



Mr Peter Bennett
Manager Optimisation & Rates
B & J Catalano Pty Ltd
South Western Highway
BRUNSWICK JUNCTION WA 6224

Dear Mr Bennett

**Additional information required for preliminary documentation
Lots 4 & 5 Ludlow Road Limestone Extraction, Myalup, WA**

I am writing to you in relation to your proposal to clear vegetation and expand the existing limestone extraction operations on Lots 4 & 5 Ludlow Road, Myalup, approximately 50 km north of Bunbury, WA.

On 29 April 2019, a delegate of the Minister for the Environment and Energy decided that the proposed action is a controlled action and that it will be assessed by preliminary documentation. Further information will be required to be able to assess the relevant impacts of the proposed action.

Details outlining the further information required are at Attachment A.

Details on the assessment process and the responsibilities of the proponent are set out in the enclosed fact sheet. Further information is available from the Department's website at <http://www.environment.gov.au/epbc>.

If you have any questions about the referral process or this decision, please contact the Project Assessments West Section by email to PAWS@environment.gov.au and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Rod Whyte
Director
Project Assessments West Section

24 June 2019

REQUEST FOR ADDITIONAL INFORMATION REQUIRED FOR ASSESSMENT BY PRELIMINARY DOCUMENTATION

Lots 4 and 5 Ludlow Road Limestone Extraction, Myalup, WA (EPBC 2019/8388)

On 29 April 2019, the proposed action was determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), with listed threatened species and communities (s. 18 & 18A), listed migratory species (s. 20 & 20A) and the ecological character of a declared Ramsar wetland (s. 16 & 17B) as the controlling provisions. On the same date, it was determined that the proposed action will be assessed on preliminary documentation.

This document sets out the specific information required by the Minister under s. 95A of the EPBC Act for the assessment of the relevant impacts of the proposed action (the 'preliminary documentation').

The preliminary documentation for the proposed action must include:

- The information contained in the original referral.
- The further information provided on the impacts on the proposed action and the measures you propose to avoid, mitigate and/or offset those impacts (as specified below).
- Any other relevant information on the matters protected by the EPBC Act.

The preliminary documentation must contain sufficient information to allow the Minister (or delegate) to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for each controlling provision.

It is important that you read this document carefully and make sure that you understand it. If you have not adequately addressed the information requirements set out in this document, your draft preliminary documentation will not be approved for publishing. Please contact the Project Assessments West Section as early as possible if you have any questions or concerns.

RELEVANT MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

From the information provided to date, the Department considers that the protected matters that may be significantly impacted by the proposed action include, but are not limited to¹:

Listed threatened species and communities

Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) – endangered

Bar-tailed Godwit (Baueri) (*Limosa lapponica baueri*) – vulnerable

Curlew Sandpiper (*Calidris ferruginea*) – critically endangered, migratory

Great Knot (*Calidris tenuirostris*) – critically endangered, migratory

Greater Sand Plover (*Charadrius leschenaultia*) – vulnerable, migratory

Lesser Sand Plover (*Charadrius mongolus*) – endangered, migratory

Eastern Curlew (*Numenius madagascariensis*) – critically endangered, migratory.

¹ Please note, any protected matter listed under the EPBC Act at the time of the controlled action decision may be considered relevant to the assessment of the proposed action and should be addressed, as appropriate, in the preliminary documentation.

Listed migratory species

Red-necked Stint (*Calidris ruficolis*).

Ecological character of a declared Ramsar wetland

Peel-Yalgorup System Ramsar site (PYSRS).

GENERAL CONTENT, FORMAT AND STYLE

The purpose of the preliminary documentation is to enable interested stakeholders, the general public and the Minister to understand the environmental consequences of the proposed development on protected matters and any relevant social and economic considerations. The information provided should be objective, clear and succinct and where appropriate, supported by maps, plans, diagrams or other descriptive detail.

The preliminary documentation must include a reference table demonstrating where in the documentation the additional information requirements are addressed.

