upon it. Bird deterrent spikes or equivalent structures could be installed on the horizontal surfaces of the chimney, if it was apparent that birds attempted to perch on the chimney. In the unlikely event this issue came apparent, it would be easily managed through minor engineering of bird deterrents onto the chimney.	
BEF will cause GHG submissions *Summary of Issues Raised:* The DA Reports do not identify the level of emissions from burning the plants Methane. The plant will have to continue to run daily, there must be information provided on the plants approximate yearly greenhouse emissions from burning the methane produced by resident's green waste, sewerage sludge, commercial food waste and developers vegetation removal. There appears to be no reduction in greenhouse gas emissions from this plant. Burning artificially produced Methane is not a Renewable energy source Councils grid electricity supply is already 30% non-carbon sourced and 70% offset – there is no further offset of Councils Greenhouse gas's by sourcing electricity from the BEF for the sewage plant. A solar plant with batteries would provide the STP with 100% of electricity needed.	Council staff from the Infrastructure Services Directorate and the Sustainable Environment and Economy Directorate collaborated to prepare a detailed account of atmospheric greenhouse gas (GHG) emissions calculated from present/business-as-usual operations, versus the estimated GHG emissions form an operational Bioenergy Facility. The accounting was performed in equivalent tonnes of carbon dioxide emissions per year (t-CO_2-e/year), and included all emissions from transport fuel, electricity consumption (or production as is the case for a Bioenergy Facility), as well as fugitive emissions from landfilling, anaerobic digestion, and composting. CO_2 refers to carbon dioxide, while CO_2e stands for "Carbon Dioxide Equivalent" which includes CO_2 and other greenhouse gases (e.g. methane, nitrous oxide, and ozone). Carbon dioxide equivalent, or CO_2e, includes other greenhouse gas emissions expressed in terms of CO_2 based on their relative global warming potential. The results are presented in Table 6.3 of the Response to Submissions Report. As can be seen, and using best available Australian Commonwealth policy guidance, the Council Infrastructure Services and Sustainable Environment and Economy staff have determined that the Bioenergy Facility is forecast to result in an atmospheric carbon emission reduction of over 9,000 tonnes CO_2e/year.	The applicants response satisfactorily addresses the issues raised in the submissions and refusal of the application on this basis is not considered to be warranted.
Air quality Impacts *Summary of Issues Raised:* Lack of detailed assessment of odour impacts The report does not identify the level of emissions from burning the plants methane	An air quality impact assessment (AQIA) prepared as part of the EIS assessed potential air quality impacts on the nearest sensitive receptors from construction and operation of the proposed BEF. The AQIA has been reviewed by the NSW EPA who subsequently issued their General Terms of Approval (GTA). In addition to the proposed biofilter, contingency mitigation measures have been proposed should odour issues persistently occur. If increased dispersion of the treated air is required (to further reduce impact on neighbours) the biofilter can be retrofitted with a cover and a	The applicants response satisfactorily addresses this issue. Conditions of consent, including the General Terms of Approval, will require compliance with the AQIA and will contain air quality limitations and monitoring requirements.

