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By email: whalersway@southernlaunch.space
cc: EADSAandNTSection@dcceew.gov.au, epbc.referrals@dcceew.gov.au

2 February 2024

Re: Proposed Orbital Launch Complex at Whalers Way (EPBC 2021/9013)

Dear Mr Damp,

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to comment on the draft preliminary documentation (Draft PD) for the proposed Orbital Launch Complex at Whalers Way (Proposed Action).

Since 1962, the NCSSA has been a strong advocate for the protection of native vegetation and biodiversity in South Australia with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities and the management of protected areas. This includes privately protected conservation areas, such as Whalers Way, and the habitat it provides for listed species.

The NCSSA submits that the federal Minister for the Environment and Water (Minister) **should not approve** the Proposed Action due to the significant and unacceptable impacts it would have on listed threatened species protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the ongoing damage it would cause through disturbance to the remaining habitat for listed threatened species, and the bushfire risk it would pose. A more suitable, less environmentally sensitive site should be found.

Further detail of the incompatibility of your Proposed Action with the conservation of nature at Whalers Way is presented on the attached pages. Critically, there seems to be a substantial underestimate in the Draft PD of the area of threatened species habitat that would be directly destroyed by the Proposed Action. It does not appear to have accounted for planned vegetation clearance to a distance of 60m around launch pads or for additional fire breaks along fences. This means the calculations in the Draft PD of direct impact on threatened species, and associated "offsetting" calculations, are significantly underestimated.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Kirsty Bevan'.

Kirsty Bevan
CEO, NCSSA

NCSSA comments on EPBC Act Draft Preliminary Documentation (Draft PD) for the Proposed Action of the Whalers Way Orbital Launch Complex (EPBC 2021/9013), dated December 2023

Summary

The Proposed Action should not be approved under the EPBC Act because:

1. It would have significant and unacceptable impact on species protected under the EPBC Act, particularly the endangered Southern Emu-wren (Eyre Peninsula) and endangered Mallee Whipbird,
2. The calculation of the area of threatened species habitat to be cleared for the development to proceed (the Disturbance Footprint) in the Draft PD appears to be a substantial underestimate since it does not seem to include additional clearance planned to mitigate bushfire risk. This means all calculations of impact, and associated “offsetting” calculations, are incorrect,
3. The Proposed Action does not adequately adhere to the mitigation hierarchy – most critically, this applies to the site selection process, since impact could be avoided if a less environmentally sensitive site were selected for the development,
4. The assessment of likely impact on threatened species underestimates the negative impact of launch noise,
5. The Proposed Action would present an ongoing and unacceptably high bushfire risk,
6. Plans to ‘offset’ the residual impact are not sufficiently progressed or transparently communicated to allow for the Minister to reach an informed view of whether they meet the requirements of the EPBC Act Offsets Policy;¹
7. Approval of the Proposed Action would be inconsistent with the precautionary principle, and
8. Approval of the Proposed Action would be inconsistent with the protection and recovery of threatened species, as articulated in relevant Conservation Advice and Recovery Plans.

Further details on each of these points is provided below.

1. *Significant, unacceptable impact on threatened species*

Whalers Way, and the surrounding sea area, provides habitat for species identified as in need of protection under the EPBC Act. Species of particular concern to the NCSSA are the Southern Emu-wren (Eyre Peninsula) and the Mallee Whipbird. Both birds have recently been recognised as being closer to extinction than previously thought, with the Minister ‘uplisting’ both from ‘vulnerable’ to ‘endangered’ over the course of 2023.

As stated in its Conservation Advice, **all remaining habitat** for the Southern Emu-wren is critical for its survival², as is **all remaining habitat** for the Mallee Whipbird.³

It is therefore unacceptable to take the Proposed Action, which would result in direct habitat loss for both of these endangered species, as well as ongoing degradation of remaining habitat from persistent noise impacts and human disturbance. It also presents an unacceptable, ongoing bushfire risk.

This is the case even if the status of ‘vulnerable’ for these birds is used to assess this Proposed Action, since Whalers Way is recognised as an ‘important population’ of Southern Emu-wren (Eyre Peninsula), and this Proposed Action would lead to a long-term decrease in the size of this important population, reduce its area of occupancy, fragment the existing important population, adversely affect habitat critical to the survival of the subspecies, disrupt its

¹ Commonwealth of Australia, *Environmental Protection and Conservation Act 1999: Environmental Offsets Policy* (2012).

