

**From:** s47F  
**To:** [Assessments West](#)  
**Cc:** [EPBC Referrals](#); s47F  
**Subject:** FOR INFORMATION: DEPARTMENT OF AGRICULTURE RESPONSE - EPBC 2019/8420 - Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA [SEC=OFFICIAL] [DLM=For-Official-Use-Only]  
**Date:** Tuesday, 21 May 2019 11:05:05 AM  
**Attachments:** [Response to Dept of Envt.pdf](#)

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Good morning s22

Please find attached the department's response letter in relation to the invitation to comment on:

- **EPBC 2019/8420 - Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA**

Kind regards

s47F

**Senior Policy Officer (02) s47F |Natural Resources Section| Climate & Resilience Policy Branch|Rural Policy & Farm Performance Division|Department of Agriculture and Water Resources**

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**From:** EPBC Referrals [mailto:EPBC.Referrals@environment.gov.au]

**Sent:** Thursday, 11 April 2019 12:50 PM

**To:** Sustainable Agriculture Policy

**Cc:** EPBC Referrals

**Subject:** Invitation to comment on Referral - (EPBC 2019/8420) - Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA [SEC=OFFICIAL]

Good afternoon

We are sending you the attached link to a referral received for consideration under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for your comments, as it falls within your area of interest:

<http://epbcnotices.environment.gov.au/invitations/>

Formal notification of this referral is attached to this email.

Any comment should be sent by 30 April 2019 via:

by letter s22

Director

Major Projects West Assessments Section

Assessments & Post Approvals Branch

Department of the Environment and Energy

GPO Box 787

CANBERRA ACT 2601

by email [Assessments.west@environment.gov.au](mailto:Assessments.west@environment.gov.au)

Regards

Referrals Gateway

Governance and Business Support Section

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**Australian Government**  
**Department of Agriculture  
and Water Resources**

Mr s22  
Director  
Major Projects West Assessments Section  
Assessments & Post Approvals Branch  
Department of the Environment and Energy  
GPO Box 787  
CANBERRA ACT 2601

Dear s22

I refer to the letter of 11 April 2019 from Mr s22 (Director, Referrals Gateway, Department of the Environment and Energy) to the Hon. David Littleproud MP, Minister for Agriculture and Water Resources, inviting comment on referral EPBC 2019/8420 (Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA), under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Minister for Agriculture and Water Resources has asked me to reply on his behalf.

The department has no comments from a portfolio perspective on whether the proposed action may have significant impact(s) on any matters of national environmental significance protected under the EPBC Act.

Based on the referral, the proposed action by Energy Australia Pty Ltd, is to build and operate a pumped hydro energy storage project, located about 10 kilometres southwest of Port Augusta in South Australia. The proposed action will occur on terrestrial, coastal and marine sites. Key components of the terrestrial site include an upper and lower reservoir sized to store about 3.5 gigalitres of water each; a single-pass reverse osmosis facility to produce 'treated water' for the system; and a 275 kilovolt switchyard and overhead transmission line. The coastal and marine site will include a water supply support structure extending from the shore into the Spencer Gulf; submersible seawater pumps mounted below the water supply support structure; and a new underground powerline from the reverse osmosis facility to the seawater pumps. The proposed action is anticipated to produce about 225 megawatts of electricity during peak operation. The development footprint is about 1800 hectares (ha). The proposed action is anticipated to commence in January 2020 and end in March 2069.

According to the referral, the terrestrial project area is located on degraded Commonwealth land (totalling about 209 000 ha) currently used for defence activities. The coastal and marine project area is situated on State Crown land (408 of Deposited Plan (DP) 47644, 501 of DP 47645, 400 of DP 47644) and within State marine waters, currently used for commercial fishing and recreational fishing. We note neither site crosses Commonwealth waters.

We encourage the proponent to maintain open communication and consultation lines with stakeholders (e.g. Barngarla Traditional Owners, Wildcatch Fisheries SA, RecFish SA, community residents, Australian Fisheries Management Authority, environment groups).

We also recommend the proponent cleans water equipment and other structures in marine waters regularly to minimise the risk of marine pest translocation. Water assessments including marine and waste water discharge monitoring should also be carried out in accordance with management plans and made publicly accessible.

Thank you for the opportunity to comment on referral EPBC 2019/8420.