Where appropriate, the preliminary documentation must be supported by:

- Evidence-based conclusions based on the best available peer-reviewed scientific literature with supporting references cited or expert opinion provided.
- Maps, plans, diagrams and technical information (e.g. specifications, schematics) – any images provided must be clearly annotated, in colour and of high resolution.
- Scientifically-robust methodologies appropriate for purpose (e.g. methodology used to identify the quality and extent of habitat available to a species), sufficient description of the methodology, justification of why it was selected and appropriate references.
- A risk assessment of uncertainties associated with the potential impacts of the proposed action, including whether the nature and/or scale of the potential impacts are unknown, unpredictable or irreversible.
- Relevant approved conservation advices, recovery plans and/or threat abatement plans for all listed species and/or communities and a discussion of how the proposed action is not inconsistent with these documents.

The preliminary documentation must make reference to all relevant standards, policies and other guidance material published by the Department. Any instances where published guidance is not followed must be justified. Where no Commonwealth standards exist, state government and/or industry standards may be useful.

The contact details of Departmental officers should be redacted from the preliminary documentation.

The preliminary documentation must also include the following specific information:

1. DESCRIPTION OF THE ACTION

The preliminary documentation must provide a description of the proposed action, including:

- A summary of all components of the proposed action.
- A description of the activities associated with the proposed action.
- The location, boundaries and size (in hectares) of the disturbance footprint and any adjoining areas which may be directly or indirectly impacted by the proposed action.

- An indicative layout plan for the proposed action area, including the location and type of land use, key infrastructure, etc.
- The anticipated timing and duration (including start and completion dates) for both construction and operational components.
- A description of any decommissioning and rehabilitation activities and the likely timing.
- A discussion of any feasible alternatives to the proposed action that were considered.

2. DESCRIPTION OF THE ENVIRONMENT AND MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

The preliminary documentation must provide a general description of the environment of the proposed action area, as well as surrounding areas, that may be impacted by the proposed action both in the short and long term. Specific matter this section must address include, but are not limited to:

- A description of any protected matters (including, but not limited to those listed above) that are, or have the potential to be, in the proposed action area and surrounds (including the PYSRS);
- A description of the current land use, topography, surface and groundwater bodies, waterways and vegetation communities within the proposed action area and surrounds; and:
- For listed threatened species and communities and listed migratory species that are, or have the potential to be, present within the proposed action area and surrounds, a minimum of:
 - Information on the abundance, distribution, ecology and habitat preferences for each listed species or community.
 - Quantification of the extent of habitat and the number of individuals present, or historical patterns of use within the proposed action area and surrounds (including mapping identifying known and/or potential habitat).
 - Assessment of the quality and importance of known or potential habitat for the relevant listed species or community within the proposed action area and surrounds.
 - Information detailing known populations or records of individuals within at least 1 km of the proposed action area and the size of these populations, if available.
 - An assessment of the adequacy of any surveys undertaken (including survey effort and timing). In particular, the extent to which these surveys were appropriate for the listed species or community and undertaken in accordance with relevant Departmental survey guidelines.
- Information about the methods, data and scientific literature used to identify and assess the environmental values within the proposed action area and surrounds, including survey data and historical records. Survey data relating to the proposed action area must be provided for the relevant listed species and/or communities, be as recent as possible and must not have been collected more than two years before the date the draft preliminary documentation is submitted to the Department.

Habitat quality

Please note that a methodology suitable for each individual listed species or community (i.e. approved by the Department or supported by literature) must be used to assess habitat or vegetation quality, noting that the same scoring system must be used at both impact and offset sites, where relevant (see Section 4). The quality score for an area of habitat must relate directly to the habitat requirements of the species (e.g. number of suitable nesting hollows). There are three components that must be considered when calculating habitat quality: site condition, site context and species stocking rates.

Relevant guidance material (such as survey guidelines, conservation advices, recovery plans, threat abatement plans and policy statements) is available on the Department's public website. It is your responsibility to ensure that you have identified the relevant documents.

3. ASSESSMENT OF IMPACTS

The preliminary documentation must include an assessment of the potential direct and indirect impacts on protected matters that are likely to be present within the proposed action area and surrounds. The impacts of the proposed action should be considered at the broadest scope and all components of the proposed action should be considered, including any associated supporting infrastructure.

The Department has identified the following types of impacts as being particularly relevant to your proposed action:

Vegetation clearing and habitat degrading processes such as weed invasion and *Phytophthora cinnamomi* dieback.