² <https://www.environment.gov.au/biodiversity/threatened/species/pubs/26006-conservation-advice-05072023.pdf>

³ <https://www.environment.gov.au/biodiversity/threatened/species/pubs/81025-conservation-advice-21122023.pdf>

breeding cycle and modify, destroy and decrease the availability and quality of habitat to the extent that the Southern Emu-wren (Eyre Peninsula) is likely to decline.

Similarly, Whalers Way is an important site for the Mallee Whipbird, with recent survey work suggesting abundance may be higher in Whalers Way compared to anywhere else on the Eyre Peninsula.⁴

Whilst the NCSSA's comments focus on these two endangered birds, it is also concerned about the direct impact on, and ongoing risk to, these additional EPBC Act listed species from your proposal and trusts that the Department for Climate Change, Energy, the Environment and Water (DCCEEW) will closely critique the information you have provided, as well as seek independent review regarding the following:

- Eastern Osprey - listed as Migratory under the EPBC Act and an endangered species in South Australia. The NCSSA understands an active nest is in the vicinity of your proposed development,
- White-bellied Sea Eagle - listed as Marine under the EPBC Act and an endangered species in South Australia that is threatened by disturbance from humans,
- Southern Right Whale - listed as Endangered under the EPBC Act – as per page 138 of the Draft PD, whales have been sighted within 500m of the coastline and sightings in recent years suggest Sleaford Bay may be increasingly used by calving females, and
- Australian Sea Lion - listed as Endangered under the EPBC Act – as per page 138 of the Draft PD, a large breeding colony is present on nearby Liguanea Island.

2. *Underestimated Disturbance Footprint*

The NCSSA believes that the Disturbance Footprint of 23.4ha, presented in Section 3.1.2 as well as elsewhere in the Draft PD, is a substantial underestimate.

This is because the figure purportedly includes “all areas of permanent and temporary vegetation clearance (plus a 5m buffer)” (page 15). However, reference is made in other parts of the Draft PD (as well as other documents) to additional planned habitat clearance that does not appear to be reflected in the figure of 23.4ha, namely:

- In Section 6.4, on page 97, you commit to “creating sterile (no fuel) and low fuel areas around launch pad sites (minimum 60m Asset Protection Zone), based on modelled launch trajectory, where an area of green grass will be managed, minimising the chance of ignition”. This additional clearance/modification to a distance of at least 60m around the two planned launch pads does not appear to be included in your Disturbance Footprint of 23.4ha. The NCSSA estimates that this additional clearance would add some extra 14ha of habitat clearance to the Disturbance Footprint.
- On page 99, you state that one of your planned bushfire mitigation measures is “incorporation of firebreaks along fences to protect and mitigate threats to MNES” (matters of national environmental significance), however, this additional clearance does not appear to be included anywhere in your Disturbance Footprint calculation of 23.4ha.

The above points mean that your calculations of direct impact on threatened species from your proposal as presented in the Draft PD, and associated “offsetting” requirements, are substantially underestimated.

3. *Inadequate adherence to the Mitigation Hierarchy*

⁴ <https://www.environment.gov.au/biodiversity/threatened/species/pubs/81025-conservation-advice-21122023.pdf>

You have not adequately adhered to the Mitigation Hierarchy⁵ of avoid environmental impact, reduce/minimise impact, mitigate impact and offset residual impact. Particularly, the first critical step is to avoid negative environmental impacts, which you could have done by selecting a less environmentally sensitive site for your proposed launch complex.

Avoiding impact through more appropriate site selection

Section 2.2 of the Draft PD purports to describe a site selection process using multi-criteria analysis. This description is apparently inconsistent with responses you gave in interview on ‘The Self Made Theory’, published online in 2018. In this interview, you describe the using Google Maps, as well as having conversations with Regional Development Australia staff and landowners, as your primary sources of information for selecting a site for your proposed facility. You state that “through a whole bunch of discussions we then found the right place”⁶ and make no reference to multi-criteria analysis or to environmental considerations.

Even if a multi-criteria analysis was undertaken, the three final candidate sites were all areas set aside for nature conservation. Your site analysis process was therefore fundamentally flawed as it did not adequately prioritise environmental considerations, particularly impact on nature, including on threatened species.

