5 Offset management measures

The offset area management measures include, but are not limited to, management actions required on the offset site to abate those threats identified to the Coastal Swamp Oak TEC, Koala and GHFF. These identified threats to each species align with the relevant listing advice, conservation advice and threat abatement plan and recovery plan for each matter, and have been detailed in *Table 5* and are also summarised in *Section 3.3.1* (coastal swamp oak TEC), *Section 3.4.1* (koala habitat), and *Section 3.5.1* (GHFF habitat). A full assessment of the risks that these threats present is presented in *Section 4.*

The offset area management measures provide for the management, reporting, and the monitoring program (*Table 18*) that will be undertaken for the period of EPBC Act approval. Protection of the offset area will be maintained under the *Vegetation Management Act 1999* (Qld) (**VM Act**) as a Category A area of vegetation (vegetation subject to a restoration order or an offset).

The management actions include:

- Limiting vegetation clearing to only those areas required for maintaining fencing and fire control lines
- Prohibiting alternate land use and activities during the period of the declared area (e.g. timber harvesting, cropping)
- Restricting unauthorised access
- Excluding all domestic livestock from Greenridge
- Limit domestic livestock to specific areas at Tabooba
- Controlling pest animals
- Managing fire
- Controlling invasive plants
- Thinning of thickened areas

The management schedules describe the actions to be undertaken on the offset sites at Tabooba (*Table 12*) and at Greenridge (*Table 13*).

A separate fire management strategy has been developed specifically for each of the two offset properties which implements the recommended fire strategy for the relevant REs in the Tabooba offset areas (*Table 14*) and in the Greenridge offset areas (*Table 15*).

Additionally, a Coastal Swamp Oak TEC rehabilitation and revegetation plan has been developed for AU3 at Greenridge (refer to *Appendix C*). this revegetation plan will be implemented over a 5-year period to reduce the risk of seasonal variations affecting plant establishment.

The risk assessment undertaken for the offset areas identified the impact of pest animals as one of the most significant risks to the success of the offsets, for all of Coastal Swamp Oak TEC, Koala and GHFF. Accordingly, detailed pest animal management strategies have been developed for each property and are detailed further in the sections below.

Regular offset area reports will be prepared by TMR as listed in *Table 18* and *Table 19* (refer to *Section 8*). These will report against each of the management actions shown in *Table 12* and *Table 13.* These management actions enable the offset site to improve to achieve the scores in *Table 16*, thus attaining and maintaining the completion criteria required of the offset. The reports will provide transparency regarding how the site management actions are being implemented,

and where relevant, identify any force majeure events impacting the offset site, and any non-compliance with the management plan.

Reducing the impact of pest animals on Tabooba

Wild dogs and European foxes are present on Tabooba and reducing their impacts on native animals will be critical to improving and sustaining the habitat quality.

Although 1080 baiting is considered to be the most effective and efficient control technique currently available to reduce wild dog and European fox impacts; other secondary control tools may be required if target animals show bait aversion or as indicated as a corrective action measure. These techniques include foot hold trapping and canid pest ejectors (see *Appendix B*).

Although feral pigs and feral deer have not been recorded on the site at this time, these pest animals have formed populations in the area and it is very likely that these pests are either already present at low densities or will be observed on the site over the life of this OAMP. As such, feral pig and feral deer management actions are planned for (and outlined in *Table 12*).

Feral pig control will be carried out upon the detection of feral pig activity and may involve baiting simultaneously at 3 or 4 sites across the property. Adjoining landholders may also be involved. The primary feral pig control technique should be baiting (either 1080 grain or sodium nitrate (Hoggone®) is suitable). Feral pig baiting will be carried out by trained operators in accordance with the product label and or 1080 standards (see above). The relevant SOP must be followed (especially in relation to free feeding requirements) (see *Appendix B*). Feral pig trapping is not as efficient as baiting at removing large proportions of the population; however, may be used as a secondary control tool where baiting is not suitable or permitted. Feral pig trapping will be carried out in accordance with the SOP in *Appendix B*.