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The DA has ignored the potential health impact of the air emissions of the truck increase past homes.	chimney (stack). Whilst ammonia levels for the exhaust air are anticipated to be low given the size of the biofilter (440 m2) and the inclusion of a water scrubber in the design, the system could be retrofitted with an acid scrubber to remove ammonia from the air stream prior to the biofilter if ammonia levels are higher in the exhaust air than expected. With the implementation of the air quality mitigation and management measures provided in the EIS, the proposed BEF is expected to comply with all applicable legislation and guidelines with respect to potential air quality impacts and is therefore suitable for construction and operation. Vehicles will be licensed to operate in NSW with either State of Commonwealth registrations. As such, by law they must comply with vehicle emission standards and are not forecast to have significant impacts on local air quality. Transport for NSW and Byron Shire Council reviewers accept that the public roads have capacity for the small number of proposed vehicle movements from this development; additional study on this matter is unwarranted.	
Noise and light impacts to wildlife	The effects of traffic noise on birds is complex, and opinions in the scientific literature vary. While it usually assumed that noise associated with traffic including heavy vehicle operation could increase disturbance to birds, multiple studies have shown that it is not the noise from traffic that significantly effects bird presence, breeding and behaviour, but other effects, most noticeably vehicle collision (Summers et al 2011). As discussed, vehicle collision risk can be significantly reduced or avoided by enforcing slow speed limits by vehicles traversing the facility. The effects of noise from heavy vehicle movement can be significantly mitigated, by enforcing maximum speed limits and stringent rules to reduce heavy vehicle noise emission such as implementing bans upon (or enforcing minimisation) the emission of compression ('jake') and exhaust brake noise from heavy vehicles when such vehicles pass wetland bird habitat areas. Owing to the topography of the site it is not likely that exhaust /compression breaking will be required at all. Other mitigation measures include ensuring trucks have rubber-lined trays (or similar noise reducing measures) and vehicles only tip waste products indoors. Tipping of materials will not likely generate noise that will disturb threatened fauna as the tipping will incur indoors and the materials being tipped consist of organics which make no abrupt or sharp noise when tipped onto a hard surface. Noise from the fans and pumps associated with the Bioenergy Facility (BEF) will be minimal as noise mitigation measures will be put in place, for example, wherever possible such noise-emitting plant will be enclosed within a noise attenuated building.	The applicant's response satisfactorily addresses this issue. Conditions of consent, including the General Terms of Approval will contain limitations for noise generation. Conditions will also be imposed with respect to lighting.

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Impacts to bird watching recreation activities and tourism *Summary of Issues Raised:* The proposal will have a significant impact on the large number of bird and nature lovers that visit the site. This experience will be diminished by the proposal.	These constructed wetlands form part of the 100 ha Byron Bay Integrated Water Management Reserve. An award- winning example of how good resource management can minimise the impact of the sewage treatment plant on the surrounding ecosystems and create a wonderful, natural habitat for the support of local flora and fauna diversity. The wetlands are a great place to bird watch when visiting Byron with more than 227 species spotted. Habitats and seasons will define where you are likely to see the birds and a variety of water levels provide for different types of waterbirds and shorebirds. Bookings can be made for the Wetlands Interpretive Centre, located about 320m southeast of the BEF site. The facility provides a meeting room, disabled access and toilet and first aid kit as well as a small kitchen. The Wetland Interpretive Centre is air-conditioned and will accommodate up to 30 people comfortably and provides a place for school and other groups to gather and learn about the construction wetlands and biodiversity values of the wetlands and region. Access to the facility is from Wallum Place and is completely separate to the STP including a separate parking area for visitors adjacent to the centre. Use of the facility will not be impacted by the BEF. The proposed location of the BEF adjacent to the STP will not block or impede any uses of the Wetlands Interpretive Centre. None of the existing walking tracks around the constructed wetlands will be impacted which can continue to be used by visitors and tourists during both construction and operation of the proposed BEF. During construction of the proposed BEF there may be additional noise and disturbance for a short period of time, however access will not be impacted as the construction fencing will be placed such that access around the ponds adjacent to the wetlands can still be maintained. Once operation of the facility begins, there will be vegetative screening and fencing along the southern edge of the proposed BEF, but foot traffic access around the wetland areas will remain intact and open.	The application demonstrates the proposal will not physically affect the use of the site for birdwatching activities. The BDAR demonstrates that with the incorporation of mitigation measures the proposal will have a satisfactory biodiversity outcome.
Traffic and noise impacts to community *Summary of Issues Raised:* Impact on residents of 'Habitat' and due to noise. Impacts on residents along Bayshore Drive due to additional truck noise. The DA minimises the impact of truck noise by saying it will only increase total by an average of 0.1dB. The	<u>Traffic impacts</u> A Traffic and Transport Impact Assessment prepared for the EIS assessed the potential impacts from traffic generated from the construction and operation of the proposed BEF on the local road network. Construction is expected to be undertaken over a period of 10 months. An average of 6-8 truck movements per day (including all deliveries of equipment and materials) are expected during construction of the proposed facility. These movements will primarily be related to delivery of materials and movements on-site for a short-term period. Some light vehicles for construction	The application demonstrates that traffic noise is expected to comply with relevant standards. Therefore, noise attenuation conditions (fencing, double glazing etc) are not justified. As the proposal complies with noise standards, and hours of operation are