Reduce

Following your flawed site selection process and the failed opportunity to avoid the damage you are proposing by avoiding a nature conservation area, you state repeatedly throughout the Draft PD that impact of your proposal has been reduced because “further consideration in the design process has reduced the size of the Disturbance Footprint from 70.58ha to 23.4ha” (for example, on page 111).

The NCCSA queries this claim since information on the ‘original’ design requiring 70.58ha of clearance is not presented. It may relate to the later stages of planned development of your Complex, i.e. stages that are planned for after this approval is received, if it is granted. A much bigger planned Complex appears in the ‘Guidelines for the preparation of an Environmental Impact Statement: Whalers Way Orbital Launch Complex’ dated 23 July 2020 (Figure 1).

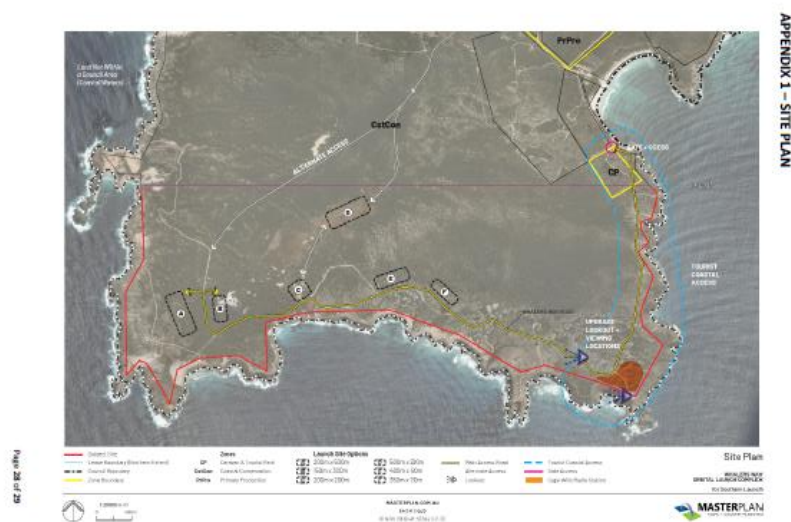


Figure 1: Plans for the Whalers Way Orbital Launch Complex as per Guidelines for the preparation of an Environmental Impact Statement: Whalers Way Orbital Launch Complex’ dated 23 July 2020

⁵ <https://www.dcceew.gov.au/environment/epbc/approvals/offsets/guidance/mitigation-hierarchy>

⁶ [Lloyd Damp from "Southern Launch" – The Self Made Theory – Podcast – Podtail](#), quoted from approx. 14 minute mark

Mitigate

The NCCSA does not believe your plans to ‘mitigate’ the impact of your proposal on threatened species will correspond to any lesser impact in practice. For example, the actions listed on page 125 of the Draft PD will do little to nothing to lessen the impact on Southern Emu-wren at Whalers Way: surveying habitat before clearing it will not lessen the impact of clearing it, implementing a monitoring program does not lessen impact and avoiding construction within the breeding season where practicable (emphasis added) is not a solid commitment to avoiding the breeding season.

Offset

As per section 6 of these comments, your plans to “offset” the habitat destruction you are proposing (euphemistically referred to as ‘residual impact’) are not sufficiently progressed or transparently communicated to allow for a third party to judge, however, from the scant information provided, do not appear to meet the requirements of the EPBC Act.

4. Impacts on threatened species from noise underestimated

The NCCSA disagrees with your analysis of the likely impact of launch noise on the endangered Southern Emu-wren and Mallee Whipbird and believes it has been underestimated.

The Draft PD erroneously focuses on the risk of permanent or temporary hearing loss to these endangered birds from rocket launching noise. This approach fails to address the most likely cause of ongoing disturbance and therefore decline for these endangered birds should your proposal be approved, which is persistent disturbance from launch noise, as well as increased human presence associated with your operations, that will startle and disturb birds repeatedly.

This impact is somewhat dismissively addressed in Appendix H for the Southern Emu-wren and Appendix I for the Mallee Whipbird in such statements as “Indirect impacts to Southern Emu-wren based on updated noise modelling by Resonate (2022a) are expected to be limited to behavioural impacts to Southern Emu-wren” (page 23 of Appendix H).

Behavioural responses are of critical importance for these endangered birds, since, as Appendix H states, noise could cause displacement from preferred habitats, which in turn could affect feeding, growth, predation, survival, and reproductive success. In other words, the impact of noise on these birds’ natural behaviour will be negative and will lead to decline and is therefore unacceptable.

