



Australian Government



Queensland Government

Brigalow Belt North bioregional guidance plan – use by the regulator

MAY 2026

Purpose of this fact sheet

This fact sheet is intended to aid regulators in applying the Gulf Plains Bioregional Guidance Plan (the Plan).

Although this use case demonstrates application to a renewable energy project, the advice in the Plan may be relevant for other types of development and regulators may consider the information in the Plan where it is applicable. For example, advice regarding the ability of protected matters to tolerate impacts is likely to be directly applicable, while advice regarding mitigation measures may vary for other industries.

This fact sheet should be read in combination with other information about bioregional guidance planning, including the Fact Sheet: Brigalow Belt North bioregional guidance plan - use by a proponent. Together, the two fact sheets illustrate how proponents and regulators use the same information, tools and plan advice at different stages of the *Environment Biodiversity Conservation Act 1999* (Cth) (EPBC Act) assessment process:

www.environment.qld.gov.au/management/planning-guidelines/bioregional-planning

This fact sheet will be updated to reflect necessary changes following public consultation and the finalisation of the Plan.

How can developers use the bioregional guidance plans?

Regulators responsible for assessing projects referred under the EPBC Act, will consider the information in bioregional guidance plans to inform their assessments and recommendations. This includes using:

- Spatial Conservation Analyses (SCA) to identify areas where development is more likely to impact irreplaceable values¹ and/or pose a risk to achieving net positive outcomes
- Cumulative Impact Assessment (CIA) results regarding:
 - impact pathways to consider the range of ways a project may impact Matters of National Environmental Significance (MNES), and how much risk these impacts are likely to pose for each Part 3 protected matter.
 - the impact thresholds to identify which mitigation measures are likely to be suitable, including those most important to make significant efforts to avoid impacting on MNES.

Regulators should consider project-specific circumstances, including changing context and on-ground conditions, that may change the applicability of the advice in the Plan.

Once a bioregional guidance plan has been approved by the Australian Government, the Minister for the Environment and Water (the Minister), or their delegate, will be required to take the Plan into account when making any relevant decision under the EPBC Act. This may include deciding whether or not to approve the taking of an action, and what conditions to attach to an approval.

Regulations will provide that this includes decisions on actions referred before the plan was made, that are still under assessment. Where a referral was submitted before the plan was made, the Minister or delegate will also have regard to the fact that the proponent could not have considered the plan when designing their project. If there is information in the plan that has a significant effect on the department's assessment of a project, the proponent will be made aware of this and provided with an opportunity to address this prior to a decision being made.

¹Irreplaceable means biologically, physically or technically impossible to reverse damage to habitat, or impossible to restore, recreate or replace the habitat in a relevant timeframe and location and with the function necessary to support the viability of the species or community. See the bioregional guidance plan or spatial conservation analysis factsheets for more information.

Case study – what does this look like in practice?

Scenario

A renewable energy company is proposing to construct and operate a wind farm with 110 wind turbine generators and associated ancillary infrastructure within the Plan area. The associated infrastructure includes components such as roads, transmission lines, substations, and workers accommodation. The renewable energy company uses the Plan and the [Bioregional Planning Interactive Tool](#) (the Interactive Tool) to consider the MNES values likely located at their potential site.

This is a fictional scenario and does not represent that any similar project would ultimately be approved under the EPBC Act. Each referral must be considered and assessed on a case-by-case basis having regard to specific facts.

Pre-referral meeting

After considering protected matters and irreplaceable features information in the Interactive Tool, the renewable energy company decides to have a pre-referral meeting with the Commonwealth regulator to understand their obligations under the EPBC Act and feasibility of their project.

The Commonwealth regulator helps the renewable energy company understand the referral process under the EPBC Act and the types of information the regulator will need to know about the project. The renewable energy company tells the regulator about their proposed action, including their proposed site.

The regulator recommends that the renewable energy company uses the Plan to help guide their early project planning, including site selection, placement of wind turbine generators, and project design. The regulator recommends that the company avoid or minimise their impacts on MNES as much as possible and clearly demonstrate they have applied mitigation measures aligned with advice in the Plan, as this may support a faster and simpler assessment of the action under the EPBC Act.

