2021/2022 COMPLIANCE REPORT TAXIWAY BRAVO EXTENSION PROJECT

EPBC 2008/4170

31 August 2022





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2021/2022 COMPLIANCE REPORT

INFRASTRUCTURE UPGRADE AND CONSTRUCTION AT CANBERRA AIRPORT, ACT EPBC 2008/4170

1. Description of Activities

1.1 EPBC Number

EPBC 2008/4170

1.2 Project Name

Taxiway Bravo Extension Project, Canberra Airport

1.3 Approval holder and ACN

Managing Director, Canberra Airport Pty Ltd

ACN 080 361 548

1.4 The Approval Action

The approved action undertaken as part of this EPBC Approval is the Taxiway Bravo Extension Project. The project commenced on 4 June 2019 and reached practical completion on 5 August 2020; the construction of the northern extension having taken fourteen months to complete. Taxiway Bravo North was opened for business on Wednesday, 13 August 2020.

1.5 Location of the Project

Canberra Airport, ACT 2609

1.6 Person Accepting Responsibility for the Report

A signed declaration is provided at Section 7 of this Report.

1.7 Date of Preparation of the Report

The report is dated 31 August 2022.

2. Address of all Approval Conditions - EPBC 2008/4170

2.1 Compliance Table

A Compliance Table is provided at *Attachment* 1.

3. Summary of Outcomes for 2021/22

Section 4.3 Page 6	In September 2021, Alison Rowell, Biologist and Environmental Consultant, inspected the grassland areas around new Taxiway Bravo, including replanted verges.
Section 4.4 Page 6	In late July 2022, Alison Rowell, Biologist and Environmental Consultant, surveyed and remapped the grasslands surrounding Taxiway Bravo.
Section 4.5 Page 7	Canberra Airport NTG mapping has been updated using Alison Rowell's July 2022 Taxiway Bravo survey data.
Section 4.7 Page 8	Following the cancellation of GSM monitoring in 2020, planned monitoring for mid- November to mid-December 2021 (the usual GSM peak flying period) by Capital Ecology did not proceed as once again weather conditions did not favour the GSM season. GSM monitoring is therefore being planned for mid-November to mid- December 2022.
Section 4.8 Page 8	The Airport will continue to work with Alison Rowell over the next three/four years to undertake fieldwork to map and assess the condition of the NTG on airport. This will include sourcing NTG seed and forbs in order to rehabilitate the NTG in compliance with the conditions applying to EPBC 2008/4170.
Section 5.2 Page 10	The Airport will continue to work with Alison Rowell, Biologist and Environmental Consultant, as well as others to further develop the NTG experiments in the NTG areas identified on Airport.
Section 5.5 Page 10	Canberra Airport will implement a robust spot spraying program of the identified weed species within the NTG patches. The Gorse will be dug out to eliminate any prospect of it flowering in the spring.
Sectlon 6 Page 10	The revised February 2022 Taxiway Bravo Biodiversity Offset Strategy (EPBC 2008/4170) was submitted to DAWE and subsequently approved by a delegate of the Minister responsible for the <i>Environment Protection and Biodiversity Conservation Act 1999</i> on 11 March 2022.
Section 7 Page 11	Canberra Airport submitted with the 2020/2021 Annual Compliance Report a letter requesting the Minister to consider deferring the date of commencement of the action from 4 June 2019 to commence 4 June 2020.
,	In accordance with conditions 2A the outcome required for rehabilitation by condition 2.a.ii may now be achieved within 6 years of commencement of implementation (by 2025).

4. On-Airport Rehabilitation Measures Taken to Date

Condition 2.a.ii requires the rehabilitation of 17.1 hectares within the Canberra Airport Lease to meet the definition of Natural Temperate Grassland. This is Canberra Airport's preferred option in response to Condition 2 of the Taxiway Bravo approval EPBC 2008/4170).

The following measures have been implemented to date:

4.1 May 2020 - Re-seeding of the Taxiway Bravo Shoulders and Batters

In late May 2020, the contractor engaged to construct the Taxiway also undertook works to re-seed a total area of 52,285m2 along the Taxiway alignment. The following methodology was employed:

Topsoiling Methodology:

- Scraper cart and placement of topsoil;
- Grader followed grader to smooth out any high areas;
- Backhoe and workers with shovels undertook topsoil placement around pits and up against the asphalt as required;
- Work was done on a ten-minute recall as this allowed enough time for the grader to smooth out any non-compliant levels and evacuate the graded strip;
- This work was completed prior to grassing.