Disturbance of listed threatened and/or migratory species through increased noise, dust, emissions and/or vibrations associated with the proposed action, including disruption of key behaviours.

Loss or degradation of important habitat for listed threatened and/or migratory shorebirds and/or the ecological character of the PYSRS as a result of the proposed action, including groundwater and/or surface water contamination, groundwater extraction, stormwater management and the lowering of groundwater levels as a result of vegetation removal.

The impact assessment should identify and take into account the scale, duration and intensity of the proposed action, and:

- For each listed species and/or community, identify the quantum and quality of habitat or vegetation likely to be impacted.
- Identify the number of affected individuals and/or habitat features (i.e. potential breeding trees, suitable and/or known nesting hollows, roosting trees, etc.) relevant to each listed species.
- Characterise the nature of impacts, including timing and whether the impact is temporary or permanent.
- Include an assessment of the direct, indirect, consequential and cumulative impacts on each protected matter.
- Include a risk assessment of potential impacts from the proposed action that are likely to be unpredictable, severe or irreversible.
- Include details of any policy guidelines, relevant studies, surveys or consultations with relevant experts which were not included in the original referral.

- Include a local and regional scale analysis of likely impacts to the protected matters identified above, with reference to the proposed action's potential contribution to cumulative impacts in the context of development patterns in the locality and region.

More specifically, the preliminary documentation must also:

- Include the results of a targeted Carnaby's Black Cockatoo nest hollow assessment, which must:
 - be conducted within the Carnaby's Black Cockatoo breeding season, as defined in the *Carnaby's Black Cockatoo (Calyptorhynchus latirostris) Recovery Plan (2013)*;
 - be conducted using a telescopic pole-mounted camera or camera drone technology;
 - include close visual inspection of all potential nesting hollows within the proposed action area (and immediate vicinity) from above ground-level and provide photographic evidence of all potential nesting hollows inspected;
 - detail any evidence of use by Carnaby's Black Cockatoo i.e. chew marks, feather, debris, etc.;
 - include mapping of all potential breeding trees, suitable nesting hollows and known nesting hollows within the proposed action area (and immediate vicinity); and
 - take care not to disturb any Carnaby's Black Cockatoo nesting activity.
- Include an assessment of potential direct and indirect impacts on the ecological character of the PYSRS, including:
 - In relation to dust suppression activities, confirm whether groundwater extraction will be undertaken to source the water used, and if so:
 - confirm the amount of groundwater extraction required both per annum and over the lifetime of the quarry;
 - confirm where extraction bores will be located (including mapping); and
 - provide an assessment of potential impacts to the ecological character of the PYSRS, specifically in response to reduced groundwater inflows.
 - An assessment of the impacts of vegetation removal within the proposed action area on groundwater levels and, subsequently, groundwater inflows to the PYSRS.
 - An assessment of potential groundwater contamination and storm water management impacts as a result of activities associated with the proposed action.
 - An assessment of impacts on the PYSRS' ability to regularly support important populations of migratory birds, including the Red-necked Stint.

4. AVOIDANCE AND MITIGATION MEASURES

While the original referral proposes a number of measures to avoid and mitigate potential impacts to protected matters, the Department considers further details are required. The preliminary documentation must include the following information:

- A consolidated list of impact avoidance and mitigation measures, including any additional to those proposed in the original referral, which will be implemented to reduce impacts on protected matters.
- Details of pre-clearance and clearance procedures to ensure that protected matters are adequately detected and managed to minimise impacts (i.e. the introduction or spread of disease or pathogens to habitats and vegetation).
- A description (including maps and imagery) of the location, boundaries and size of any proposed buffer areas and/or exclusion zones, and details on how these areas will be protected and maintained.
- Details of any rehabilitation measures to be implemented, including objectives, target species, timing of relevant stages, methodology, maintenance and monitoring.
- For each proposed mitigation measure, please include:
 - performance and completion criteria;
 - monitoring and reporting arrangements; and
 - potential risks/threats, including residual risks, and any measures that would be implemented to mitigate against these risks, and any proposed monitoring to confirm the effectiveness of these measures.
- Evidence of the effectiveness of avoidance and mitigation measures discussed above, noting that the effectiveness of a particular measure is a reflection of the confidence in the ability of the measure to reduce the risk or threat. The assessment of effectiveness should be evidence-based and include examples of demonstrated success of the measure to achieve the desired avoidance or mitigation outcome.