The regulator advises the renewable energy company:

- Refer to the Interactive Tool when selecting a site for the project, particularly looking at the SCA, and the protected matters and irreplaceable features information (Figure 1). The regulator advises making significant efforts to avoid locations with important conservation areas, irreplaceable features, or protected matters that are categorised as E4, E4+ or partial E4 (for which offsets are unlikely to be effective).
- That, if they choose to proceed with their currently proposed site, the renewable energy company will need to provide strong evidence that the action does not significantly impact the irreplaceable features, as well as how impacts to Threatened Ecological Community 1 and Species 1 and 2 will be avoided, mitigated or offset (Table 1).
- Use the Interactive Tool to compare other potential sites, before they invest time and money into this location.
- Use this information, along with practical considerations in developing the project proposal.

Where the proposal aligns with the advice in the Plan, appropriate site-specific investigations have been conducted and adequate management measures proposed, the proposal is more likely to undergo an efficient assessment process and have a favourable outcome.

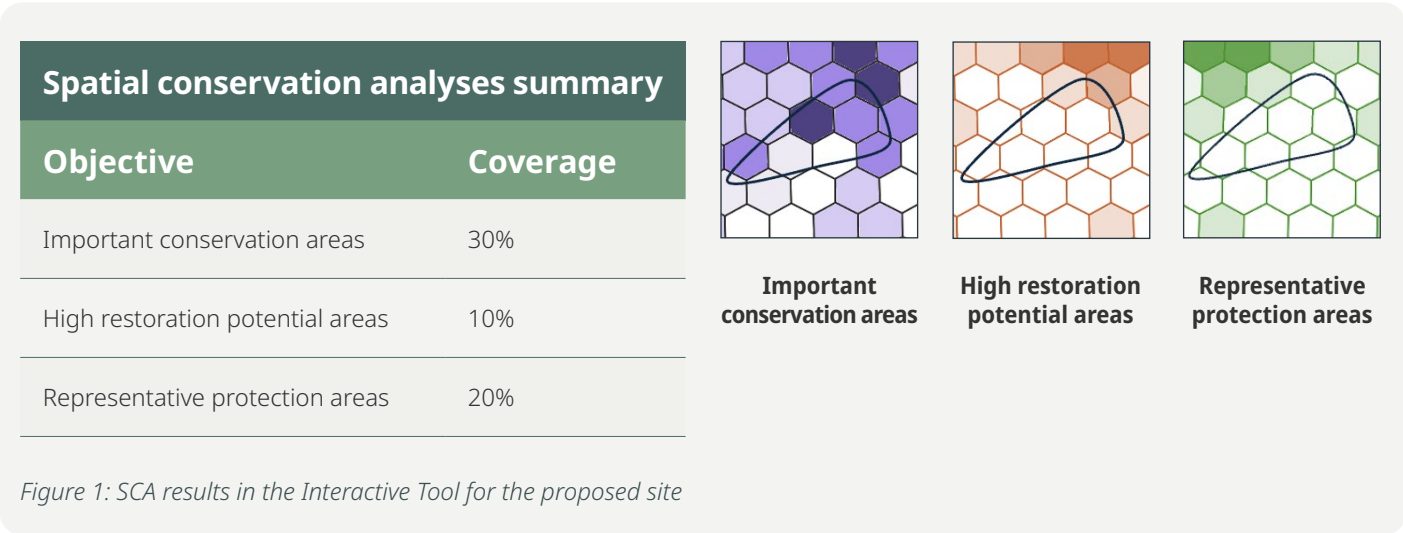


Table 1 - Extract of protected matters identified in the approximate location of the proposed site in the Interactive Tool

Protected matter	Impact threshold	Likelihood of occurring
Threatened Ecological Community (TEC) 1	E4 – Near zero impact	Low
Species 1	E4 – Near zero impact (direct impact to individuals, and known nesting habitat) / E3 – Impacts as low as possible	Medium
Species 2	E3 – Impacts as low as possible	Medium

Referred action

Following this meeting, the renewable energy company considers the advice in the Plan and information in the Interactive Tool, as suggested by the regulator. They re-design and relocate the project to an alternative site. They consider Social, Cultural and Economic Values (SCEVs) information in the Plan to increase the chance of mitigation measures succeeding and seek advice on cultural values, before engaging experts to conduct surveys focusing on protected matters likely to occur at the alternate site.