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noise however will be experiences as loud, extended bursts and will not be averaged out over a long period. Cumulative noise burden as a result of other DA's that have been approved but not yet completed (Habitat Stage 4 and 5) Negative impacts of noise on mental and physical health. At least half the residents in affected units are occupied by retirees, work from home or do shift work. These residents have varied sleep patterns which could adversely impacted by the proposal. Request the following options to control truck noise: • Council investigates alternative access options for large vehicles including the feasibility of linking Centennial Circuit with the BEF as part of a larger plan to provide an additional connection between the industrial estate and Ewingsdale Road as suggested in the Arts and Industry Precinct Plan • Install double glazing and soundproof fences along Bayshore Drive, Bayshore Lane and Sunrise Boulevarde. • Limit waste deliveries to 9am to 5pm Mondays to Fridays • Additional road maintenance to reduce sound of trucks going over potholes • Not use Sunrise Bvde as an alternative truck route. • Cap the truck numbers at 10 per day as disclosed in the DA.	workers travelling to and from the Site are also expected. Overall, the traffic volumes associated with construction of the BEF are expected to be lower than the operational traffic volumes. Therefore, construction traffic is unlikely to impact the surrounding road network. As mentioned previously, during operations, 3 to 5 staff and 8 deliveries are expected to access the site per day, with a maximum of 2 trucks onsite at any one time. The 8 heavy vehicle movements consist of up to 5 side lift compactor trucks (from food and garden organics kerbside collections) and 3 bulk materials trucks (maximum length 19m) which deliver bulked up organic wastes from other facilities (e.g. Byron Resource Recovery Centre) and collect finished compost. These vehicle movements are in addition to those currently required for STP operation. With a maximum of 7 vehicle movements (5 staff and 2 truck movements) occurring during peak periods on the roads, the assessment determined that the proposal will not have any unacceptable impacts on the road network. The proposal will replace the truck movements associated with the removal of biosolids (currently requiring approximately 45 truck movements over a 2-3 day period, occurring at six-week intervals). The biosolids will be processed onsite through the BEF. The benefit of these reduced biosolids truck movements are not counted in the forecast traffic for the development. To calculate the traffic noise impacts generated by the operation of the development the existing road traffic volumes for Wallum Place and Bayshore Drive (nearest impacted roads) are required. The increase in traffic volumes due to proposed operation of the site are shown in Table 6.2 of the Response to Submissions report, which also summarises the predicted increase in noise levels on the nearest affected roads due to the traffic generated by the proposed development site. With the implementation of the traffic mitigation and management measures provided in the EIS, the proposed BEF is expected to comply with all applicable legislation and guidelines with respect to potential traffic impacts and is therefore suitable for construction and operation. <u>Noise and vibration from the facility</u> A Noise and Vibration Impact Assessment (NVIA) was prepared for the EIS to assess the potential noise and vibration impacts associated with the construction and operation of the proposed BEF on any nearby sensitive receptors. The facility has been designed to minimise noise emissions by enclosing noisy equipment with technical corridors and siting noisy equipment on the side of the facility furthest from residential sensitive receivers. A selection of the predicted worst-case operational noise levels due to onsite noise sources show low noise emissions from the site to the surrounding environment when the proposed mechanical noise control measures are implemented.	within normal limits, further restrictions by way of conditions is not proposed. Recommended conditions of consent require compliance with the Traffic and Transport Impact Assessment which contains limitations on truck numbers and the route that the trucks follow. Therefore, further conditions in this regard is not considered necessary. The DA assessment report has discussed the issue of the number of compost vehicles leaving the site per day. As discussed, no additional traffic would be generated as a result of this as compost would be transported from the site as a backload of trucks delivering waste to the facility. Alternative transport routes to the site were considered and dismissed for various reasons including environmental impact (Cavanbah Centre) and road standards. Councils engineer has assessed the traffic report and traffic impacts of the proposal on the road network and this is considered satisfactory subject to conditions. One of the conditions includes road widening at the Wallum Place/Bayshore Drive intersection.