The NCCSA notes that the predicted airborne noise contours presented in the Draft PD suggest significant sound impacts from rocket launching over large distances (Figure 2).

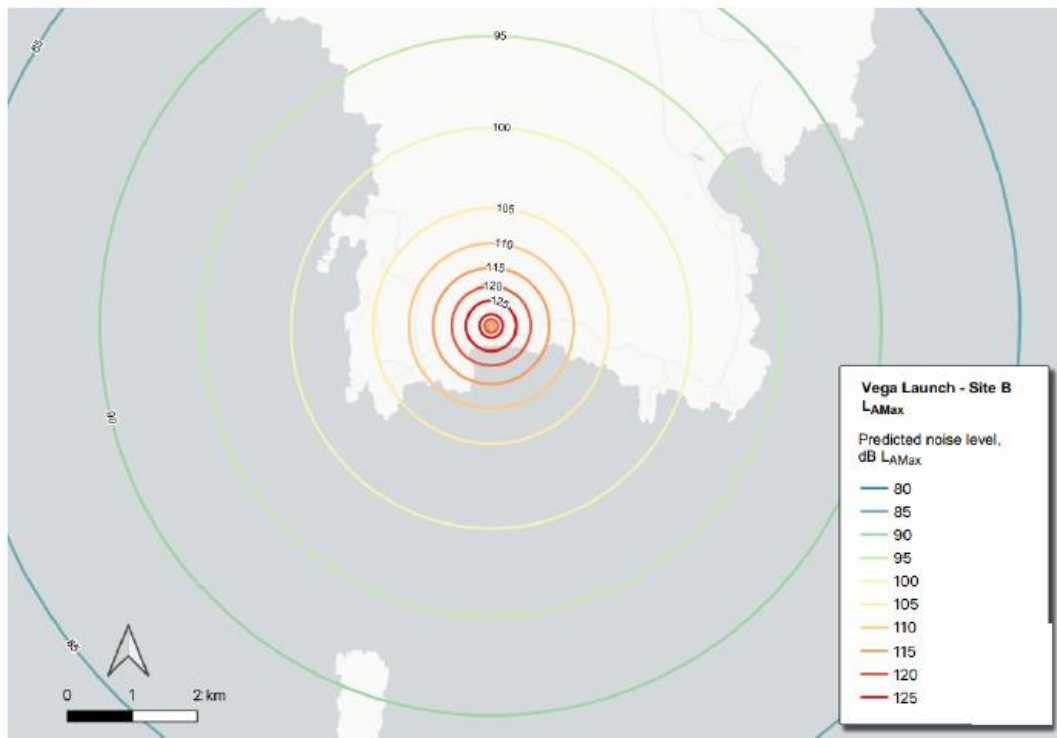


Figure 6-1: Predicted airborne noise level dBL_{Amax}

Figure 2: Taken from page 81 of the Draft PD, the noise modelling predicts loud noise disturbance over significant distances from launches, should they be permitted from Whalers Way. Note that this modelling is for Site B, which will host smaller rockets than the planned Site A.

The NCSSA notes that the calculations presented in the Draft PD are something of a “best case scenario” since they relate only to Site B, whereas larger rockets are planned for Site A, which is the launch pad closer to the highest number of Southern Emu-wren records. The analysis of likely noise impacts presented in Appendix E, using the Unweighted Sound Exposure Level (L_E) which was purportedly included to support wildlife assessments, suggests a much greater impact over many more kilometres for launches from the planned Site A, with sound of over 120 decibels extending virtually across the whole of Whalers Way during a launch event (Figure 3).