Feral deer, both rusa deer (*Cervus timorensis*) and red deer (*Cervus elaphus*), have been recorded throughout the region and are known to be spreading rapidly across South East Queensland (**SEQ**). Even low-density feral deer populations can have severe and lasting impacts on native vegetation (particularly young trees). Any observed feral deer will trigger a rapid response to initiate a ground shooting operation. This program (and actions) will be set out in an approved shooting plan and be in compliance with the relevant SOP in *Appendix B*.

Reducing the impact of pest animals on Greenridge

Feral pigs and European foxes have been recorded on Greenridge. Uncontrolled feral pig populations will have detrimental impacts on the habitat condition of this offset, especially the Coastal Swamp Oak TEC vegetation community. Effective feral pig control on Greenridge will require ongoing best practice control. Feral pig control will aim to reduce populations by at least 70% in the first year with follow-up control activities conducted within the feral pig gestation period (four months).

As Greenridge is close to urban developments, but does have restricted access, pest animal management would be particularly suited to trapping and shooting.

Feral pig trapping can be utilised as part of this plan but should only be attempted where baiting is not allowed or suitable. Feral pig trapping (especially free feeding) will be carried out in accordance with the SOP in *Appendix B*.

Wild dogs, albeit rare and European foxes are present on Greenridge and adjacent properties and reducing their impacts on native animals will be critical to improving and sustaining the health of the offset. Control tools may include shooting and/or foot hold trapping and canid pest ejectors (see *Appendix B*).

Although thought to be absent from the site at this time, feral deer, being rusa deer (*Cervus timorensis*), red deer (*Cervus elaphus*) and fallow deer (*Dama dama*) have been recorded throughout the region and are known to be spreading rapidly across SEQ. Even low-density feral deer populations can have severe and lasting impacts on native vegetation (particularly young trees). Any observed feral deer will trigger a rapid response to initiate a ground shooting operation. This program (and actions) will be set out in an approved shooting plan and be in compliance with the relevant SOP in *Appendix B*.

Table 12: Tabooba offsets - management actions, triggers and corrective actions

The management actions shown in this table are consistent with the risks identified in the listing advice, conservation advice, and threat abatement plans relevant to each matter.

