Appendix N

DWF-HSE-PLA-002

ENVIRONMENTAL MANAGEMENT PLAN FRAMEWORK

DELBURN WIND FARM

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10745_EHP_DelburnTS_BA	Biodiversity Assessment (Terminal Station)
10745_EHP_FF_ManagementPlan	Flora and Fauna Management Plan (DRAFT)

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Contents

1 Introduction

Delburn Wind Farm Pty Ltd (DWFPL) (part of the OSMI Australia group) is developing a wind farm project in the Latrobe Valley region of Victoria, known as the Delburn Wind Farm (DWF or the Project).

The purpose of this document is to provide a framework for the preparation of Environmental Management Plans (EMPs) for the Project, including management tools, protection measures and monitoring regimes for the design, construction and operation phases.

1.1 Policy and Planning Guidelines for the Development of Wind Energy Facilities in Victoria

The Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (Nov 2019) requires the preparation of an EMP.

The guidelines require:

The preparation of an environmental management plan (EMP) will be required. An environmental management plan details how the site will be managed through construction, and sets out future operational and maintenance requirements. It may include:

- *measures to minimise the amenity and environmental impacts of the construction and decommissioning of the facility;*
- *organisational responsibilities, and procedures for staff training and communication;*
- *a construction component that includes procedures to manage dust and noise emissions, erosion, mud and stormwater run-off and procedures to remove temporary works, plant, equipment, buildings and staging areas, and reinstate the affected parts of the site, when construction is complete; and*
- *complaints management processes.*

1.2 Site Context

The Delburn Wind Farm project is situation in elevated, hilly, often steep landscape. It sits within the HVP Plantation Thorpdale Tree Farm, over principally pine plantation with smaller areas of blue gum plantation. Patches of remnant native vegetation are scattered throughout the project area, particularly along roads and waterways.

Soils are a mixture of sands, red clay and yellow duplex clays which can be prone to erosion. Several creeks and waterways pass through the site, and there are several small wetlands which provide habitat for frogs and other native wildlife.

Several patches of good quality remnant vegetation are adjacent to the site. The site is surrounded primarily by agricultural land, with horticulture (potatoes and other vegetables), forestry and beef production the predominate land uses, as well as lifestyle properties.

Two nationally significant species, Growling Grass Frog and Strzelecki Gum, are known to occur in the project area. The site also supports a number of other native flora and fauna species, including the locally iconic Strzelecki Koala and Wedge-tailed Eagle.

1.3 DWFPL's EMP Principles and Objectives

DWFPL maintains a strong commitment to avoid unforeseen impacts on the environment.

To give effect to the above stated environmental principle and to ensure that the Project accords with regulatory requirements, the following objectives have been established:

- To contribute to State and Federal government policy objectives to maintain a secure, efficient and affordable supply of energy in Victoria while reducing the intensity of greenhouse gas emissions from the energy sector;
- To minimise the adverse impacts of the Project on visual landscape values;
- To ensure that the construction and operation of the Project does not unduly affect the amenity of nearby dwellings, or existing land uses on and around the site;
- To avoid or minimise impacts on species and communities listed under the FFG Act and/or the EPBC Act, to avoid or minimise impacts on other indigenous species and communities, and to comply with the relevant Victorian native vegetation clearing and offsetting policy to compensate for the removal of native vegetation for biodiversity outcomes;
- To avoid or minimise impacts on places with Aboriginal and non-Aboriginal cultural heritage values; and
- To minimise any physical impacts from the construction and operation of the facility, such as erosion, sedimentation, and impacts on natural water flows.

It is recognised that without environmental management measures being incorporated into the design, development and operation of the Project, the potential exists for adverse environmental impacts to occur. Accordingly, and in addition to its corporate Environment Management Systems and the conditions of regulatory approvals, DWFPL will develop EMPs for the project.

2 Environmental Management Plan Framework

An EMP is a procedural document which outlines the environmental goals of the project, the safeguard measures to be implemented, the timing of the implementation in relation to the progress of the project, responsibilities for implementation and management, and a review process.

The DWFPL EMPs will be prepared to address the key stages of the project, including:

- Site preparation and construction;
- Operation; and
- Decommissioning.