Proposed avoidance and mitigation measures must be discussed in terms of their expected effectiveness and cost.

Management commitments by the person proposing to take the action must be clearly distinguished from recommendations or statements of best practice made by the document author or other technical expert. It is preferable to provide a consolidated table of management commitments, including details on funding, roles and responsibilities and measurable performance criteria.

5. OFFSETS

In the event that there are significant impacts that cannot be avoided or mitigated, an offset to compensate for any predicted or potential residual significant impacts must be provided for each relevant protected matter. The preliminary documentation must demonstrate how any offset proposal:

- meets the principles of the *EPBC Act Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (2012)*;
- directly contributes to the ongoing viability of the relevant protected matter and will deliver an overall conservation outcome that improves or maintains the viability of the

protected matter in the region, as compared to what is likely to have occurred under the status quo, i.e. if neither the proposed action nor the offset were to take place; and

- compensates for the proposed impact over the entire duration of the impact (i.e. should impacts be in perpetuity, the offsets must also be delivered in perpetuity).

For further details regarding offset requirements, see [Attachment B](#).

6. ECONOMIC AND SOCIAL MATTERS

The preliminary documentation must provide information about the expected economic and social impacts of the proposed action (both positive and negative). This should include, but not necessarily be limited to, the following:

- Consideration of both costs (e.g. disruption to existing community infrastructure or environmental features) and benefits (e.g. increased housing or employment) of the proposed action, including the basis of any estimations of costs and/or benefits.
- Details of any public and/or Indigenous stakeholder consultation activities, including the outcomes of those consultations.
- Consideration of different scales of economic and/or social impacts where relevant (e.g. local versus national).

7. ENVIRONMENTAL HISTORY OF THE PERSON PROPOSING TO TAKE THE ACTION

The preliminary documentation must provide details of any proceedings under a Commonwealth, state or territory law for the protection of the environment, or the conservation and sustainable use of natural resources, against the person proposing to take the action (or if the person is a corporation, its executive officers).

If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be provided.

8. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The preliminary documentation should include a discussion of how the proposed action meets the principles of ecologically sustainable development, as defined in s. 3A of the EPBC Act.

OUTCOMES BASED CONDITIONS

Outcomes-based conditions can provide approval holders with greater flexibility and autonomy while still holding them accountable for achieving sound environmental outcomes.

The Department promotes the use of outcomes-based conditions where possible, in accordance with its *Outcomes-based Conditions Policy* (2016).

Please advise the Department if you would like to pursue this approach. If so, the preliminary documentation would need to:

- thoroughly document the baseline condition of the relevant protected matter(s)
- identify conservation objectives (outcomes) for the relevant protected matters, preferably with reference to any applicable conservation advices, recovery plans and threat abatement plans
- outline how performance against specified objectives will be measured and reported over time, including at specified milestones.

RELEVANT POLICIES AND PUBLICATIONS

Various policy statements and other publications that may be relevant to your assessment can be found on the Department's website. Some key policies are summarised below:

Department of Parks and Wildlife (2013). *Carnaby's Cockatoo* (*Calyptorhynchus latirostris*) *Recovery Plan*. Department of Parks and Wildlife, Perth, Western Australia.

Threatened Species Scientific Committee (2016). *Conservation Advice* *Limosa lapponica baueri Bar-tailed godwit (western Alaskan)*. Canberra: Department of the Environment.

Department of the Environment (2015). *Conservation Advice* *Calidris ferruginea curlew sandpiper*. Canberra: Department of the Environment.

Threatened Species Scientific Committee (2016). *Conservation Advice* *Calidris tenuirostris Great knot*. Canberra: Department of the Environment.

Threatened Species Scientific Committee (2016). *Conservation Advice* *Charadrius leschenaultii Greater sand plover*. Canberra: Department of the Environment.

Threatened Species Scientific Committee (2016). *Conservation Advice* *Charadrius mongolus Lesser sand plover*. Canberra: Department of the Environment.

Department of the Environment (2015). *Conservation Advice* *Numenius madagascariensis eastern curlew*. Canberra: Department of the Environment.