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
Degradation of Koala and GHFF habitat	Koala and GHFF management	Increase the habitat quality scores for remnant and regrowth Koala and GHFF habitat (AU4) based on the results of baseline and subsequent monitoring events to achieve the interim targets and completion criteria targets as listed in *Table 16*.	Implement pest animal control management actions Implement invasive plants and environmental weed control management actions. Undertake livestock grazing in accordance with livestock grazing management actions. Undertake planned burns in remnant and regrowth Koala and GHFF habitat in accordance with relevant RE fire management guidelines (*Table 14*). Undertake strategic ecological thinning in regrowth and remnant areas (e.g., non-eucalypt and non GHFF habitat trees) if recommended by appropriate qualified ecologist.	TMR and associated contractors	Monitoring of offset value habitat quality scores will be undertaken in accordance with *Section 8*. The results of monitoring events will be compared against the habitat quality scores and completion criteria to determine the progress of the offset area and recorded as part of reporting (see *Section 8*).	Koala and GHFF habitat quality scores, performance targets and completion criteria (*Table 16*) are not on track to being achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger: • Within one month after detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. • Within two months after detection of the trigger, complete a re-evaluation of the suitability of the relevant management measures in the OAMP. The re-evaluation must identify appropriate corrective actions. Step 2: Implementation of corrective action/s The appropriate corrective actions identified under Step 1 will be implemented as soon as practicable, and in any case within six months after detection of the trigger.
Habitat or vegetation loss through land clearing	Maintain the extent of offset value habitat within the offset area	No unapproved and/or intentional clearing of vegetation of Koala and GHFF habitat offset area, except for clearing that is required for fencing, access, firebreaks, ecological restoration and public safety.	Protection of the offset area via a declared area under Section 19E and 19F of the VM Act, as described in *Section 9* to be registered within six months of the approval of this OAMP.	TMR and associated contractors	Advise DCCEEW within 5 business days when the approved declared area over the offset has been registered by the Queensland Department of Resources. Reporting to the Australian Government consistent with any and all EPBC Act approval(s).	Any activities in contravention of the declared area management plan.	Step 1: Investigate cause of trigger (e.g. unauthorised access) • As soon as practicable, and in any case within one month of detection of the trigger, identify appropriate corrective actions. Step 2: Implementation of corrective action/s • As soon as practicable, and in any case within two months of detection of the trigger, the appropriate corrective actions must be implemented. These may include (though are not limited to) additional fencing and/or signage and security for the offset area.
			Construction and maintenance of access tracks, fencing and firebreaks will be undertaken in accordance with the requirements of *Table 10.* If vegetation clearing is required for fencing, access (e.g., weed control), firebreaks or public safety it must be undertaken in accordance with best practice management methods and any applicable legislative requirements. Any clearing and/or ecological thinning in accordance with the advice of an appropriately qualified ecologist.	TMR and associated contractors	Quarterly inspections will monitor and document if any unapproved and/or intentional clearing of vegetation within the offset area Quarterly inspections will monitor and document vegetation clearing that has occurred for fire break, access road or fence line maintenance.	Any unapproved and/or intentional clearing within the offset area	
Degradation of habitat by overgrazing	Grazing management	Livestock to be excluded from the offset area at specific times. When the habitat has become more established	Fences are maintained in a stockproof condition and allow for exclusion of livestock from the offset area. Any new or replacement fencing will be wildlife-friendly including the use of a plain top wire.	Land manager, TMR	Quarterly inspections will monitor and document if presence or evidence of livestock are present in offset area.	Detection and/or evidence of livestock in offset area outside of specified timeframes and/or if DMY is <1,400kg/ha.	Upon being notified or becoming aware of prohibited livestock grazing in the offset area, TMR (or their successors or assigns) is to remove the livestock from the area (if present) and assess the adequacy of fencing within 10 days. The land manager is to undertake fence