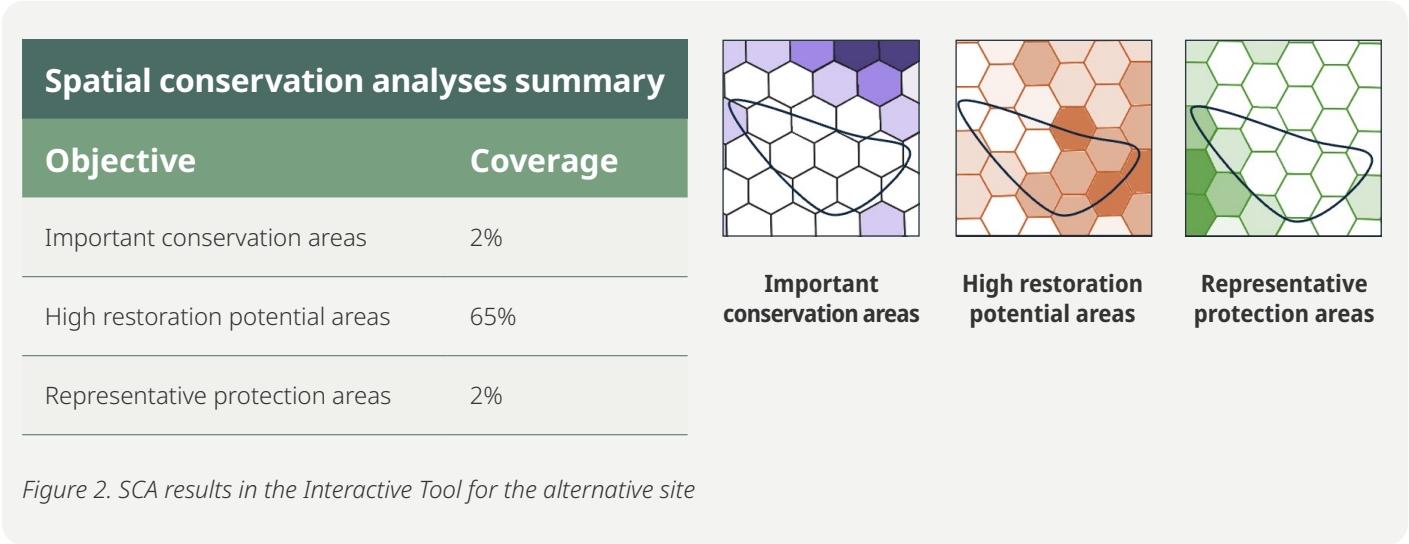
The renewable energy company submits an EPBC Act referral for the project at an alternate site (Figure 2). They consider that the new site is likely to have residual significant impacts on Species 4 (Table 2).

Key considerations for the Commonwealth regulator during the EPBC Act assessment process

The regulator will assess the impact the development will have on protected matters and determine whether the renewable energy company has applied the mitigation hierarchy in designing their project: avoiding, mitigating and repairing impacts to the greatest extent possible.

1. Landscape-scale MNES values

The regulator refers to the SCA in the Interactive Tool to determine whether the project is in an important conservation area, high restoration potential area, or area important for representative protection (see Figure 2).



The renewable energy company's proposed site overlaps with a very small amount of representative protection areas and important conservation areas, meaning that these small areas are likely to contain values that are difficult or impossible to recreate or restore (Figure 2). A high portion of the site includes high restoration potential for improving vegetation.

If there are data gaps, the regulator may identify the need for detailed, quantitative and spatialised data collection based on the project assessment, for example aerial collision for birds and bats.

2. Protected matters and irreplaceable features

The regulator interrogates the irreplaceable features and protected matters information in the Interactive Tool.

They identify that this site is likely to contain irreplaceable features in the form of areas with high densities of hollow-bearing trees.

They determine that the disturbance footprint will also have a residual significant impact to Species 4, in addition to the species the renewable energy company originally identified. The regulator considers the risk that recovery targets for Species 3 may not be met if significant impacts are likely, particularly if irreplaceable values such as denning habitat are impacted.

Table 2 - Extract of protected matters identified in the approximate location of the alternate site in the Interactive Tool

Protected matter	Impact threshold	Likelihood of occurring
Species 2	E3 – Impacts as low as possible	Low
Species 3	E4 / E3 – Near zero impact (denning habitat) / Impacts as low as possible (other habitat)	Very low
Species 4	E2 – Some impacts with appropriate compensation	Medium

3. Site-specific investigations

The regulator considers whether the renewable energy company has conducted adequate matter and site-specific investigations (underpinned by survey efforts), including for birds and bats, to determine the presence/occurrence, location (including flight paths and migratory patterns where applicable) and condition of protected matters and their habitat.