Further, standalone Construction Environmental Management Plans (CEMPs) will be developed and form an integral part of the EMP. The preparation of standalone CEMPs are proposed to allow the construction contractors to tailor construction procedures and environmental management controls, which are to meet or exceed the minimum requirements of DWFPLs EMP(s). The preparation of a CEMP will be a condition of a contractual agreement between the proponent and the nominated contractor(s).

The EMPs will be prepared following assessment and approval of the Project, and will serve as working documents to be used throughout the detailed design, construction and operation phases.

General details regarding EMP objectives, contents, structure, reporting, monitoring and review are provided in the following sections.

2.1 Objectives

The key objectives of the EMPs will include:

- Ensure that works are carried out in accordance with appropriate environmental statutory requirements and relevant non-statutory policy as detailed throughout this framework;
- Ensure that works are carried out in accordance with the objectives and requirements presented in this framework;
- Ensure that works are carried out in such a way as to minimise the likelihood of environmental degradation occurring;
- Ensure the project does not have a significant impact on any rare or threatened species;
- Ensure that the project does not exceed impact thresholds on threatening processes for any threatened species;
- Ensure the project does not contribute towards habitat fragmentation, degradation or modification for threatened species;
- Ensure that no pest or diseases which threaten species of conservation significance are introduced to the project area;
- Ensure that works are carried out in such a way as to manage the impact of the works on neighbouring properties (e.g. noise, dust);
- Ensure that all employees engaged in the works comply with the terms and conditions of the EMP;
- Provide clear procedures for management of environmental impacts including corrective actions; and
- Identify management responsibilities and reporting requirements to demonstrate compliance with the EMP.

2.2 Contents and Structure

The EMPs will include:

- Establishment of environmental objectives and targets;
- Comply with conditions of the Project approvals;
- List of actions, timing and responsibilities;
- Supervision protocols fully identifying areas of responsibility for environmental management of the project;
- Statutory requirements;
- A structured reporting system detailing all relevant matters on a regular basis;
- Procedures and forms for documentation and reporting of issues;
- Standard specifications incorporating environmental safeguards;
- Training of personnel in environmental awareness and Environmental Management Systems;
- Guidelines for emergencies, contact names and corrective actions for non-conformance and notifications to appropriate authorities and affected parties;
- Calibration and measuring of testing equipment;
- Process surveillance and auditing procedures;
- Review procedures and protocols for modification of the EMP;
- Complaint handling procedures;
- Site management and control procedures;
- Monitoring procedures; and
- Quality assurance procedures.

The EMPs will comprise both generic components and issue-specific management components, as described in Table 1. Additionally, as a guide, the EMPs should be structured as detailed in Table 2.

Table 1: EMP Contents

Item	Description
The generic procedural components will comprise:	• Overall policy and management approach; • Environmental objectives and strategies; • Responsible personnel and defined responsibilities; • Environmental training; • Monitoring and auditing requirements; and • Reporting procedures.

Item	Description
The issue-specific management components will relate to:	• Protect water quality, particularly near creek crossings; • Protect flora and fauna; • Protect cultural heritage; • Protect public infrastructure; • Control air emissions, including greenhouse emission and dust; • Control noise; • Minimise impacts to nearby dwellings and existing land uses; • Manage any risks to the safety of the local community; • Minimise socio-economic impacts; • Minimise impacts on agricultural production; and • Rehabilitate disturbed land.

Table 2: EMP Structure

Item	Description
Introduction and purpose	Details the objectives of the Plan. Chain of Command structure (including relevant environmental delegate). Responsibility and authority for implementation.
Statutory requirements and integration with other plans	Details the statutory requirements, if any, and other obligations required to be met as part of the WEF approvals.
Environmental management procedures	Describes the operational procedures for preventing environmental impacts, nominates responsibility to individuals, establishes reporting protocols and procedures, nominates corrective and preventative action procedures.
Monitoring requirements	Details the monitoring program for checking environmental performance of the project, nominates responsibilities to individuals, establishes reporting protocols and procedures, nominates corrective and preventative action procedures.
Emergency response	Contains emergency response plans.

2.3 Reporting and Review

Environmental performance reporting is an integral part of any EMP and further provides management with the information to make meaningful and positive changes. It is also to ensure that relevant authorities are appropriately informed of how the proponent is managing its environmental performance, periodic reports will be prepared by the contractor during the construction phase and the proponent during the operations phase, in accordance with each party's Quality System.