Grassing Methodology:

- Truck drove into Runway graded strip and a worker on foot walked around spraying out hydromulch with seed;
- Work was done on a ten-minute recall as this allowed enough time for the truck and worker to evacuate the graded strip.

The areas of work included:

West Bravo

- Grassed Shoulder 9746m²
- Batters 13284m²

East Bravo (North of Foxtrot)

- Grassed Shoulder 5437m²
- Batters 8914m²

East Bravo (South of Foxtrot)

- Grassed Shoulder 5711m²
- Batters 9193m²

As no adequate supplies of native grass seeds could be sourced for this re-seeding project, the Airport determined with the agreement of Alison Rowell, Biologist and Environmental Consultant, to procure an 80%/20% mix of Prosper Fescue and Couch respectively. The seed was spread on the surface of the topsoil taken from the Taxiway Bravo construction zone and then stabilised with a bituminous material to detract birds and to protect the seed from wind/jet blast.

4.2 January/February 2021 - Inspection of Re-seeded Area by Alison Rowell, Biologist and Environmental Consultant

Alison Rowell undertook an inspection of the re-seeded area around Taxiway Bravo. Following the inspection, Alison Rowell provided the following report via email dated 15 February 2021:

"You asked me to inspect the re-grassing around the Taxiway Bravo area to determine whether additional NTG had been created after grassing of the verges of Taxiway B. This may be because you have noticed the growth of native forbs (wildflowers) on some areas where exotic grasses have been sown, including in the swale east of the taxiway.

I attach my vegetation mapping of that area before Taxiway Bravo was constructed (NTG in green), a January 2020 image from actmapi showing the taxiway under construction, and a photo I took on 15 February 2021.

If you look at the south-eastern-most verge of the taxiway under construction you can see that an area of NTG has been altered/shaped. This area is shown in my 'Native forbs & exotic grass' photo, where you can see germination of exotic grasses in the sowing furrows and a number of native forbs in the spaces between the grasses.

This is similar to the effect we noted when the haul road around the Eastern Grass was left to recover, where the first species to appear on the bare and compacted soil were native forbs, probably resprouting from roots and germinating from seeds in the soil. In the Taxiway Bravo case, although the number of species and frequency of native forbs now present would allow the vegetation to be classed as NTG **if the surrounding grasses were native**, this altered grassland would not now meet the NTG criteria. This is because the first step in determining NTG is 'The percentage cover of native vascular plants (including annual and perennial species) in the patch is greater than the percentage cover of perennial exotic species'. This is not the case here because of the higher cover of 'perennial exotic species' i.e. the sown grasses.

2018/2019 Vegetation Mapping before Taxiway Bravo was constructed – A Rowell

ACTMapi Image showing Taxiway Bravo under construction – January 2020

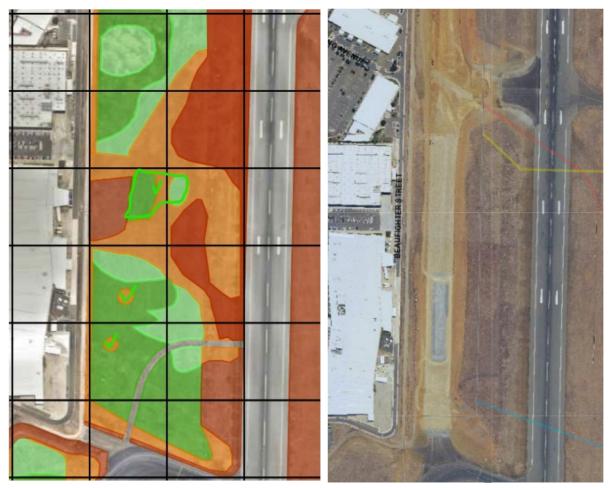


Image of Native Forbs and Exotic Grass – Taxiway Bravo SE Verge – 15 February 2021, A Rowell



4.3 September 2021 – Inspection of Grassland Areas Around New Taxiway Bravo

In September 2021, Alison Rowell, Biologist and Environmental Consultant, inspected the grassland areas around new Taxiway Bravo, including replanted verges. Due to the season (early spring) and recent mowing, many native forbs were not yet visible. The presence of annual exotic species also partially masked the cover of perennial species, so observations were made but a full survey was not undertaken at that time.