In doing so, the regulator considers whether the renewable energy company has:

- focused their efforts on protected matters in alignment with the impact thresholds (i.e. significant efforts made to avoid impacts to category E4 species)
- identified the specific location of irreplaceable features or confirmed their absence.

The referral information shows that surveys conducted by the renewable energy company's environmental consultant identified the location of known Species 3 habitat and some hollow-bearing trees, and that the proponent plans to avoid impacting these areas through micro-siting.

The referral information shows the location and quality of Species 4 habitat.

The regulator concludes that surveys have been appropriately undertaken and site-specific considerations have been taken into account, so they do not need to request further information at this stage on the current state of the site for MNES values.

4. Sources and intensity of impacts

The regulator refers to the Plan and Interactive Tool to assess whether the energy company has adequately identified the sources and intensity of impacts arising from the proposed action. The regulator may seek additional information from the energy company if relevant sources of impacts are not well identified or described. In this instance, the regulator concludes that the energy company has appropriately identified the likely sources of impact as part of their action.

Table 3. Extract of CIA information in the Interactive Tool regarding sources of impact from activities that are primarily construction related.

Sources	Intensity ²
Activities: primarily construction related	
Blasting & vibration (quarrying, tunnelling, major civil works)	Tertiary
Construction-related transport & traffic (haulage, workforce transport, delivery of materials)	Primary
Earthworks (excavation, cut-and-fill, foundations, road construction)	Secondary
Establishment & use of temporary/supporting infrastructure (camps, laydown yards, borrow pits, spoil areas, access tracks, site compounds, fencing, exploration works)	Secondary
General construction activities (machinery use, noise/light, site disturbance not otherwise specified)	Secondary
Land clearing	Primary
Soil, overburden & material handling (stockpiles, quarries, trenching)	Secondary
Water extraction & diversions (surface water diversions, channel modifications, bunding, groundwater pumping, bore fields, bulk supply pipelines)	Secondary

Note: the Interactive Tool also shows sources of impact from activities that are primarily operations and maintenance related and that are primarily rehabilitation and decommissioning related, and from components of an action.

²**Primary:** Activities or components that are central to how minerals mining operations interact with the environment and typically trigger multiple impact pathways with potential for moderate to high environmental impact. Impacts are often long-term or continuous and may extend across or beyond site boundaries in the Plan area and can be difficult to reverse without strong mitigation. Layered mitigation measures and ongoing monitoring are required.

Secondary: Sources that are important but play a supporting or situational role within the industry, in practice often linked to transitional or cyclical phases (e.g. construction, periodic operations). These impacts generate some environmental impacts, but of lower intensity or spatial extent, and are typically manageable using standard best-practice mitigation measures.

Tertiary: Sources that are not applicable to the industry, or not major drivers of environmental impacts/pathways for the industry. Effects usually occur infrequently, as one-off or episodic events, and are localised, short-term, and readily reversible through routine procedures without intensive monitoring.

5. Impact pathways

The regulator considers the risk of each of the impact pathways for each protected matter that may be significantly impacted by the project, with reference to the Interactive Tool.

They consider the impact pathways in the Interactive Tool (Table 4) alongside any unique project considerations to determine upstream, downstream, facilitated and cumulative impacts that may arise from the life of the action.

The regulator concludes that the renewable energy company has appropriately identified the likely impact pathways of their action.

Table 4 - Examples of impact pathways and residual risk

Impact pathways	Residual risk		
	Species 2	Species 3 (E4/E3)	Species 4 (E2)
Accidental fire/ bushfire	Medium	Medium	Medium
Aerial collision / entanglement	Medium	Low	High
Barriers & interruptions to movement (from infrastructure)	Low	Medium	Low
Habitat fragmentation	Medium	High	Medium
Elevated noise, vibration, shadow flicker	Medium	Medium	Medium
Chronic pollution / contaminant release	Low	Low	Low
Altered groundwater hydrology (levels/expression)	Low	Low	Low
Altered surface water hydrology (incl. flooding)	Medium	Medium	Medium
Introduction / spread of weeds	High	Low	Low
Introduction / spread of pest animals	Medium	Low	Medium
Land clearing (vegetation removal & ground disturbance)	High	High	High

6. Avoidance and mitigation measures

The regulator assesses whether the proponent has appropriately applied avoidance, mitigation, and repair measures where an impact will have or is likely to have significant impacts on protected matters. To do this, they refer to the recommended mitigation measures in the Interactive Tool and the impact thresholds of the relevant protected matters.