If the reports identify any shortcomings in the way the construction activities or the operations are being conducted or in the performance of environmental control structures, the necessary changes would be made and the CEMP and the Operational Environmental Management Plan (OEMP), which will be prepared, would be updated to reflect these changes.

EMPs are not static documents. They must be responsive to change, such as changes in legislation, changes in environmental conditions and changes in project detail.

Accordingly, the EMPs will be reviewed by DWFPL at a minimum every five (5) years.

2.4 Responsibilities

The EMPs will be developed by DWFPL with the DWFPL Directors having the ultimate responsibility for the implementation of the EMPs with the construction Project Manager responsible for the development and implementation of the CEMPs.

Notwithstanding this, all personnel involved in the design, construction, operation and decommissioning of the Project will be required to comply with the relevant EMP.

To assist all personnel involved in the project to comply with their environmental responsibilities prior to working on site all personnel will be required to complete an environmental site induction as out lined below:

Environmental Site Induction:

- All construction staff on site (i.e. the area of construction) will be made aware of the CEMP and their responsibilities regarding environmental management. As such, all staff will attend an environmental site induction, which will inform contractors of the requirements of the CEMP. All main contractors undertaking construction works will be provided with a copy of the CEMP prior to commencement of works. The main contractors must issue sub-contractors with a copy of the document prior to commencement of works to allow time to become familiar with the document and guidelines/procedures.
- Following the induction, all persons working on site are required to sign the induction form and a log will be kept of all staff that have completed the environmental site induction. All construction personnel will hold appropriate competencies/ qualifications for their intended role. A summary of actions and timings of the induction will be provided.

The induction will include the following:

- Information about the environmental values present within and surrounding the Site;
- A site plan will be provided for viewing in order to become informed on environmental values;
- The legislative context of the development;
- The key objectives and measures outlined in the CEMP;
- The duty of care of all persons to: protect the environmental values within and surrounding the Site; ensure that their actions are in accordance with the relevant environmental legislations and policies, and the CEMP; and report any faults, issues or actions with the potential (even if remote) to impact upon the environment;
- The hierarchy of environmental responsibility and the lines of reporting;
- The consequences of non-compliance;
- The requirement for all persons inducted to sign a log book of induction.
- A log is to be kept of all staff that have completed the environmental site induction.
- All site changes that affect environmental protection, whether they are a directly or indirectly as a result of development will be logged at each toolbox meeting.

Compliance monitoring, record keeping and reporting:

To ensure the environmental controls are maintained and effective routine monitoring and reporting of controls must be adopted including:

- The project Head Contractor's Project Manager will undertake monthly routine inspections of all environmental management controls he temporary fencing and signage and will organise any required maintenance ensuring that it is carried out in a timely manner and to a satisfactory standard.
- Any accidental damage to environmental controls or retained vegetation during construction will be reported to the Head Contractor's Project Manager immediately, who will assess the extent of

damage and effect the required corrective actions and reporting (including, informing the Responsible Authority if required).

- All incidents will be recorded in a logbook, with the logbook available for inspection by the Contract Manager and the Responsible Authority at all times.

2.5 Environmental Safeguards

A number of safeguards will be incorporated into the EMPs to prevent or minimise potential environmental impacts that may be caused by the Project. These have been detailed in the previous sections of the report and would be implemented throughout the duration of the different stages of the lifecycle of the project.

Table 3 summarises the main safeguarding measures. It is a summary of the scope of the EMP.