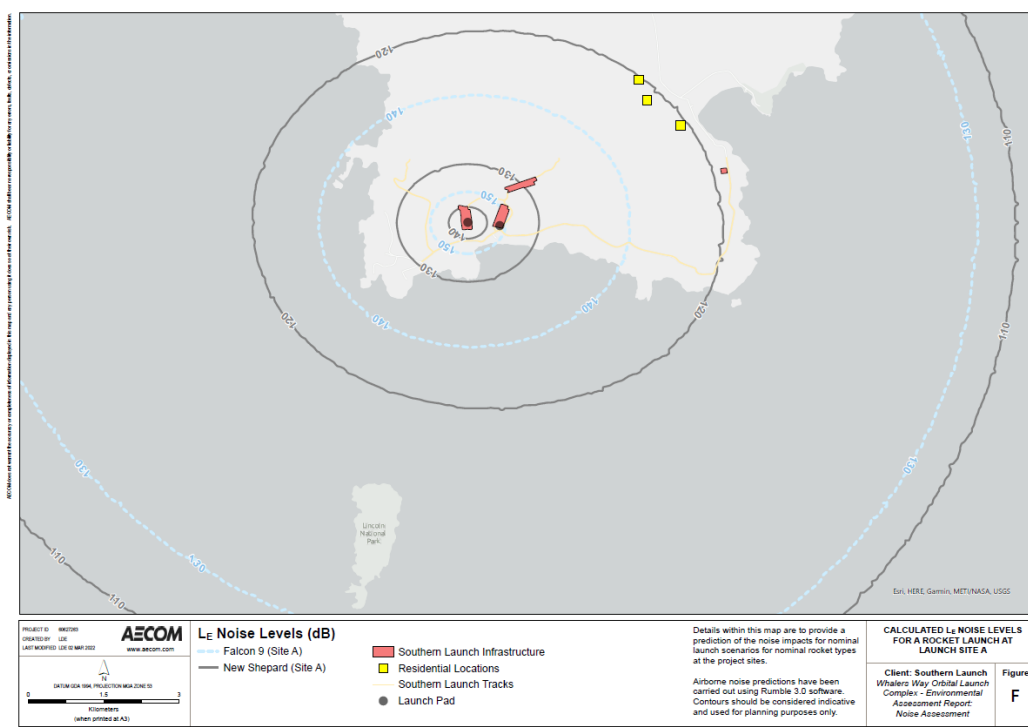


Figure 3: Taken from Appendix E, noise modelling using the Unweighted Sound Exposure Level (L_e) which was included to support wildlife assessments predicts significant exposure of over 120 dB for most of the Whalers Way site.

The NCSSA therefore does not agree with your statement that “taking into account the infrequency and short duration noise emission, the overall risk of significant or long-term adverse behavioural impacts is considered to be low”, on page 24 of Appendix K, as there is absolutely no evidence to support this assertion.

The reality is that, as stated in Appendix H, ‘The indirect impacts of the Whalers Way Orbital Launch Complex on Southern Emu-wren are uncertain and are difficult to quantify, for example, the potential impact of noise on Southern Emu-wren behaviour’ (page 28 of Appendix H).

The NCSSA acknowledges whilst the precise degree of impact of launch noise on these endangered birds is unknown, it will be negative and it will extend over considerable distances, well beyond the direct Disturbance Footprint. Therefore, a much larger area of habitat will be negatively impacted by launch noise, as well as disturbance from increased human activity associated with launch preparations, than you have accounted for in your assessment.

The NCSSA therefore disagrees with your assumption that fragmentation is unlikely to result from this development, as the populations of these birds at Whalers Way could become separated if noise and disturbance from launch preparations, as well as the launches themselves, regularly prevent the movement of birds.

The NCSSA draws to your attention to the ‘Calculated Habitat Area’ for the Southern Emu-wren (Eyre Peninsula) presented in Figure 7.3, which is a gross overestimate of where these birds have been or are likely to be found. The NCSSA does not know where your figure of 41,000ha of habitat on the Eyre Peninsula is sourced from, but a study recently undertaken by the NCSSA indicates a figure of approximately half that size (212km², or 21,200ha) of potential habitat based on survey work and analysis of satellite imagery.⁷

The Mitigation Measures for the Southern Emu-wren (page 125) will not reduce the impact of this development on this bird; for example, surveying its habitat before clearing it will not lessen the impact of that clearance.

⁷ <https://www.ncssa.asn.au/ep-southern-emu-wren/>

The statement that a PhD student is undertaking long-term monitoring of the Southern Emu-wren (page 132) is incorrect, given the time bound nature of such projects (2022-2025 for this project, according to Appendix H).

5. *Unacceptable bushfire risk*

The NCSSA remains deeply concerned about the risk of bushfire and its potential catastrophic impacts for wildlife at Whalers Way, as well as life and property.