4.4 July 2022 - Resurvey of Grassland Remnants Surrounding New Taxiway Bravo

In late July 2022, Alison Rowell, Biologist and Environmental Consultant, surveyed and remapped the grasslands surrounding Taxiway Bravo.

Below is an extract from 'Section 2: Results' of Ms Rowell's report:

Ten patches of native-dominated grassland were identified, each including at least one area of about 400 square metres that reached the non-grass and indicator species composition criteria (for grasslands surveyed outside ideal sampling times) for the critically endangered NTG community, embedded in native dominated grassland (Table 1, Photographs 1 and 2).

Some of the NTG patches identified were smaller than the minimum patch size specified for the community (1000 square metres), but have been included as they were mostly separated by less than 75 metres from other NTG patches by grassland which contained native species (see 'additional considerations' above). The total area of NTG mapped was 26,355 square metres (2.6 hectares) (Figure 1). Details of the patches are in Table 1, and a list of the 27 native species observed is in Table 2.

Some NTG patches (East/D and East/F) had not previously been mapped, but represented easterly extensions of known patches within the construction footprint. These new patches met the minimum criteria for the threatened community in 2022, but were of a lower quality than most of the other NTG patches (Table 1).

Some areas originally mapped as NTG were inside the silt fence during construction, and were still affected/degraded by construction activities when inspected in 2021. Some parts of these areas that were not covered by fill or oversown with exotic species after construction had recovered by 2022 and again met the criteria for NTG (e.g. western part of East/E, southern part of East/G).

East/west of Twy B	Patch number (from north)	Area (sq.metres)	Number of non- grass/sedge native species in plot	Number of Indicator species in plot	Minimum number of native species recorded in whole patch
West	А	3495	9	5	13
	В	855	7	4	13
East	А	650	8	4	18
	В	725	5	3	12
	С	680	7	4	14
	D	4000	5	2	11
	E	3115	9	5	17
	F	510	4	3	8
	G	12325	10	5	19
		Total: 26355			

Table 1. Natural Temperate Grassland patches around Taxiway B

A copy of Ms Rowell's report entitled *"Resurvey of grassland remnants surrounding new Taxiway B, 2021-22"* is provided at **Attachment 2.**

4.5 Outcome of July 2022 Taxiway Bravo Resurvey and Mapping

Canberra Airport NTG mapping has been updated using Alison Rowell's July 2022 Taxiway Bravo survey data. It indicates that since the 2018/2019 whole of airfield NTG mapping, which identified an increase of 6 hectares of new NTG, there has been 2.39 hectares of new NTG along the Taxiway Bravo alignment. This equates to a total of 8.39 hectares of new NTG since 2018, derived from various experiments undertaken over time.

August 2022 mapping of Alison Rowell's survey data is provided at Attachment 3.

4.6 Grassland Earless Dragon (GED) Tympanocryptis lineata Monitoring at Canberra Airport

The Natural Temperate Grassland on Canberra Airport is habitat for vulnerable and endangered fauna, including the GED and GSM. In that regard, monitoring for these threatened fauna species is conducted every two years.

Alison Rowell, Biologist and Environmental Consultant, last undertook GED monitoring at the northern end of Canberra Airport in late summer/autumn 2019 and 2021, and no GED were found during monitoring at the permanent grids in this area. However, one GED was found during the preconstruction survey for Taxiway Bravo in May 2019. A copy of the 2019 and 2021 reports were provided with Compliance Report 2 for 2020/2021.

The next GED monitoring exercise is due to be conducted in 2023.

4.7 Golden Sun Moth

Following the cancellation of GSM monitoring in 2020, planned monitoring for mid-November to mid-December 2021 (the usual GSM peak flying period) by Capital Ecology did not proceed as once again weather conditions did not favour the GSM season. Counts are undertaken in suitable weather conditions (warm to hot, sunny and relatively calm), and in the middle of the day, when maximum numbers of male moths are likely to be flying. GSM monitoring is therefore being planned for mid-November to mid-December 2022.