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The access road is likely to impose safety hazards to pedestrian traffic. Its proposed route occupies an area necessarily taken by walkers around the ponds, leaving little if any room for safe co-occupation by trucks, waterfowl and pedestrians. Does not consider compost vehicles in the calculations of traffic numbers. Therefore, traffic movements are understated. The EIS states that there will be 10 trucks per day, the noise report states 13 per day. DA understates heavy truck movements and the associated noise. Lack of detail regarding where the waste will be transferred to after treatment and associated traffic movements. Additional traffic on already overcrowded Bayshore Drive – particular impacts at peak times. Truck turning in to Wallum Place will exacerbate the problems of the tight intersection. An alternative access via the Cavanbah Centre should be used. Trucks should not be allowed to divert down Sunrise Avenue to avoid congestion at the Ewingsdale Road/Bayshore Drive intersection – condition of consent suggested in this regard.	Given the relatively small increase in vehicle traffic to be caused by operation of the proposed development, the predicted noise increase associated with construction and operational vehicle movements is expected to be less than 0.1 dB along Wallum Place, the increase in noise levels is predicted to be 0.3 dB between Porter Street and Gallagher Drive, and 1.4 dB between Gallagher Place and the proposed BEF site. These predictions satisfy the Road Noise Policy criteria that traffic associated with a project must not result in an increase of more than 2 decibels (dB). With the implementation of the mitigation measures as described in the EIS, the proposed BEF is not expected to have significant noise and vibration impacts and is therefore suitable for construction and operation.	
Lack of Consultation *Summary of Issues Raised:* Lack of direct consultation with local community organisations (eg bird watching groups) Claims in the Social Impact Statement that certain community groups were consulted is incorrect.	A social impact assessment report was prepared and accompanied the EIS and development application to assess potential social impacts. BSC prepared a Communication and Engagement Plan (CEP) for the proposed development in November 2020, which supported the delivery of the social impact assessment for the project. Feedback was sought from neighbours comprising residents and business owners / operators from a wide consultation area, within a 1km radius of the development (169 property owners). In addition, the following businesses and community groups were contacted:	The applicant has demonstrated that the level of community consultation is satisfactory. In response to the exhibition of the application and the objections received, particularly from members of the local birdwatching group and birdlife organisation, the proposal has

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	• Habitat retail precinct; • Elements Resort; • West Byron Fair shopping centre (IGA and other businesses); • Bayshore Drive and Centennial Circuit businesses; • Other Arts and Industry Estate businesses; • North East Forest Alliance; • Belongil Catchment Drainage Board; • Byron Environment Centre; and • Community Alliance for Byron Shire (CABS). A letter of introduction to the project was mailed to these groups, along with a supporting information sheet. The focus was to seek feedback from neighbours on key matters that need consideration in the environmental assessment phase of the project. The community outreach encouraged respondents to provide feedback via Council's 'Have Your Say' web page. A summary of issues was provided in the EIS along with the steps taken during the EIS process and design development stages to address stakeholder concerns. These are provided in section 4 of the EIS, and summarised in table 4.1 and table 4.2 of the EIS. The public exhibition period is also an important part of the consultation process and, as demonstrated by this report, allows submissions that informed by the full development application to be considered and addressed by the proponent, which in this case is BSC. Additional community outreach has been undertaken by BSC post exhibition of the EIS. These activities are summarised in Section 7.2 of the Response to Submissions Report. Since the close of the DA Public Exhibition period, the Council project team has also conducted the following additional activities: • Numerous direct email correspondence with the media and Shire residents • Continuous updating of Q&A on the Your Say page • Direct email follow-up in October 2021 with key community and environmental groups offering to meet with the Council Project Team while it is preparing this report.	been modified to relocate the proposed access away from the eastern wetlands. The applicant has also provided evidence of ongoing consultation with the local bird watching group that is referred to in the objections.