Table 3: Summary of Mitigation and Measurement Methods

Element	Objective	Scope
Land Capability	To minimise soil erosion and any changes in water quality or hydrology, particularly near wetlands.	The EMPs will incorporate measures to minimise soil disturbance, compaction, soil erosion, and the potential for contamination. It shall also incorporate drainage controls, access controls, rehabilitation strategies, monitoring programs and environmental training programs designed to protect soil and water. In doing so it will have regard to applicable EPA documents.
Ecology	To minimise the clearance of native vegetation and impacts on native flora and fauna including avifauna.	The EMPs will incorporate a Native Vegetation Management Plan. This will include criteria that identifies the need to fence off areas along with the required revegetation works, weed management works and any offset works. The Native Vegetation Management Plan will address the environmental management hierarchy of avoid, minimise and offset, with all works undertaken in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation (Dec 2017)*. The plan will provide detail regarding the following measures to be undertaken as part of the development: • Further micro-siting techniques, including fencing retained areas of native vegetation; • All contractors will be aware of ecologically sensitive areas to minimise the likelihood of inadvertent disturbance to areas marked for retention; • Tree Retention Zones (TRZs) will be implemented to prevent indirect losses of native vegetation during construction activities; • The development of a Pest Plant Management Plan; • Construction stockpiles, machinery, roads, and other infrastructure will be placed away from areas supporting native vegetation and/or other ecological sensitive areas; and • Sourcing of appropriate biodiversity offsets to compensate for any native vegetation removal following the implementation of avoidance and minimisation measures. The EMPs will incorporate a Bat and Avifauna Management Plan. This will include criteria that identifies the need for monitoring, significant impact thresholds, and mitigation actions.
Heritage	To minimise impacts on Aboriginal archaeology sites, heritage sites and cultural values.	The EMPs will incorporate the outcomes of the CHMP. This will feature the protocols for parties to follow during any archaeological testing and subsequent management actions during construction phases of the Project.
Public Infrastructure	To minimise any disturbance to public infrastructure, including electricity, gas, water, sewer and telecommunication services.	The EMPs will require DWFPL to maintain ongoing liaison with key service providers (electricity, gas, water and telecommunications) to ensure that its construction activities do not impact on existing infrastructure services in the region.

Element	Objective	Scope
Air and Greenhouse	To minimise greenhouse emission and the discharge of air borne pollutants, including dust, from the site.	The EMPs will incorporate measure to control greenhouse emissions, dust and wastes.
Noise	To minimise noise and vibration impacts to nearby residents.	The EMPs will include restrictions on blasting, the use of heavy equipment and other noisy activities, including time limits, etc.
Land Use	To minimise both on-site and off-site land use impacts particularly the ongoing use of the site and its environs for timber plantation purposes.	The EMPs will require DWFPL to consult with landholders to ensure that the construction and operation of the wind farm is undertaken in a manner which causes minimal disturbance to the ongoing use of the area for timber plantation purposes, subject to the terms of the licence agreements.
Safety	To ensure that the Project is developed and operates in a manner that is safe to persons on-site and off-site.	The EMPs will require the ongoing monitoring of the wind farm's operations to detect any abnormal operations that may present a hazard.
Socio-Economic	To minimise the social, economic and tourism impacts of the Project and where possible enhance the local economy.	The EMPs will require the implementation of a stakeholder communication plan during the construction and early operation of the Project.
Waste Management	To develop and use the Project in an environmental responsible manner which avoids the generation of waste.	The EMPs will require the development and implementation of a Waste Management Plan and ensure all personnel are advised of the waste management and disposal procedures outlined, prior to commencement of works.

2.6 Specific Mitigation Measures to Minimise Impacts on Waterways

The following mitigation measures, to reduce potential impacts on surface water, should be adopted:

- Implement methods to reduce sediment transportation to creeks including:
  - Swales;
  - Silt-fences; and/or
  - Sediment Ponds
- Minimising crossing and obstructing natural gullies and depressions;
- Locating new access tracks along ridges to reduce the need for any side cuts and reduce erosion;
- Design adequate drainage along access tracks;
- Locate temporary earthworks away from flow paths and gullies;
- Avoid significant river crossings. Should avoidance not be possible and new access tracks are required, these should be hardened to prevent erosion caused by heavy machinery;
- Implement best practice sedimentation and pollution control measures at all times, in accordance with Environment Protection Authority guidelines (EPA 1991; EPA 1996; Victorian Stormwater Committee 1999) to prevent offsite impacts to waterways and wetlands; and,
- Vehicle and machine access, wash down and set down, and excavation material stockpiling will be limited to the areas specifically designated for these activities. These areas will be appropriated bunded and fenced off to avoid any runoff, sediment, pollutants etc. entering adjacent vegetation and habitats.