On 4 January 2022, the following statement via email was received from Robert Speirs, Director/Principal Ecologist of Capital Ecology:

"I'm fairly sure that we've now seen the last of the possible Golden Sun Moth (GSM) flying season, and in short, it was most uneventful. On 31/12/2021 and 01/01/2022 we did our last surveys on a couple of our development assessment sites, the hope being that the GSM might put on an extraordinarily late but substantial show right at the tail end. This didn't really happen, there were a few flying at our reference sites, but nothing real convincing.

As you can read in the <u>ACT region GSM survey group spreadsheet</u>, the flying season didn't really properly commence at all this season. Frustratingly, we spent a huge amount of time checking reference sites but these checks never really provided a strong indication of commencement. As a result, the GSM survey programs for each of our sites (and I expect for everyone else in the region) have been impacted and the limitations of the surveys will need to be properly acknowledged and considered in any assessment of presence/absence and distribution. Understandably, this will have some significant consequences for our development assessment projects which may require a follow-up survey program next season.

In light of the above, and as per your email below and our phone conversation in December, I confirm that we closely monitored the situation across the potential flying season and unfortunately there was no point at which our reference site checks indicated that undertaking the Canberra Airport monitoring would be worthwhile. As such, we did not undertake any monitoring this season."

On 7 December 2021, Conservation Advice for *Synemon plana* (Golden Sun Moth) assessed by the Threatened Species Scientific Committee of the Commonwealth Department of Agriculture, Water and the Environment recommended:

- (i) that the list referred to in section 178 of the EPBC Act be amended by transferring *Synemon plana* from the Critically Endangered category to the Vulnerable category;
- (ii) that there not be a recovery plan for this species.

4.8 Ongoing Fieldwork and Mapping/Assessment

The Airport will continue to work with Alison Rowell over the next three/four years to undertake fieldwork to map and assess the condition of the NTG on airport. This will include sourcing NTG seed and forbs in order to rehabilitate the NTG in compliance with the conditions applying to EPBC 2008/4170.

The projected program of work will include, but not be limited to, the production of mapping of the status of NTG to compare with Taxiway Bravo pre-construction and further site assessments have been scheduled for approximately November 2022 and January, June and November 2023.

5. Biodiversity Offset Strategy – Year 2 Tasks and Targets

Task	Description	Target
Seed Collection	Collect, dry and store seed from Master Plan offset property and on-Airport harvesting.	Year 1-4
Further Develop Grassland Experiment	 Conduct additional experiments to determine: Weed control application rates Seed application rates Pre- and Post-seeding watering rates Broad acre seeding methods Density and timing of spreading hay bearing seed Translocation methods Propagating forbs 	Year 1-2
Broad acre seeding	Using the outcomes of Grassland experiments, broad acre seeding of areas of vegetation within the Airport lease.	Year 2-4
Replanting forbs	g forbs Replanting propagated forbs and forbs located within areas affected by the development in areas of vegetation.	
Maintain revegetation	aintain revegetation Maintain revegetation areas through watering, weed control and additional planting/seeding if required.	

The Strategy identifies the following Tasks and Targets for Year 2:

5.1 Seed Collection

Canberra Airport will continue to consult Alison Rowell, Biologist and Environmental Consultant, and other relevant parties to source seed and/or forbs to undertake further rehabilitation works.

5.2 Further Develop Grassland Experiments

The Airport will continue to work with Alison Rowell, Biologist and Environmental Consultant, as well as others to further develop the NTG experiments in the NTG areas identified on Airport. Over the years, these experiments have included:

- A Greening Australia experiment in the Eastern Grass near Scherger Drive;
- A weeding program and spreading of seed by our experiment of broadcasting NTG and mowing thatch between taxiway Alpha, the Runway and near the Instrument Landing System (ILS);
- The establishment of a translocation site north of Taxiway Foxtrot and west of Taxiway Alpha;
- Improving drainage to the north of Runway 17/35.

5.3 Broad Acre Seeding

Canberra Airport will continue to consult Alison Rowell, Biologist and Environmental Consultant, and other relevant parties to source seed and/or forbs to undertake further rehabilitation works.

5.4 Replanting Forbs

Canberra Airport will continue to consult Alison Rowell, Biologist and Environmental Consultant, and other relevant parties to source seed and/or forbs to undertake further rehabilitation works.

5.5 Maintain Revegetation

As noted in Section 2: Results of Ms Rowell's report:

"With the good conditions in the last two years several weed species have extended their cover on the airport, including in some of the NTG patches. Those of most concern are Chilean Needlegrass, Serrated Tussock and a few occurrences of African Lovegrass (a recent but serious invasive weed in north Canberra). Careful spot spraying of these weeds within the NTG patches is advisable. Two patches of Gorse/Furze were also observed, usually a tall shrub but still able to flower and seed after mowing."