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	• Nov. 2021: Face-to-face meetings with the Byron Bird Buddies, and scheduled for another follow-up meeting once this report is in the public domain. • Dec. 2021: Face-to-face meetings with neighbouring residents to better understand their concerns and offering to meet again for another follow-up meeting once this report is in the public domain.	
Safety concerns Explosive gas storage on site is a safety concern to people and wildlife	The biogas tank sits directly above the anaerobic digestor tunnels and is located greater than 30m from the STP oxidation ponds and other STP infrastructure. The biogas is greater than 40m from the access road and approximately 250m from the entrance to the STP. Sensitive uses fall outside of the 40m threshold. The biogas storage amount and location are below the Class 2.1 thresholds set forth in *Figure 6: Class 2.1 Flammable Gases Pressurised (Excluding LPG)* in the *Hazardous and Offensive SEPP* and in this case the proposed development is not considered a potentially hazardous development. A Bushfire Assessment and, whilst not required for the EIS, a Fire Safety Study were also prepared to assist with design of the proposal. The mitigation measures as proposed in the EIS are considered appropriate to manage health and safety of proposed BEF staff, the community and the environment. Note that the BEF design includes connection to mains water and a large on-site roof water tank. As indicated in the EIS, a roof-top sprinkler system will protect the Biogas Storage Dome from ember attack. The BEF has adopted construction materials and methods suitable for the BAL flame zone that overlaps part of the site. In addition, a 6-metre-wide access has been designed around the entire facility for operational and emergency service personnel access and egress. These measures will protect both the building and its occupants from potential exposure to bush fire. The Biogas Storage Dome (Biodome) was also moved entirely into the lower Bushfire Attack Level (BAL) 12.5 zone i.e. it is not in the flame zone. The BEF incorporates an essential flare in its design. The flame is permanently contained within an insulated chimney. The updated BDAR assessed the potential for the flare to impact on fauna (i.e., birdlife). As the chimney is insulated and no open flame and no heat at the surface of the flare, there is little to no risk of fire in adjacent areas and little to no risk to birds that fly over the chimney or attempt to perch upon it. Bird deterrent spikes or equivalent structures could be installed on the horizontal surfaces of the chimney, if it was apparent that birds attempted to perch on the chimney. In the unlikely event this issue came apparent, it would be easily managed through minor engineering of bird deterrents onto the chimney.	The applicant's response satisfactorily addresses this issue. Conditions of consent will require compliance with NSW Rural Fire Service and EPA requirements and consultation with Fire and Rescue NSW. A condition of consent also requires the preparation of an Operational Environmental and Emergency Response Management Plan.