Hale, J. and Butcher, R. (2007). *Ecological Character Description of the Peel-Yalgorup Ramsar Site, Report to the Department of Environment and Conservation and the Peel-Harvey Catchment Council*. Perth, Western Australia

Department of the Environment, Water, Heritage and the Arts (DEWHA) (2010). *Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines 6.2*. Canberra: DEWHA.

Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) (2012). *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*. Canberra: DSEWPC.

INFORMATION REQUIREMENTS FOR EPBC ACT OFFSET PROPOSALS

The proposed offset package must include, but not be limited to, the following:

Details in relation to the proposed direct offset package, including:

- (a) A description of the proposed offset site(s) including location, size, condition and relevant ecological/species habitat features, landscape context and cadastre boundaries of the offset site(s) (supported by mapping).
- (b) Evidence of the presence of, or usage by, relevant protected matter(s) on, or adjacent to the offset site(s), and the presence and quality of habitat for protected matter(s) on the offset site.

These details should be based on recent site surveys or analysis of available contemporary site data, reference to research, studies or other publications relevant to the protected matter(s) and include reference to the site survey and habitat assessment methodology used.

- (c) Current and likely future tenure of the proposed offset site and details of how the offset site will be legally secured for the full duration of the impact.

Details and justification demonstrating how the proposed direct offset package will maintain or improve the viability of the protected matter(s) consistent with the EPBC Environmental Offsets Policy and EPBC Act Offsets Assessment Guide. This includes:

- (a) Offset completion criteria (i.e. environmental outcomes) to be achieved, and reasoning for these in reference to relevant statutory recovery plans, conservation advices, and threat abatement plans (e.g. within 15 years of commencement of the action, 85% of the offset site contains x density of habitat trees).
- (b) Milestones to demonstrate adequate progress towards achieving the offset completion criteria (e.g. within 10 years of commencement of the action the proponent must increase, by at least 20 per cent, the number of available habitat trees at the offset site).
- (c) Specific environmental management activities and mitigation measures that will attain and maintain the completion criteria, including the management of threats to relevant species and the timing of actions. (e.g. complete the planting, and ensure a survival rate of 90%, of at least 15,000 seed, sapling or tube stock (or equivalent) food tree species within 5 years following commencement of the action; reduce the invasive weed coverage on the offset site to 5% within 5 years following commencement of the action; implement an annual non-native feral pest control program over a 10 year period).
- (d) Baseline survey information to determine the presence of relevant protected matters and the extent and quality of the respective habitat(s) at the offset site(s) in accordance with the Department's survey guideline, or using a scientifically robust and repeatable methodology.
- (e) A monitoring and corrective action program to measure the success of the environmental outcomes, which must include performance indicators, milestone outcomes, monitoring requirements, trigger values, corrective measures, and identified roles and responsibilities in accordance with the requirements in section 3 of the Departments Environmental Management Plan Guidelines:

<https://www.environment.gov.au/epbc/publications/environmental-management-plan-guidelines>.

- (f) Evidence of how the proposed offset completion criteria for the proposed offset will be maintained over the duration of the impact.
- (g) Justification of how the proposed offset package meets the *EPBC Act Offsets Assessment Guide*, in particular:
- Evidence of the likely effectiveness of any proposed management actions (i.e. rehabilitation / restoration / re-creation of habitat) to support quality improvement and/or maintenance of the proposed offset site(s) for the relevant protected matter(s).
 - The time over which management actions will deliver the proposed improvement or maintenance of habitat quality for the relevant protected matter(s).
 - The risk of damage, degradation or destruction to any proposed offset site(s), in the absence of any formal protection and/or management, over a foreseeable time period (20 years). This information is important in determining the comparative benefit of a proposed offset.
 - Evidence to support 'confidence in results' for averted loss and quality scores.

Note: where increases in habitat quality of the offset site are being proposed by the proponent to meet the direct offset requirements, the Department will require specific details of site condition, site context or stocking rate measures to be implemented commensurate to the expected level of habitat improvement

Indirect offsets

In circumstances where direct offsets cannot compensate for 100 per cent of a residual significant impact, please consult the EPBC Environmental Offsets Policy and engage with the Department at your earliest convenience.