



Mr Joe Fittell
Team Leader- Planning
DPHI Planning
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By email: joe.fittell@planning.nsw.gov.au

Dear Mr Fittell,

Subject: Snowy 2.0 – Main Works Modification 3 (SSI-9687-Mod-3)

I refer to the request for advice from the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment, and Water (DCCEEW) regarding Modification 3 (MOD 3) for the Snowy 2.0 project.

EMM has stated that all works will be undertaken entirely within the approved construction envelope for Snowy 2.0 Main Works, without requiring an increase in the approved clearance limits. The modification states it is not expected to increase the impact on biodiversity values beyond the approved impacts. However, BCS has concerns regarding the newly identified 'work areas,' around Marica West, and their potential impact on the Smoky Mouse (*Pseudomys fumeus*) and the Eastern Pygmy Possum (*Cercartetus nanus*).

In summary, our key issues are:

1. **Updated Species Polygon:** An updated species polygon needs to be provided to include 'work area 1' to ensure that this area is appropriately managed and protected.
2. **Updated Biodiversity Management Plan (BMP):** The BMP needs to be revised to incorporate all relevant works associated with the impacts of MOD 3. Mitigation measures should be clearly outlined to reduce the impact on the Smoky Mouse and Eastern Pygmy Possum.
3. **Updated Rehabilitation Plan and Monitoring Programme:** These plans must include the further impacts associated with the additional work areas. Emphasis should be placed on ensuring that rehabilitation and monitoring are effective and adaptive to the specific conditions of the project area.
4. **Review of Auditing (Section 6.4 of BMP):** BCS requests access to the auditing and annual monitoring reports to evaluate the project's performance against the objectives outlined in the BMP. This will ensure that effective adaptive management is being implemented as the project progresses.
5. **Mitigation Measures for Smoky Mouse at Marica:** BCS's review of the last monitoring report (March 2023) noted the absence in the presence of Smoky Mouse at all monitoring locations, which may trigger an action response. We seek clarification on how impacts on

this species are currently being mitigated and monitored. Concerns regarding the increased vehicle movements at Marica have raised questions about the implementation of mitigation strategies to prevent vehicle strikes on the Smoky Mouse. Given that an action/response was triggered in the last monitoring report, it is pertinent to inquire about the specific actions taken to address this issue.

6. **Helipad Location:** The helicopter pad for the Marica camp is to be relocated to a different previously disturbed area to allow for additional accommodation blocks. The location of the updated helipad location has not been provided. BCS seeks clarification of the location to ensure it will occur in low condition vegetation or a previously cleared area to demonstrate the avoid, minimise framework.
7. **Groundwater Drawdown Concerns:** Groundwater monitoring has been a significant issue over the course of the project due to the lack of established baseline monitoring and reporting. This deficiency was highlighted during a review of Able Ecology's Biodiversity Monitoring Programme (BMP) and the subsequent lack of monitoring results provided to BCS. It is necessary to establish baseline groundwater levels to assess compliance with performance criteria, particularly regarding the impact on groundwater-dependent ecosystems (GDEs) such as alpine bogs and fens. Monitoring of shallow groundwater levels is essential to gauge ecosystem function within these GDE patches, and any adverse changes must be reported. To ensure no detrimental effects on these ecosystems, the Groundwater Monitoring Program must clearly demonstrate stability in shallow groundwater regimes. Any confirmed impacts necessitate immediate notification to agency stakeholders.

Additional information is provided in **Attachment A**.

If you have any questions regarding this advice, please do not hesitate to contact Allison Treweek, Senior Team Leader, via rog.southeast@environment.nsw.gov.au or (02) 6229 7082.

Yours sincerely,



Michael Saxon
Director, South East Region
Biodiversity, Conservation and Science Group

16 September 2024

Attachment A- BCS Assessment Summary for Snowy 2.0 MOD 3

ATTACHMENT A: BCS Assessment Summary for Snowy 2.0 MOD 3

In preparing this advice BCS has reviewed the following documents:

- Snowy 2.0 MOD 3 Modification Report (dated July 2024)
- Appendix A - Need for the Modification (dated July 2024)
- Appendix B - Water and Spoil Management (dated July 2024)
- Appendix C - Groundwater Impact Assessment (dated July 2024)
- Appendix D - Traffic Impact Assessment (dated July 2024)
- Appendix E - Biodiversity Consistency Assessment (dated 05 August 2024)

Key Assessment Issues

Issue <i>Potential impacts on Smoky Mouse and Eastern Pygmy Possum due to newly identified 'work areas' around Marica West.</i>	Description of issue: The introduction of new work areas may increase the risk of environmental impacts for these species. Recommended action: Provide an updated species polygon, revise the BMP and Rehabilitation Plan to include these areas, and ensure adaptive management through monitoring and reporting. An increase in feral cat and red fox control measures may be required to prevent predation around Marica in accordance with the Weed, Pest and Pathogen Management Plan (Appendix F of the BMP).
Extent and Timing	Pre-determination and Pre-construction and Ongoing
Issue <i>Potential impacts on groundwater-dependent ecosystems (GDEs) such as alpine bogs and fens due to deficiency of monitoring.</i>	Description of issue: The lack of baseline groundwater monitoring has raised concerns about potential impacts on groundwater-dependent ecosystems (GDEs) such as alpine bogs and fens. Monitoring is critical to assess compliance with performance criteria and ensure ecosystem stability. Recommended action: Establish baseline groundwater levels immediately. Implement a comprehensive Groundwater Monitoring Program that includes frequent reporting and focuses on the stability of shallow groundwater levels within GDEs. Any detected impacts on GDEs must be reported immediately to relevant agency stakeholders for timely intervention.
Extent and Timing	Immediate implementation of monitoring with ongoing reporting throughout the project lifecycle included within the BMP.