Yours sincerely

**s47F**

Emma Cully  
Assistant Secretary  
Climate & Resilience Policy Branch

21 May 2019

**From:** s47F  
**To:** s22; [Assessments West](#)  
**Cc:** s22; s47F  
**Subject:** Invitation to comment on EPBC referral 2019/8420 Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA [SEC=UNOFFICIAL]  
**Date:** Wednesday, 22 May 2019 4:44:41 PM  
**Attachments:** [22052019 s47F Letter to s22 Defence comment on EPBC referral 2019-8420 Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA.pdf](#)

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**UNOFFICIAL**

Dear s22

Please find attached Defence's comments on EPBC referral 2019/8420 Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA.

Please don't hesitate to call me if you need any further information.

Regards

s47F

[Redacted]  
Director Environment Planning Assessment and Compliance (DEPAC)  
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Estate and Infrastructure Group  
Department of Defence  
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**Australian Government**

**Department of Defence**  
Estate and Infrastructure Group

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DEPAC/OUT/2019/B155448793

s22

Director  
Major Projects West Assessments Section  
Assessments & Post Approvals Branch  
Department of the Environment and Energy  
GPO Box 787  
CANBERRA ACT 2601

Dear s22

**Invitation to comment on EPBC referral 2019/8420 Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA**

1. Thank you for your letter dated 11 April 2019 (EPBC Ref. 2019/8420) inviting the Department of Defence to comment on a referral received under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for a Pumped Hydro Energy Storage (PHES) facility on Defence's Cultana Training Area located approximately 10 km south-west of Port Augusta, South Australia.
2. Defence is concerned that the referral documentation does not provide sufficient information to understand whether the proposed action will have a significant impact on the environment of Commonwealth land or Defence's use of the Cultana training area. It is also important to note that these matters are not expected to be addressed through the planning and/or environmental approval processes to be conducted by the South Australian Government.
3. Given the nature, scale and location of the proposed action, Defence believes that detailed environmental assessment and approval under the EPBC Act is warranted. Further information about Defence's concerns is provided below.

Threatened Species

4. The proposed action involves the loss of approximately 345 hectares (Ha) of native vegetation. The impacts of this large loss of native vegetation on flora and fauna have not been sufficiently identified and addressed in the referral documentation, for example, the proposed action will affect approximately 337 Ha of chenopod shrubland which is a key habitat for the Western Grasswren (Gawler Ranges subspecies). This subspecies is listed as 'vulnerable' under the EPBC Act and is known to occur at the Cultana Training Area. Furthermore, the State-listed Slender-billed Thornbill also inhabits chenopod shrubland vegetation and it is unclear whether Slender-billed Thornbills in the project area qualify as the EPBC Act-listed Gulf of St Vincent subspecies.



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### Defence use of the training area

5. Defence is currently engaged with Energy Australia to assess a proposed land access application.
6. The referral does not contain sufficient detail on the impacts to the land or marine-based components of the PHES to enable Defence to fully understand the impacts of the proposed action on its training area or activities. It would appear that the proposed action will reduce and/or restrict the number and range of Defence activities on the training area.
7. The referral describes an indicative design and infrastructure footprint with large scale land clearing, the total area affected being 345 hectares. The development footprint is located in a part of the training area where Defence training is least constrained. However, it is possible that the PHES will reduce the utility of this area for Defence purposes. Defence will consider this as part of its broader strategic assessment of the Energy Australia proposal.
8. Construction of the upper and lower reservoirs and penstock will result in an area that excludes Defence activities and interrupt connectivity of the training area for cross-country manoeuvre. The referral states that the proponent will provide an access road to maintain the existing north-south main supply route. This will create a barrier of approximately 2.8km to cross-country manoeuvre which will reduce the space to the easement that crosses the penstock on the relocated main supply route, and the residual gap of approximately 970m between the eastern edge of the lower reservoir and Shacks Road. The consequences of this action will be to direct manoeuvre activities closer to the edge of the training area, increasing potential for activities coming into conflict with surrounding communities.
9. Construction of the reservoirs may also lead to a reduction in the recharge to groundwater locally below the reservoirs. The referral states that this will not be a significant impact but does not provide evidence to support the statement.
10. The proposed siting of the two reservoirs is within the live-fire training area which presents safety and capability risks.
11. The referral describes underground pipeline through the eastern edge of the lower reservoir and Shacks Road. Defence requires clarification that cross-country manoeuvre by heavy load military vehicles will not be limited by underground pipeline.
12. The approval of this action would facilitate/necessitate a new 275 kV switchyard and overhead transmission line to be constructed. The location of the transmission line or consideration of facilitated impacts of this aspect are not addressed in the referral.
13. In addition to the permanent footprint from the proposed action, Defence notes three areas for excavation of material 'potential borrow pits' which would also be removed from the training area available for Defence use. It is understood that material generated by borrow pits and/or excavation within the escarpment feature are likely to limit Defence use of the training area and the escarpment area (either through extraction or rehabilitation).
14. Noise and air quality impacts to the environment during construction have been noted to be a temporary concern during construction. The ongoing effects of noise and vibration during pumping and generating operations etc. have not been discussed.