2.7 Specific Mitigation Measures to Minimise Impacts on Native Vegetation

The following mitigation measures, to reduce potential impacts on vegetation, should be adopted where relevant:

- Development of a construction and operational environmental management plan which includes a Native Vegetation Management Plan.
- Impacts to native vegetation (including large old trees, scattered remnant trees and/or remnant EVCs) will be avoided and minimised through micro-siting and construction techniques, such as the use of no-go zones. If indeed necessary, trees should be lopped or trimmed rather than removed. Similarly, soil disturbance will be avoided or kept to a minimum, to avoid, or minimise impacts to fauna habitats;
- All contractors should be aware of ecologically sensitive areas to minimise the likelihood of inadvertent disturbance to areas marked for retention. Habitat Zones (areas of sensitivity) should be included as a mapping overlay on any construction plans;
- Development of an offset proposal in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation (Dec 2017)* to compensate for the removal of native vegetation.
- Retention and protection of indigenous trees in appropriately signed Tree Protection Zones (TPZs). All machinery and earthworks be excluded from the TPZs. Tree Protection Zones (TPZs) will be implemented to prevent indirect losses of native vegetation during construction activities (DSE 2011). A TPZ applies to a tree and is a specific area above and below the ground, with a radius 12 x the DBH. At a minimum standard a TPZ should consider the following:
  - A TPZ of trees will be a radius no less than two metres or greater than 15 metres;
  - Construction related activities and encroachment (i.e. earthworks such as trenching that disturb the root zone) will be excluded from the TPZ;
  - Where encroachment exceeds 10% of the total area of the TPZ, the tree will be considered as lost and offset accordingly;
  - Directional drilling will be used for works within the TPZ without being considered encroachment. The directional bore will be at least 600 millimetres deep;
  - The above guidelines may be varied if a qualified arborist confirms the works will not significantly damage the tree (including stags / dead trees). In this case the tree would be retained and no offset would be required; and,
  - Where the minimum standard for a TPZ has not been met an offset may be required.
- Any tree pruning to be undertaken by an experienced arborist to prevent disease or unnecessary damage to the tree or disturbance to understorey vegetation during tree trimming.
- Stockpiling of soil outside areas of native vegetation, preferably on cleared and disturbed land to minimise disturbance.

- Weed control, by an experienced bush regenerator, undertaken along disturbed areas after construction to control any weed outbreaks in bushland or wetland areas.
- All machinery to enter and exit works sites along defined routes that do not impact on native vegetation or cause soil disturbance and weed spread.
- Vegetation to be retained onsite (including all Strzelecki Gum adjacent to the development footprint) will be clearly marked and identifiable in order to reduce the likelihood of areas scheduled for retention being disturbed. These areas will be protected with vegetation protection fencing and clearly identified as No-Go Zones.
- No Go Zones will be appropriately bunded and fenced off to avoid any runoff, sediment, pollutants etc. entering adjacent vegetation and habitats. Bunding and fencing will be in accordance with all relevant guidelines (AS 4970-2009, Australian Standard: Protection of trees on development sites) and will be undertaken by the relevant the sub-contractor prior to the commencement of works.
- Vegetation protection fencing will be installed at the interface of the development and the corridor of retained vegetation. Weatherproof signs will be installed along the fences, stating “No go zone – area of environmental significance.
- All machinery brought on site to be weed and pathogen-free. Soil-borne pathogens such as Cinnamon Fungus diseases can be easily transported by machinery.
- All machinery wash down, lay down and personnel rest areas to be defined (fenced) and located in disturbed areas.
- Construction contractors to be inducted into an environmental management program for construction works.
- All environmental controls to be checked for compliance on a regular basis.
- The implementation of all measures to protect native vegetation, as well as any incident impacting on flora must be included in the Contractor’s Project Manager’s logbook.

2.8 Specific Mitigation Measures to Minimise Impacts on Threatened Species

2.8.1 Growling Grass Frog

The Growling Grass Frog *Litoria raniformis* is listed as vulnerable under the federal EPBC Act (1999), threatened in Victoria under the Flora and Fauna Guarantee Act (1988) and is registered and is listed as Endangered on the Advisory List of Threatened Vertebrate Fauna in Victoria: 2013 list. Current threats include habitat loss and degradation, barriers to movement, predation, disease and exposure to biocides.

Growling Grass Frog has been identified during surveys as occurring at two locations in the project site.