Table 5. Extract of CIA information in the Interactive Tool regarding impact pathways and mitigation measures

High risk impact pathways	Extract of options for mitigation measures	Ability to implement	Effectiveness
Land clearing Limited ability to mitigate	Avoid clearing sensitive habitat features through exclusion zones and design layout.	Manageable	Strong
	Pre-clearance surveys by ecologists to confirm species presence and refine impact boundaries and adapt design.	Manageable	Strong
	Provide alternative/artificial habitat structures in adjacent suitable areas advance of clearing and/or repair or replace habitat structures post clearing.	Manageable	Conditional / uncertain
Habitat fragmentation Partial ability to mitigate	Design infrastructure layouts to retain high-value habitats, maintain ecological connectivity, and enable safe fauna movement.	Manageable	Strong
	Maintain, repair, and enhance habitat corridors and buffers to support ongoing ecological and genetic flows.	Manageable	Conditional / uncertain
Aerial collision and entanglement Limited ability to mitigate	Site and align aerial structures to avoid key habitats and flight paths.	Manageable	Conditional / uncertain
	Implement deterrent technologies and design/retrofit modifications, following best-practice guidance (DCCEEW, 2024; IUCN, 2021).	Manageable	Conditional / uncertain
	Undertake habitat and attractant management near turbines (e.g. removing features that attract prey).	Complex	Conditional / uncertain
Introduction and spread of weeds Limited ability to mitigate	Develop and implement management plans to identify and target high risk species.	Manageable	Strong
	Apply control programs and treatments across the Project Area to reduce impacts of priority weeds.	Manageable	Conditional / uncertain
	Prevent introduction and spread of weeds through best practice operational controls including clean sourcing requirements, strict hygiene protocols for vehicles/equipment.	Simple	Strong

Because Species 3 is categorised as E4/E3, the regulator checks that the renewable energy company has provided detailed evidence that significant efforts have been applied to avoidance measures, particularly for high-risk impact pathways. They check that stringent mitigation measures have been applied for other relevant impact pathways.

Since Species 2 is assigned E3 and Species 4 is assigned E2, the regulator checks that the renewable energy company has demonstrated adherence to the mitigation hierarchy and proposed effective offsets where appropriate.

In this case, the renewable energy company has proposed to:

- apply standard mitigation practices for most impact pathways, particularly those that are low risk
- avoid impacts to denning habitat for Species 3 by not clearing hollow-bearing trees and micro-siting of project components and infrastructure
- enhance habitat corridors for Species 3, in coordination with other major projects in the area
- manage the impacts of weeds on Species 2 by applying best practice operational controls including clean sourcing, and strict hygiene protocols for vehicles/equipment (for example washdowns).

The regulator identifies that the renewable energy company has not provided information about how they are proposing to manage and mitigate aerial collision to Species 4. This is a high-risk impact pathway (see Table 5), so the regulator requests additional information from the renewable energy company, including the provision of 24-months of site utilisation surveys to provide sufficient baseline data on a relevant species' potential to utilise the project area and surrounds. The regulator notes that, as per the Plan advice, offsets are unlikely to be effective for aerial collision and entanglement impacts for Species 4, because the species does not land often.

7. Regional pressures

Incorporating mitigation measures that contribute to addressing regional pressures into both design and implementation phases of the proposal is likely to improve the acceptability of project impacts.

The regulator checks the Interactive Tool to see how the project's impact pathways interact with other regional pressures across the Plan area. They use this information to consider where cumulative effects may amplify project impacts or undermine project mitigations. For example, the regulator considers the following matters relevant:

- how connectivity to habitat will be retained, moved or functionally compromised or lost in the project site or landscape
- how species population and/or species habitat will be sustained locally and regionally, should there be intensification of ongoing impacts such as aerial collision from current and future wind farms.

The regulator can see that the proponent has addressed this in their referral information. The proponent states that they plan to work with other wind farm developers to enhance habitat corridors for Species 3.

8. Coordination with other users

The regulator notes the advice in the Plan that certain mitigation measures will be most effective if coordinated with other parties in the area, such as aerial collision and pests and weeds.