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15. The referral makes reference to future intentions of Energy Australia to refurbish the facility and update equipment. Defence is concerned that future expansion and/or intensification of the facility may result in increased degradation of the training area and opportunities for Defence training opportunities.

Indigenous Heritage

16. Cultural heritage surveys undertaken by the proponent with the Native Title Holders (Barnarla Determination Aboriginal Corporation) have identified Aboriginal heritage site values, including a number of archaeological objects and places, ranging from isolated single artefacts to medium sized artefact scatters. We note that there is no reference to any consultation with the other three Indigenous groups with interests on Cultana. A number of cultural heritage complexes are also present, some associated with the Seven Sisters dreaming story. Defence works cooperatively with the Barnarla people under an Indigenous Land Use Agreement for the Cultana Training Area. Further consultation with all Indigenous groups and Defence is necessary to ensure Indigenous interests are managed appropriately.

Impacts on landscape and soils

17. It should be noted that the soils of the Cultana Training Area are fragile and susceptible to erosion. This will require extensive risk mitigation measures to be implemented during the construction and operational phases of the PHES.

Impacts to marine environment

18. Potential impact to the broader marine environment have not been adequately addressed in the referral document. Further information is needed regarding the effects of construction noise on shorebirds and marine animals that occur in proximity to construction activities. There is potential for entrainment of turtles and other marine life without suitable mitigation measures on inlet points. An assessment of the likely impacts on marine water quality from the discharge of wastewater (concentrated brine) is also needed.

19. Defence will remain closely engaged with Energy Australia to ensure risks to training and capability are fully understood as the land access application is assessed and more specific information emerges.

20. Thank you for the opportunity to comment on the proposed action. If you have any questions about this submission, please contact me or on s47F or s47F on s47F or email s47F@defence.gov.au.

Yours sincerely

s47F

Director Defence Environmental Planning  
Assessments and Compliance

22 May 2019

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s22

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**From:** s47F (DEW) s47F @sa.gov.au>  
**Sent:** Monday, 29 April 2019 11:19 AM  
**To:** Assessments West  
**Subject:** EPBC 2019/8420 - Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA  
[DLM=For-Official-Use-Only]  
**Attachments:** DEW response EPBC 2019-8420 Cultana Pumped Hydro Energy.pdf

**For Official Use Only**

Hello s22 ,

Please find attached the DEW response on behalf of the SA Government.  
Thank you for the opportunity to comment.

Regards,

s47F  
Coordinator Assessments

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Department for Environment and Water  
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Government of South Australia

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29/4/2019

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s22

Director

Major Projects West Assessments Section  
Assessments & Post Approvals Branch  
Department of the Environment and Energy  
GPO Box 787  
CANBERRA ACT 2601

Dear s22

**Re: EPBC 2019/8420 - Cultana Pumped Hydro Energy Scheme, near Port Augusta, SA**

I write on behalf of the South Australian Government regarding your invitation to comment on the above referral received by the Australian Government Department of the Environment and Energy under the *Environment Protection and Biodiversity Conservation Act 1999*.

Thank you for the opportunity to comment on the above referral. The Department for Environment and Water (DEW) has consulted with other relevant SA Government agencies, as per State protocol.

Based on the information provided by the Proponent DEW concurs with the Proponents assessment regarding MNES and does not consider that the proposed action is likely to have a significant impact on any of the matters protected under the EPBC Act.

For further information please contact me on (08) s47F or e-mail: s47F@sa.gov.au

Yours Sincerely

s47F

COORDINATOR ASSESSMENTS