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Referral to Commonwealth/Federal Legislation required *Summary of Issues Raised:* Referral required with respect to Latham's snipe	A referral report was prepared and submitted to the Australian Department of Agriculture, Water and the Environment (DAWE) on 7 June 2021 to assess the likelihood of occurrence of Matters of National Environmental Significance (MNES) listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) along with an assessment of the significance of impact of the proposed development upon all MNES that are confirmed present or considered likely to occur in the location of the Byron Bay Energy Facility (BEF). The report included a summary of the BDAR as relevant to the referral and was exhibited for consultation for 10 business days. A decision was provided by DAWE on 27 July 2021 that the proposed development is not a controlled action, and not likely to incur a significant impact upon any MNES listed under the EPBC Act. To mitigate any potential impacts, a Mitchell's Rainforest Snail Salvage and Relocation Management Plan has been prepared and will be implemented for the Proposed BEF. These measures include: • No pesticides will be used when constructing and operating the Proposed BEF; • Fencing capable of preventing the entry of Mitchell's Rainforest Snail will be installed around the outward- facing perimeter of the Proposed BEF. These mitigation measures are included in the EIS and will be implemented to ensure potential impacts to the Mitchell's Rainforest Snail are prevented and or minimised to the greatest extent possible.	The applicant's response satisfactorily addresses this issue. See comments above regarding Latham's Snipe.
Height exceedance not supported	A Landscape and Visual Impact Assessment (LVIA) and Landscape Concept Plan was prepared for the proposed BEF and included with the EIS and development application. The LVIA details the results of field work, documents the assessment of the existing landscape character and visual setting, and assesses potential visual impacts associated with the proposed BEF. The LVIA also discusses measures to assist in the mitigation of potential visual impacts and ensure that the character of the immediate area and surrounding visual landscape is not overly modified or diminished. The EIS determined that with the implementation of the recommended mitigation measures development of the proposed BEF can be undertaken whilst maintaining the core landscape character of the area, with minimal visual impact on the surrounding visual landscape. It was also determined that the proposed building has a maximum building height of 13.57 m (measured from the lowest existing ground level on the site), which is 4.57 m above the maximum building height permitted for the site by Clause 4.3 (Height of Buildings) of Byron	This matter is addressed in the Section 4.15 assessment of the development application and is considered satisfactory.

(i) Refer to document titled 'Byron Bioenergy Facility Response to Submissions Report' (Jackson Environment and Planning Pty Ltd, January 2022)

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	Local Environmental Plan (BLEP2014). An elevation view of the proposed BEF is provided in Figure 6.3 of the Response to Submissions Report, and demonstrates that the proposed BEF building height is generally congruent with the existing processing units and buildings at the BBSTP. A request for exception to the building height limit was submitted along with the EIS and development application. Having regard to the facts and circumstances outlined in this objection, it is considered that the consent authority can be satisfied that the matters in Clause 4.6 of BLEP2014 (Exceptions to Development Standards) have been adequately addressed. In addition, the consent authority can reasonably be satisfied that the proposed development will be in the public interest because it is not inconsistent with the objectives of the building height development standard or the zone objectives. The erection of a publicly owned building that is fit for purpose as a bioenergy facility is in the public interest. Clause 4.6 (4) (b) provides that development consent can only be granted with the concurrence of the Secretary of the Department of Planning and Environment. The Northern Regional Planning Panel has delegated authority to assume the Secretary's concurrence.	
Economic benefit questioned *Summary of Issues Raised:* No business plan, not a worthwhile investment, no cost/benefit analysis undertaken. Lack of information regarding the sale of surplus energy and the cost per unit per production No cost/benefit analysis has been publicly released.	The Global Decarbonisation team at Deloitte Australia conducted financial modelling for the proposed BEF project. The modelling was conducted on a business case applying the following fair, responsible, and conservative assumptions: • No increase in Council rates, charges, or levies in order to support or subsidise this project; • Actual FY2022 Council organic waste management costs; • Actual FY2022 electricity retail costs; • Treasury NSW forecast municipal finance lending terms for interest rates and loan duration; • Higher than average discount rates, to conservatively estimate the project NPV; and • CPI escalation for costs and fees. Using the above-noted conservative business case assumptions and actual Council operating costs, the proposed project is forecast to carry its own operational costs and service its own debt with no external support from the Council funds. Moreover, there are many other significant benefits to this project, which include for example:	Noted. It is considered that the applicants response addresses this issue.

