



Australia's National
Science Agency

GISERA | Gas Industry Social and Environmental Research Alliance

Progress report

Identifying drought refuges for terrestrial species in the
Cooper Basin



Progress against project milestones

Progress against milestones/tasks are approved by the GISERA Director, acting with authority in accordance with the [GISERA Alliance Agreement](#).

Progress against project milestones/tasks is indicated by two methods: [Traffic light reports](#) and descriptive [Project schedule reports](#).

1. Traffic light reports in the Project Schedule Table below show progress using a simple colour code:

- **Green:**

- Milestone fully met according to schedule.
- Project is expected to continue to deliver according to plan.
- Milestone payment is approved.

- **Amber:**

- Milestone largely met according to schedule.
- Project has experienced delays or difficulties that will be overcome by next milestone, enabling project to return to delivery according to plan by next milestone.
- Milestone payment is withheld.
- Milestone payment withheld for second of two successive amber lights; project review initiated and undertaken by GISERA Director.

- **Red:**

- Milestone not met according to schedule.
- Problems in meeting milestone are likely to impact subsequent project delivery, such that revisions to project timing, scope or budget must be considered.
- Milestone payment is withheld.
- Project review initiated by GISERA Director.

2. Progress Schedule Reports outline task objectives and outputs and describe, in the 'progress report' section, the means and extent to which progress towards tasks has been made.

Project schedule table

TASK NUMBER	TASK DESCRIPTION	SCHEDULED START	SCHEDULED FINISH	COMMENT
1	Identify focal species of plants and animals	2 Sept 2024	24 Dec 2024	Completed
2	Assess geospatial data on the focal species to identify important habitat during dry periods	2 Jan 2025	28 Mar 2025	
3	Undertake field surveys of potential drought refuges of focal species.	31 Mar 2025	28 Feb 2026	
4	Measure habitat attributes and assess habitat condition of drought refuges	1 May 2025	30 Apr 2026	
5	Develop a methodology for assessment of habitat quality condition at drought refuges for each focal species	1 Mar 2026	30 Jun 2026	
6	Project reporting	2 Sept 2024	30 Jun 2026	
7	Communicate project objectives, progress and findings to stakeholders	2 Sept 2024	30 Jun 2026	

Project schedule report

TASK 1: Identify focal species of plants and animals

BACKGROUND

The GBA prioritised 12 threatened species (4 birds, 3 mammals, 5 plants) as the focus of causal pathway assessment. However, other endemic or near-endemic species to the Cooper Basin may be valued by the community. Of these 2 groups of species only a subset will be chosen to focus on in this project. The species chosen will be those expected to occupy drought refuges and that will occur within areas of high prospectivity for onshore gas development.

TASK OBJECTIVES

To examine existing reports and consult with interested stakeholders to develop a list of threatened and significant species in the Cooper Basin that occupy terrestrial environments and are likely to depend on drought refuges for continued survival and resilience.

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

A list of target focal species that will be the basis of the remaining tasks for the project.

There are no other specific deliverables for this task; however, the methods and outcomes will be discussed in the final report for the project.

PROGRESS REPORT

This task was completed on 11th December 2024. The final list of six species was developed from a candidate list of 31 animals and five plants.

TASK 2: Assess geospatial data on the focal species to identify important habitat during dry periods

BACKGROUND

A range of databases hold location records of the focal species that will be determined in task 1. Most of these data have not been systematically collected and none have been interrogated with the aim of obtaining the location of drought refuges. Most species in the study area occur widely during wet (boom) periods when primary productivity is high. In contrast, records during the long intervening dry periods are rarer. Database searches will be carried out to identify those sites that are only occupied during dry periods. This will be done by accessing historical rainfall data and determining the occurrence of dry periods. Records during wet periods will be filtered out of the search for each species. This will produce information of potential drought refuges of each of the focal species.

TASK OBJECTIVES

To obtain information on the geospatial locations that are potentially drought refuges of each of the target species

TASK OUTPUTS AND SPECIFIC DELIVERABLES:

A database that for each of the focal species has the locations of potential drought refuges within the study area. The results will be discussed in the final report for the project. There are no specific deliverables for this task; however, mapping outputs will be used in subsequent tasks.

PROGRESS REPORT

This task will be completed March 2025

Variations to Project Order

Changes to research Project Orders are approved by the GISERA Director, acting with authority, in accordance with the GISERA Alliance Agreement. Any variations above the GISERA Director's delegation require the approval of the relevant GISERA Research Advisory Committee.

The table below details variations to research Project Order.

Register of changes to Research Project Order

DATE	ISSUE	ACTION	AUTHORISATION

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GISERA is a collaboration between CSIRO, Commonwealth and state governments and industry established to undertake publicly-reported independent research. The purpose of GISERA is to provide quality assured scientific research and information to communities living in gas development regions focusing on social and environmental topics including: groundwater and surface water, greenhouse gas emissions, biodiversity, land management, the marine environment, and socio-economic impacts. The governance structure for GISERA is designed to provide for and protect research independence and transparency of research.