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
		and better quality, livestock may be progressively removed from the offset area.	Cattle to be excluded from the Koala and GHFF offset areas during periods of drought and/or if DMY is <1,400kg/ha (see *Appendix D*) Cattle to be introduced in offsets area if DMY is >3,000kg/ha between April – September and the soil is dry. Cattle to be removed from the offsets area at commencement of the wet season >25mm October – March and/or if DMY is <1400kg/ha January.		When the habitat has become more established and better quality, the DMY can be expected to reduce as the canopy and shrub layer recovers. The need to utilise grazing to reduce fuel load (DMY) should reduce over time.		maintenance and repairs to resecure the offset area within 10 days.
Introduction, establishment and spread of non-native weeds including restricted invasive plants listed under the Biosecurity Act 2014 *(Qld)*	Invasive plants and environmental weed management listed under the *Biosecurity Act 2014* (Qld)	Invasive plants and environmental weed cover must not exceed 10% cover of the offset area by Year 20. No new restricted invasive plants listed under the *Biosecurity Act 2014* (Qld) are identified at any monitoring site (based on subsequent monitoring events).	All vehicles accessing the offset area are required to have undergone a weed inspection and vehicle hygiene check, confirming that they are weed free, before accessing the site. Chemical and/or mechanical control of all invasive plants and environmental weeds in accordance with the control measures outlined in the Biosecurity Queensland Fact Sheets or other sources of information. If a new weed infestation is identified, consult with local NRM Catchment Group, Healthy Land and Water, Council and Queensland Department of Agriculture and Fisheries to determine the invasiveness of the weed and tested/ recommended control measures. Control the spread of new infestation/s. Treat new infestation/s promptly to reduce the extent and spread of the infestation.	Land manager, TMR and associated contractors	Map invasive plant and environmental weeds as part of baseline and ongoing habitat quality monitoring. Quarterly inspections will observe and record the presence of weeds and success of previously applied weed control measures. The inspection will include before and after photos of the weed control area.	Pest plants dominate isolated area and or occur in an area greater than 10% of the offset area. An invasive weed species is identified at one or more monitoring sites, or opportunistically during any site inspection or other monitoring.	Step 1: Investigate cause of trigger Step 2: Implementation of corrective action(s) Upon being notified or becoming aware of pest plants dominating isolated areas and or occupying greater than 10% of the offset area, TMR will implement pest control measures within one month. These measures may include, and are not limited to: • foliar spraying • basal bark spraying • stem injection • cut stump • cut and swab • stem scraper • wick applicators • physical removal.
Increased population of feral animals in the offset area.	Pest animal management	Reduction in the abundance of wild dog, feral cat and other feral animals from the first year of management.	Participate fully in, and cooperate with, any and all regional pest control programs, unless those would otherwise contravene a part of this OAMP. Pest animal control program to be implemented to best practice standards via appropriately qualified person/s. Control feral pigs, European foxes and wild dogs via a coordinated multiple pronged management program. Pest control will be undertaken twice within a 3-month period. Additionally, if the land manager, during quarterly inspections of the offset area notes an incursion of feral deer, feral pig or wild dog activity, an additional coordinated multiple pronged management program is to be instigated until the increased activity has ceased and/or the deer, feral pigs and wild dogs are removed.	Land manager, TMR and associated contractors	Monitoring of this management action will be undertaken by an appropriately qualified person appointed by TMR at least four times annually. Quarterly inspections will involve traversing the offset area with streams, low lying areas and vehicle access tracks being noted to record the presence of wallow holes, tracks and visual incidents in the offset area. If detected, these areas will be GPS-recorded and photographed and rechecked at the next quarterly inspection.	Any observed evidence of feral animal presence and/or habitat damage in the offsets area	• Upon being notified or becoming aware of pest animal populations exceeding the threshold, the land manager is to implement all necessary or appropriate control measures needed to reduce pest animal populations to below trigger thresholds. The land manager is to have completed implementation of all necessary or appropriate pest control measures within one month. • The land manager may approach neighbouring landowners to discuss the increased pest animal presence and an integrated control program may be developed. If an integrated control program is considered appropriate, the land manager will make best endeavours to reach agreement with neighbouring landowners to implement such a program. • If impacts from the pest animal populations have not naturally remediated within six months of completion of implementation of the control measures, the land manager is to undertake and complete all works required to remediate those impacts.
Degradation of habitat by feral pigs	Feral pig management	Reduction in observed feral pig abundance from the first year of management. With pigs, the gestation period is 3 months, so if control actions are undertaken 3 months apart, the population can be heavily impacted.				An increase in mean feral pig abundance from first year and subsequent monitoring events.	