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	• GHG emission reductions from multiple points; • Taking the Byron Bay STP off grid energy, and the grid export of excess renewable energy generated; • Taking organic waste transport trucks off road by keeping the waste processing local; • Diverting organic waste from landfilling; • Generation of a local compost product for regional farmers and residents; and • Providing an Australian first demonstration reference site for other Shires and Developers to replicate across the nation for organic waste diversion from landfill, generate renewable energy and a high-quality compost for improving soil quality. The Bioenergy Facility represents an economically sound and leadership-driven project.	
Future growth is not accounted for in the development *Summary of Issues Raised:* Potential wetland encroachment Limited design capacity – appears to meet current needs but does not clarify future need.		If any increase is proposed in the future this would be subject of a separate application process.
Application process *Summary of Issues Raised:* The development application fails to adequately (if at all) consider impacts on: • An endangered ecological community (freshwater wetlands on coastal floodplains) immediately adjacent to and entirely surrounding it, and through which it will		See comments above regarding the ecological assessment of the application.

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require heavy vehicles to travel multiple times a day • Breeding, feeding and roosting habitats immediately adjacent to the proposal • Threatened biota beyond the chain wire fence line including: A Biodiversity Development Assessment Report should have, but was not, carried out in relation to the effects of the construction and operation of the proposal on the surrounding and transitory biological communities. By deliberately ignoring the wider impacts on the surrounding STP and associated wetlands, the DA has contravened its requirements and responsibilities under the NSW EPA Act and the Biodiversity Conservation Act. It has also failed to refer the broader matter to the Commonwealth, as is required under the EPBC Act, the Bonn Convention and Australia's international migratory bird treaties. Contravenes Federal legislation by ignoring impacts on migratory waders. Application does not meet SEARs requirements as BDAR in inadequate with respect to indirect impacts on the wetland Because of the application deficiencies, the Northern Regional Planning Panel will not be able to assess the proposal and its impacts accurately. .		
Other *Summary of Issues raised* There are other strategies to achieve some of the benefits that the application claims such as solar	<u>BEF impacts on biodiversity values and associated impacts to recreation and tourism</u> These constructed wetlands form part of the 100 ha Byron Bay Integrated Water Management Reserve. An award- winning example of how good resource management can minimise the impact of the sewage treatment plant on the surrounding ecosystems and create a wonderful, natural habitat for the support of local flora and fauna diversity.	The proposal will not restrict access for birdwatching groups. Alternative sites were considered for the proposal but as outlined in the Response to Submissions Report by the applicant, and the DA assessment

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generated power, community education to reduce waste, transition to electric vehicles. No reference in any of the documents to the Visitor Education and Impact Management Plan which raises awareness in the community of the range of processes occurring at the STP and wetlands Adverse impact on birdwatching tourism More suitable location is the existing Resource Recovery Facility at Myocum – away from busy roads and residential areas.	The wetlands are a great place to bird watch when visiting Byron with more than 227 species spotted. Habitats and seasons will define where you are likely to see the birds and a variety of water levels provide for different types of waterbirds and shorebirds. Bookings can be made for the Wetlands Interpretive Centre, located about 320m south east of the BEF site. The facility provides a meeting room, disabled access and toilet and first aid kit as well as a small kitchen. The Wetland Interpretive Centre is air-conditioned and will accommodate up to 30 people comfortably and provides a place for school and other groups to gather and learn about the construction wetlands and biodiversity values of the wetlands and region. Access to the facility is from Wallum Place and is separate to the STP including a separate parking area for visitors adjacent to the centre. Use of the facility will not be impacted by the BEF. The proposed location of the BEF adjacent to the STP will not block or impede any uses of the Wetlands Interpretive Centre. None of the existing walking tracks around the constructed wetlands will be impacted which can continue to be used by visitors and tourists during both construction and operation of the proposed BEF. During construction of the proposed BEF there may be additional noise and disturbance for a short period of time, however access will not be impacted as the construction fencing will be placed such that access around the ponds adjacent to the wetlands can still be maintained. Once operation of the facility begins, there will be vegetative screening and fencing along the southern edge of the proposed BEF, but foot traffic access around the wetland areas will remain intact and open.	report, the Myocum site was not considered suitable due to poor access, poor prospects for land availability, poor grid tie in conditions, low energy demand and not central to feedstocks other than garden organics.

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