Canberra Airport will implement a robust spot spraying program of the identified weed species within the NTG patches. The Gorse will be dug out to eliminate any prospect of it flowering in the spring.

6. Revised Biodiversity Offset Strategy

Canberra Airport submitted a revised Biodiversity Offset Strategy with the 2020/2021 Taxiway Bravo Annual Compliance Report for the Minister's approval on 31 August 2021. The Department of Agriculture, Water and the Environment (DAWE) acknowledged receipt of the Report via email from Michaela Ballard, Compliance Monitoring Team, DAWE, dated 1 September 2021 and also stated:

"I have passed your request regarding the rehabilitation timeframes and the revised Biodiversity Offset Strategy to the Post Approval Section for their review."

Canberra Airport was contacted by a DAWE Assessment Officer on 31 January 2022 who advised that "I will be handling the revision of the BOS and the request to extend the rehabilitation timeframes. I will be in touch following BOS review and will let you know as soon as possible if anything further is required". On 2 February 2022, the DAWE Assessment Officer advised "... after reviewing these materials I have identified a number of items that require attention". On 10 February 2022, Canberra Airport responded to the DAWE Assessment Officer providing all relevant information and documents that had been requested to finalise the Biodiversity Offset Strategy.

The revised February 2022 Taxiway Bravo Biodiversity Offset Strategy (EPBC 2008/4170) was submitted to DAWE and subsequently approved by a delegate of the Minister responsible for the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), on 11 March 2022, as required in Condition 2 of the EPBC 2008/4170 approval for the construction of Taxiway Bravo and associated works.

The approval letter dated 11 March 2022 stated:

Regarding the revised Biodiversity Offset Strategy (BOS):

Officers of the Department have advised me on the revised BOS and on the requirements of the EPBC Act conditions of approval for the project. On this basis, and as a delegate of the Minister for the Environment, I have decided to approve the *Taxiway Bravo Biodiversity Offset Strategy* revised February 2022, in accordance with condition 3A as meeting the requirements of condition 2 of the approval. The approved plan must now be implemented.

A copy of the approval letter is provided at **Attachment 4**.

A copy of the approved March 2022 BOS is provided at *Attachment 5*.

7. Request to Minister to Extend the Timeframe for Rehabilitation

Canberra Airport also submitted with the 2020/2021 Annual Compliance Report a letter requesting the Minister to consider deferring the date of commencement of the action from 4 June 2019 to commence 4 June 2020. The request was made on the basis that prevailing conditions for rehabilitation had been unfavourable due to drought.

The approval letter dated 11 March 2022 (Attachment 5) stated:

Regarding your request to extend the timeframe for rehabilitation to 2025:

I have considered the justification and information provided in your letter as well as that available from the Australian Bureau of Meteorology. As the first year of rehabilitation activities (2019) is well documented as a year of drought for ACT, I, as a Delegate for the Minister for the Environment, have decided to deem the prevailing conditions throughout 2019 to have been unfavourable for rehabilitation activities. In accordance with conditions 2A the outcome required for rehabilitation by condition 2.a.ii may now be achieved within 6 years of commencement of implementation (by 2025).

A copy of the letter of request to the Minister is provided at *Attachment 6*.

8. Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed	1/ Milan.
Full name (please print)	Noel Edward McCann
Position (please print)	Director of Planning and Government Relations
Organisation (please print including ABN/ACN if applicable)	Canberra Airport Pty Ltd ACN 080 361 548
Date	31 August 2022

Summary of Attachments:

- Attachment 1 Compliance Table EPBC 4170
- Attachment 2 Canberra Airport Resurvey of grassland remnants surrounding new Taxiway B, 2021-22 – Alison Rowell
- Attachment 3 August 2022 Taxiway Bravo NTG Mapping
- Attachment 4 Approval Letter from Department of Agriculture, Water and the Environment for revised Feb 2022 Biodiversity Offset Strategy and extension of timeframe for rehabilitation to 2025
- Attachment 5 Approved March 2022 Biodiversity Offset Strategy
- Attachment 6 Canberra Airport letter of request to Minister to extend timeframe for rehabilitation