The regulator notes that the renewable energy company proposes to coordinate with neighbouring wind farm developers and traditional owner rangers to monitor Species 4. The renewable energy company also plans to work with other wind farm developers to enhance habitat corridors for Species 3 and restore roosting habitat for Species 4. They also note the renewable energy company proposes to coordinate the timing of weed treatments with adjacent landholders to maximise the effectiveness of this measure for Species 2. This provides the regulator greater certainty that this measure will sufficiently mitigate impacts for Species 2.

9. Social, cultural and economic values (SCEV)

The EPBC Act aims to promote ecologically sustainable development. Under the EPBC Act, the decision-maker is obligated to take into account principles of ecologically sustainable development when deciding whether or not to approve an action. This includes economic, social and equitable considerations, among others.

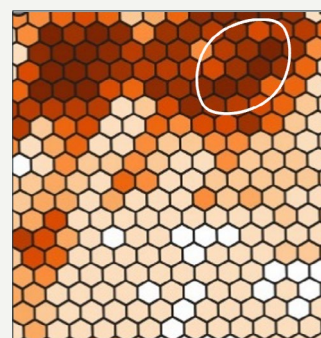
The regulator notes that the renewable energy company is proposing to work with neighbouring landholders to manage weeds. The regulator refers to the Values Statements within the Plan for further information and sees that 'strong diverse and inclusive economies' is a value in the region. The regulator considers the flow on benefits that weed management would have for the community and agricultural productivity in the region when assessing the project.

The regulator also notes that the renewable energy company is proposing to work with Traditional Owners to monitor regional impacts to Species 4. They note that this aligns well with the values statements in the Plan (in particular: 'opportunities for young people to be on Country and to be involved are improved, including traditional owner ranger programs and locally based career guidance and employment') and will increase confidence in the mitigation measures the renewable energy company has proposed.

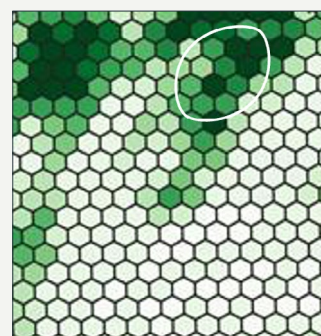
10. Offsets

After designing and micro-siting the placement of turbines to avoid impacts to the greatest extent (and therefore avoiding the risk of aerial collision and entanglement to Species 4), the renewable energy company identified that Species 4 occasionally roosts in a small portion of the project site designated for workers accommodation. Consequently, the renewable energy company has determined that the action is likely to result in significant impacts to roosting habitat for the species and has proposed offsets to compensate for the loss of this roosting vegetation. They have investigated potential offset options in the SCA section of the Interactive Tool (Figure 3).

The regulator considers the information in the Interactive Tool when assessing the suitability of the site. They note that the two proposed offset sites are flagged as both high priority restoration potential areas and representation protection areas. Using the protected matters information, they can see that marginal roosting habitat for Species 4 occurs in the immediate locality, so Species 4 can benefit from the offset proposal. The renewable energy company has verified this via on-ground surveys and proposed to legally secure the sites so that they are protected for conservation. The regulator considers other regulatory requirements (including any National Environmental Standards made), such as whether the offset achieves like for like benefits and size and scale of the offset area.



High restoration potential areas



Representative protection areas

Figure 3: SCA results in the Interactive Tool for the proposed offset site.

Outcome for the assessment process

The Plan and the Interactive Tool provide region specific information to support the regulator's assessment of the project, including their consideration of the sources and intensity of impacts, the appropriateness of the avoidance, mitigation and restoration measures proposed, and the suitability of the offset proposal (where required).

In this scenario, the renewable energy company has demonstrated that they have reduced significant impacts to protected matters through the application of appropriate avoidance and mitigation measures and decreased offset liability with reference to the plan. This process could have been more efficient if the renewable energy company had included information on aerial collision risk in their referral information, which was identified in the Plan. Notwithstanding this, the regulator was able to undertake an efficient assessment process.

In this way, the Plan provides a shared information source for both regulators and proponents. It helps establish a common understanding of the key risks to protected matters in the plan area (e.g. high-risk impact pathways), expectations about how the mitigation hierarchy should be applied, and how individual project can contribute to outcomes for protected matters at a larger scale.

In deciding whether to approve a project under the EPBC Act, the Minister (or delegate) would consider the Plan, together with the recommendation report, which sets out the assessment of the project's impacts having regard to the Plan and the other relevant considerations under the Act.



Australian Government



Queensland Government