The NCSSA does not believe that the actions outlined in Appendix J (referred to in the Draft PD as the “Operational Fire Risk Management Plan” but the document provided at Appendix J is entitled “Bushfire Emergency Plan”) adequately address the risk. Indeed, the primary purpose of the document at Appendix J is stated as:

‘... to ensure all staff, contractors and visitors are evacuated early from the site and are moved to another location away from the potential effects of bushfire’ (page 7 of Appendix J).

In other words, it focusses on reacting to a bushfire emergency, and does not contemplate the more fundamental and important question of whether a development such as this should be located in a high bushfire risk environment at all.

The NCSSA is particularly concerned about the potential impact of a rocket launch failure causing a fire. Described as a ‘ground burst’ event in Section 6.3.2 of the Draft PD, you contemplate a scenario where a launch vehicle motor fails, or the flight is terminated, shortly after lift-off, and the vehicle remains mostly whole as it falls to the ground (or water) and explodes on impact. The Draft PD states that:

‘The risk analysis modelling predicted that a ground burst would occur about every 4.7 million launches for a small rocket and every 3 million launches for mini or micro rockets’ (page 94)

The NCSSA does not have access to the calculations of this risk, but even if it is small, the consequences of such an event would be catastrophic and long lasting, particularly for the endangered wildlife at Whalers Way. The types of actions described for reducing this bushfire risk at Appendix J – such as all staff carrying a fire extinguisher in their vehicles - are manifestly inadequate relative to the risk of a 30m rocket bursting into flames at ground level or crashing into flammable mallee habitat shortly after lift-off.

Given the numerous failed ‘test’ launch attempts that have already been made at the site⁸, including the attempt of 16 September 2021 that resulted in a fire⁹, the NCSSA believes the risk of a catastrophic bushfire situation arising at this location are so high it is reason enough alone to warrant refusal of approval of your proposed action.

⁸ <https://www.southernlaunch.space/completed-missions>

⁹ <https://www.abc.net.au/news/2021-09-16/whalers-way-rocket-lift-off-delayed-by-launch-vehicle-fire/100468692>



Smoke from the fire resulting from the launch attempt on 16 September 2021 (left), and some of the resulting damage to surrounding vegetation (right)

6. 'Offset' plans inadequate

Section 8 of the Draft PD outlines your plans to "offset" the residual impact of your proposal, with some further detail provided at Appendix K.

The NCSSA notes that Appendix K has been redacted almost to the point of uselessness, such that a third party cannot form an opinion about the appropriateness of any of the five parcels of land currently being considered for "offsets". Also, as stated earlier, as your Disturbance Footprint is apparently incorrectly calculated, and your analysis of the likely impact of launch noise on birds flawed, your corresponding "offset" calculations are incorrect.

Whilst it is impossible to judge given the inadequate information provided as to the "offsetting" strategy for your Proposed Action, the NCSSA notes that the EPBC Act Offsets Policy requires that 'securing of existing unprotected habitat as an offset only provides a conservation gain if the habitat was under some level of threat of being destroyed or degraded' (emphasis added). There is no evidence provided that the parcels of land under consideration for 'protection' are under any level of threat. Indeed, Options 4 and 5 are within the existing Heritage Agreement at Whalers Way, protected under the *Native Vegetation Act 1991* (page 28 of Appendix K).

Indeed, the NCSSA is perplexed that the protection that will be sought for any "offset" areas is a Heritage Agreement under the South Australian *Native Vegetation Act 1991* (page 198 of the Draft PD), since this is the precise form of protection currently provided to Whalers Way and that would be overridden for your development to proceed.

The NCSSA does not believe that the two PhD studies referred to in 8.2.5 (page 198) should form part of the 'other compensatory measures' under the EPBC Act Offset Policy, since one of the studies relates to non-threatened raptor species and the one on Southern Emu-wren covers all subspecies in South Australia, so is unlikely to lead to any direct benefit for the subspecies on the Eyre Peninsula beyond basic survey information. It is also time-bound (2022-2025, according to Appendix H), so not long-term.

7. Precautionary principle

The Minister is required to apply the precautionary principle when making decisions pursuant to section 391 of the EPBC Act when there is a lack of full scientific certainty regarding the potential for serious or irreversible environmental damage. In particular, s 391(2) of the EPBC Act states:

"(2) The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage."