The ‘Significant impact guidelines for the vulnerable Growling Grass Frog’ states :
“A ‘significant impact’ is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. You should consider all of these factors when determining whether an action is likely to have a significant impact on matters of national environmental significance.”

Principle threats to the Growling Grass Frog include habitat loss, degradation and modification, fragmentation and isolation of populations, and introduced predators and disease.

Consideration will be given to the potential threats, both direct and indirect, impact thresholds and potential mitigation measures to ensure that the project does not have a significant impact on populations. Careful selection of site for the single creek crossing required has been conducted to occur away from both known/surveyed populations of GGF on site to minimise the potential for direct impacts. Except for the road widening at Nursery Track where there is proposed to be localised disturbance that will be managed, the infrastructure layout avoids all known and potential Growling Grass Frog habitat. This has been achieved by altering the development footprint to avoid road crossings that are in close proximity to Growling Grass Frog habitat. Although Nursery Track crosses the creek at the northern reaches of the Luxford Pond wetland, the expansion of the existing dirt road is not likely to impact the resident population of Growling Grass Frogs. The development footprint also includes the widening of the dirt road to the east of wetland Site E , although the proposed road widening will not directly impact the wetland.

The following additional protection measures, to reduce further potential impacts on Growling Grass Frog, should be adopted where relevant:

- Ensure minimum permanent loss or degradation of terrestrial or riparian vegetation as a result of creek crossing by following the guidelines stated in section 2.6
- Ensure no degradation of water quality.
- Ensure continued connectivity of habitat on either side of the creek crossing.
- Ensure no impacts to water quality in the areas of known habitat as a result of upstream construction works by following the guidelines stated in section 2.6.
- a ‘works on waterways’ permit from the West Gippsland Catchment Management Authority is likely to be required where any action impacts on waterways within the study area.
- Where structures are installed within or across waterways that potentially interfere with the passage of fish or the quality of aquatic habitat, these activities may be referred to DELWP with the West Gippsland CMA included for comment.

The design of the waterway crossing at Nursery Track will be consistent with the design guidelines specified within the Melbourne Strategic Assessment publication Growling Grass Frog Crossing Design Standards (DELWP 2017), per condition c) of the Minister’s no EES decision. Strict protocols will also be adhered to during construction as outlined in the CEMP Framework to ensure that the road widening does not impact Growling Grass Frog.

The existing culvert [600 mm (approx.) diameter pipe culvert] is proposed to be replaced by a box culvert [at least 600 mm (h) x 900 mm (w)] along Silver Creek as part of required road upgrades to Nursery Track. There will be continued connectivity of habitat on either side of the creek crossings, thus maintaining connection between breeding sites. Frogs are also highly likely to cross the road during suitable weather conditions (i.e. warm nights during or immediately after rain). The culvert will be designed to allow unimpeded frog movements along the watercourse.

Key design parameters guiding the design as follows:

- The culvert will be as short as possible with smooth surfaces along the base and with flat, rather than curved, base.
- Culvert entrance to be as close to the road edge as possible to minimise the distance that needs to be traversed, reduce the difference in climate between inside and outside the culvert and provide a sight line to the end.

- No obstructions such as rocks or logs will be placed within culverts.
- Rock and other debris such as course woody debris will be placed along likely dispersal routes to provide temporary shelter sites adjacent to the culvert.

The design of the culvert will be completed to the satisfaction of DELWP and will be consistent with the design principles and guidelines specified within the Melbourne Strategic Assessment publication *Growling Grass Frog Crossing Design Standards* (DELWP 2017).

While the development footprint also includes the widening of the unsealed road to the east of wetland Site E, the proposed road widening will not directly or indirectly impact the wetland. Where the proposed wind farm will involve the upgrade of existing forestry tracks, no-go zones and exclusion fencing will be installed at required locations.

2.8.2 Strzelecki Gum

While Strzelecki Gum is present throughout the project area, potential impacts from works associated with the construction of the windfarm, including road widening and underground cable installation, have been managed by design changes to completely avoid both direct and indirect impacts (e.g. impacts to the root zone) to Strzelecki Gum.

The development footprint sought to widen an existing dirt road intersecting the northern reaches of Luxford Pond at one of three potential locations; Clarks Road, Nursery Track or the unnamed existing road in between these two roads (Figure 2l). Nursery Track was selected as the preferred crossing, as it completely avoids all Strzelecki Gum.

As such, the project will not result in a significant impact to Strzelecki Gum.

The following additional protection measures relating to fencing and No-Go Zones will be implemented in areas of ecological value / sensitivity (e.g. known locations of Strzelecki Gum, Growling Grass Frog):

- As outlined above, retention and protection of indigenous trees, including Strzelecki Gum in appropriately signed Tree Protection Zones (TPZs). All machinery and earthworks be excluded from the TPZs;
- No works are to take place within No-Go Zone and fences are not to be moved during the entire construction period and will not be removed until all works have been completed to the satisfaction of Responsible Authority;
- No machinery or construction equipment, waste, storage materials or unauthorised personnel are permitted within established No-Go Zones;
- Specific areas designated for vehicle re-fuelling and maintenance, dumping of waste and storage of materials and equipment will be located outside the No-Go Zones. In addition, no entry or exit pits for underground services are permitted within the No-Go Zones;
- Measures and protocols for protecting remnant vegetation will be covered during the environmental site inductions;
- Temporary signage will be installed along the perimeters of the No-Go Zone. All signage will be maintained until construction works are complete or until replaced by permanent fencing. Signage will be installed in order to:
- Highlight the area as an ecologically sensitive area;
- Prevent accidental entry by construction personnel; and,
- Prevent vegetation trampling, rock disturbance and rubbish ingress by construction workers during the construction phase.

2.8.3 Other Iconic Species

The Wedge-tailed Eagle is recognised by HVP as being an iconic species in the region and has been given honourary significance status. Potential impacts on this species will be monitored under the project Bat and Avifauna Management Plan. Yellow-tailed Black Cockatoo, another iconic species in the region which have been observed flying at RSA, will also be monitored under the Bat and Avifauna Management Plan.

Arboreal mammals of significance which are known to occur in the area, namely Strzelecki Koala and Greater Glider, are considered unlikely to be impacted by the wind farm development, as their core areas of habitat will not be impacted. Further details regarding the protocol for managing koalas on site can be found in the Flora and Fauna Management Plan. Additionally, large old trees should be checked for hollows prior to removal.

2.9 Environmental Monitoring

Environmental monitoring will be a fundamental component of both the construction and operational EMPs for the Project. Detailed monitoring programs would be developed during the preparation of the EMP. An outline of the proposed monitoring methods, locations, frequency, criteria and responsibilities will be detailed in the relevant EMP.

During site operation, site staff will conduct regular visual inspections of the site and its infrastructure to confirm status and operation. Where issues or problems are identified, they would be addressed as part of the inspection.

Table 4: Summary of Monitoring Methods

Element	Descriptions
Land Capability	Monitor soil stability and assess for erosion potential Inspect for landslips and surface soil erosion regularly
Ecology	Ensure any direct impact to fauna is recorded and review records monthly; Inspect vegetation exclusion zones weekly; Monitor downstream conditions in waterways regularly and conduct surveys of sensitive species annually; Implement and review Pest Plant Management Plan regularly; Review Bat and Avifauna Management Plan. This will include criteria that identifies the need for monitoring, significant impact thresholds, and mitigation actions.
Heritage	Inspect site regularly Record any findings Review and assess records regularly
Air and Greenhouse	Conduct pre and post construction assessments of air and water quality to ensure no degradation
Safety	The EMPs will require the ongoing monitoring of the wind farm's operations to detect any abnormal operations that may present a hazard.
Socio-Economic	Maintain regular communications with communities and stakeholders Monitor community feeling through assessing feedback regularly
Waste Management	The EMPs will require the development and implementation of a Waste Management Plan and ensure all personnel are advised of the waste management and disposal procedures outlined, prior to commencement of works.

In general:

- Establish a baseline monitoring program before construction commences. ·
- Prepare an inspection, monitoring and auditing program, designed to match the environmental risks for the unique site conditions. ·
- Review records regularly
- Ensure that remedial action is taken promptly when monitoring, inspections or audit results reveal a problem in environment management. ·
- Ensure that all monitoring is conducted by a NATA registered laboratory, either directly, or under supervision. ·
- Arrange for regular independent audits of environmental performance and the environmental management system.