The NCSSA considers that the Proposed Action fulfills both conditions precedent to the application of the Precautionary Principle. First, it gives rise to a threat of serious and irreversible damage due to the destruction of at least 23.4ha of habitat for the Southern Emu-Wren (Eyre Peninsula) and the Mallee Whipbird, with the area of habitat subject to direct damage likely higher than this as well as degradation across most, if not all, remaining habitat at Whalers Way from launch noise.

Second, there is a lack of full scientific certainty regarding the precise degree of negative impacts of the Proposed Action on the Southern Emu-wren (Eyre Peninsula) and Mallee Whipbird. However as stated earlier, it will be significant, negative and it will extend over considerable distances, well beyond the direct Disturbance Footprint.

The type and level of precautionary measures that are appropriate depends on the degree of seriousness of and irreversibility of the threat and the degree of uncertainty. The more significant the seriousness and the more uncertain the threat, the greater the level of precaution required.

In this case, the NCSSA considers that precautionary measures cannot reduce the threat of serious or irreversible environmental impacts to the Southern Emu-Wren (Eyre Peninsula) and the Mallee Whipbird to acceptable levels. As such, the appropriate course of action is to prohibit the carrying out of the Proposed Action

Further, in June 2021, your company was granted permission by the South Australian State Commission Assessment Panel to construct a 'temporary' launching facility from which to launch three 'test' rockets¹⁰. The stated purpose of these 'tests' was to collect empirical data to inform your Environmental Impact Statement, particularly to validate modelling of the impact of noise and vibration on the threatened fauna at the site such as the Southern Emu-Wren (Eyre Peninsula), Mallee Whipbird and Australian Sea Lions.

Your own document entitled 'Proposed Ecological Test Campaign', dated April 2021, stated:

"Should the Statement (*sic*) Government apply the precautionary principle, a reliance on computational modelling to determine the impacts on local fauna without empirical validation may result in the proposed development being refused, or further empirical validation details being requested (which may ultimately require a test campaign) before a decision can be made and (*sic*) the proposal."

In other words, you have stated that the modelled likely impact of your proposed development would result in it being refused, if the precautionary principle was applied. You have since sought to undertake empirical validation; however, this has been unsuccessful as all your 'test' launch attempts have failed. Therefore, modelling must be relied on in decision-making in relation to your proposal.

Given the modelled likely impact of launch noise on threatened species at Whalers Way indicates significant negative impacts, the precautionary principle should be applied by the Minister, as required under the EPBC Act, and your proposal should be refused.

The NCSSA does not agree that the persistence of Southern Emu-wrens at Cathedral Rocks Wind Farm is relevant evidence of their ability to tolerate disturbance (page 125), since the type of disturbance your proposal would create is materially different.

'Test' Launch campaign flawed and inadequate

The NCSSA wishes to take this opportunity to state that the process for assessing impact of rocket launching on threatened species by 'test' rocket launches, as described in Section 4.2.5, was flawed and inadequate, and does not provide useful information about the likely long-term impact of repeated rocket launches from Whalers Way

¹⁰ https://www.saplanningcommission.sa.gov.au/scap/about_scap/commission_meetings - see Minutes from 16 June 2021. The original application documentation appears to have been removed from the Plan SA website, it should be available on request.

on endangered bird species. This is summarised on page 84 of Appendix C with regard to the failed launch of 16 September 2021, as follows:

‘Only one of the four engines was active during the launch attempt and the rocket did not leave the launch area. As such, noise data presented may not represent noise associated with an actual launch event. It is currently unclear if the full noise and vibration impact of a successful launch was achieved and thus experienced by the local bird community.

The behavioural response data of Southern Emu-wren (Eyre Peninsula) and Mallee Whipbird collected thus far is considered to be short-term behavioural response data. While no immediate impacts on avifauna as a result of the Test Launch 1 attempt was detected, the longer-term impacts of rockets launches on the avian community and focal species remains unknown.

No long-term behavioural data (i.e. occupancy, breeding and recruitment) was collected during the Pre and Post-Launch surveys of the Test Launch 1 attempt. The collection of such data would require a significant increase in survey time, intensity, and effort (likely multiple months over multiple years).

From the data collected from this first launch of a three test launch campaign definite conclusions can’t be drawn at this early stage to quantify the potential short and long-term noise impacts on the local avian community and to the two focal species of interest. Further data collection is required to be collected from the second and third test launch to quantify impacts.’

The NCSSA notes the subsequent second and third ‘tests’ in 2022 were also unsuccessful.

Therefore, the ‘test’ rocket launches that were apparently critical to understanding the impact of rocket noise on endangered species, as you argued when seeking approval, have not provided any useful information to quantify this impact, as the NCSSA anticipated at the time approval was given.

Relocation of Launch Site A inadequate

Your slight relocation of launch Site A, as briefly described in Sections 2.3.4 and 4.2.6 of the Draft PD, does not adequately or substantially ameliorate the impacts on endangered Southern Emu-wren and Mallee Whipbirds.

The NCSSA understands that you have moved Site A some seven hundred metres, but that two nestlings of Southern Emu-wren were found at the relocated Site A (page 122) – in other words, the planned location has been shifted from one patch of Southern Emu-wren habitat to another. Similarly, two Mallee Whipbirds were recorded at the relocated Site A (page 129). As noted in section 4 of these comments, the sound impact from rocket launching will extend of considerable distances, far further than the 700m distance of site relocation, so prime threatened species habitat will still be destroyed through direct habitat clearance and degraded through launch noise under your revised proposal.

8. Inconsistent with Conservation Advice and Recovery Plans

Unfortunately, the Southern Emu-wren (Eyre Peninsula) does not currently have a EPBC Act-endorsed Recovery Plan. The Conservation Advice for this bird recommends that a Recovery Plan be developed, and the NCSSA considers that the Conservation Advice should be considered as the subspecies’ Recovery Plan until such time as a Plan can be adopted or made under the EPBC Act.

As stated on page 163 of the Draft PD, this proposal is inconsistent with the primary actions in the Conservation Advice for the Southern Emu-wren (Eyre Peninsula), which is to avoid any further loss of habitat critical to the survival of this subspecies. As described in section 6 of these comments with regard to the planned “offsetting” actions, the contribution the Proposed Action would make to priority actions and addressing threats will not outweigh its impact, and it therefore should not be approved.

The Mallee Whipbird is subject to a Recovery Plan (under a previous taxonomic description as the *leucogaster* subspecies of the Western Whipbird), with threats recognised as being clearing, frequent and extensive fires, habitat fragmentation and isolation, declining habitat quality, introduced predators and climate change. Your proposal would introduce several of these recognised threats to Whalers Way by clearing and fragmenting habitat and reducing habitat quality. The Recovery Plan aims to “retain all existing subpopulations and reduce the rate of decline for these species” (it includes two other threatened birds, in addition to the Mallee Whipbird). Your action would be inconsistent with this Plan, and therefore should not be approved.

The Recovery Plan for the Australian Sea Lion identifies habitat degradation as a threat, and repeated disturbance from rocket launch noise would be a new form of degradation. Your proposal is therefore inconsistent with the Recovery Plan objective of “ensuring that anthropogenic activities do not hinder recovery in the near future or impact on the conservation status of the species in the future” and should not be approved.

The Recovery Plan for the Southern Right Whale sets the objective that ‘Anthropogenic threats are demonstrably minimised’. Since your proposal would introduce a new source of disturbance, particularly for Southern Right Whale mothers and calves in Thorny Passage Marine Park which abuts Whalers Way, it is inconsistent with the Recovery Plan and should not be approved.

Final note - Growth of facility in the future

If your proposed action is approved, you have indicated plans to expand the facility in future. As you would recall, additional launch pads appeared in the map provided in the ‘Guidelines for the preparation of an Environmental Impact Statement: Whalers Way Orbital Launch Complex’ dated 23 July 2020 (Figure 1 of these comments). Your proposed action is also consistently referred to as the ‘first stage’ of development in numerous earlier documents, including the Executive Summary that you provided to DCCEEW for the referral stage, for example:

“The Whalers Way Orbital Launch Complex is proposed to be developed in stages over time at an estimated cost of approximately \$43M. The current proposal represents the initial development of the complex and is the subject of this EIS. It comprises two separate rocket launching sites, a supporting infrastructure site, and a range control facility.”

The NCSSA notes that no reference to future stages of development is made in the Draft PD for this consultation process, and that the concept of the Launch Complex enduring for 30 years before being decommissioned has been introduced.

Your longer-term plans are therefore unclear, however, any future development of your proposed Launch Complex would involve further habitat loss and degradation, and increased fire risk. This would have even greater consequences for the natural environment at Whalers Way.

For the above reasons, the NCSSA considers the Minister should refuse approval of the Proposed Action.