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
Fire: the impact from uncontrolled wildfire or inappropriate fire regimes cause degradation in offset area habitat quality	Fire management	Uncontrolled fire does not occur in the offset area. Planned burns undertaken in remnant and regrowth Koala and GHFF in accordance with relevant RE fire management guidelines (*Table 14*).	Implement fire management in accordance with requirements in this OAMP, including: • Fire breaks reformed every 2 years and slashed as required to enable access and maintain fuel loads below 3,000 tonnes of dry matter yield/ha. • Wildfire response procedure developed • Undertake planned burns in remnant and regrowth Koala and GHFF habitat in accordance with relevant regional ecosystem fire management guidelines (*Table 14*) and/or weed control works. • Planned burns target mosaic burning resulting in patches of unburnt vegetation providing variation in the stages of response from fire and diversity of habitat. A mosaic is achieved with generally 40–80 per cent burnt within the target communities (refer Southeast Queensland Bioregion Planned Burn Guidelines, Qld Government 2013) • Controlled grazing for fuel reduction purposes.	Land manager, TMR and associated contractors	Quarterly inspections will monitor and document if there is evidence of wildfire, prohibited burning or force majeure events. Quarterly inspections will monitor and document if a prescribed low-intensity ecological burn has occurred, and recorded in the Annual report with the written advice from an ecologist or other suitably qualified person (e.g. Fire Warden)	The occurrence of deliberately lit fires. Offset area habitat degradation as a result of a lack of or inappropriate fire regimes as determined through monitoring.	Step 1: Investigate cause of trigger • Within one month of detection of the trigger, complete an investigation into the reasons why the fire management measures have resulted in a decrease in habitat quality scores. That investigation must review adherence to the fire management measures and must identify appropriate corrective actions. Step 2: Implementation of corrective action/s • Corrective action: upon being notified or becoming aware of a prohibited fire in the offset area, the landholder is to reassess and implement new access protocols for any lessees etc., signage and general access within one fortnight. • Corrective action: subsequent to any occurrence of fire in the offset area, the land manager suitable qualified person appointed by the Landholder will: 1. inspect and repair, and widen if necessary, all firebreaks; and 2. reassess fuel load reduction practices; and 3. exclude grazing until the DMY is >3,000 kg/ha.
Offset fails to achieve the performance targets and completion criteria within the 10- or 20-year timeframe.	Achieve the performance targets and completion scores in *Section 6* at Year 10 or Year 20.	The performance targets and completion criteria are achieved by Year 10 or Year 20.	All management actions outlined in in this OAMP will be implemented to ensure that the performance targets and completion criteria are achieved.	TMR and associated contractors	Monitoring of the offset area will be undertaken in accordance with *Section 8*. The results of monitoring events will be compared against the performance targets and completion criteria to determine the progress of the offset area and recorded as part of reporting.	The performance targets and completion criteria are not achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger • Within one month of detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. This investigation must re-evaluate the suitability of the relevant management measures in the OAMP and must identify appropriate corrective actions. Step 2: Implementation of corrective action/s As soon as practicable, and in any case within eight months of detection of the trigger, complete implementation of the corrective actions identified under Step 1. These may include (though are not limited to): • Increasing the frequency and intensity of pest animal and weed control measures or revising the type of measures to be implemented. • Modifying the fire management measures, to better support enhancement of offset values. If the investigation under Step 1 recommends changes to the management regime, then as soon as possible, and in any case within six months of detection of the trigger, implement a revised OAMP incorporating those recommended changes.

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
Site access	Unauthorised persons, vehicles, and/or stock are prevented from accessing the site, and authorised stock are prevented from incurring during exclusion times	Public access to the offset area is prohibited. Access is restricted to those authorised persons required to undertake actions described in this management plan, including the landholder, and approval holder staff and their contractors and assigns. The offset area is not to be utilised for any purpose including recreational activities, or any other activities that deter from achieving the outcomes of this plan. No evidence of unauthorised persons, vehicles, and/or stock is detected on site at any point. Fences and signage are erected at all necessary points and kept in good repair throughout the life of the EPBC Act approval.	Fences will be maintained to prevent unauthorised access and to control stock presence. Signs will be erected at all entrances and potential access points to the site stating that access to the site is forbidden. Security cameras are to be installed at the 2 access points to the property. All signs and any new planned fences will be erected within six months of the approval of this OAMP. Any new or replacement fencing will be wildlife-friendly including the use of a plain top wire.	Land manager, TMR and associated contractors	Monitoring of this management action will be undertaken by the land manager or suitable qualified person within 3 months of the offset area being legally secured and during quarterly inspections. Quarterly inspections will monitor and document evidence of unauthorised access to the offset area. Quarterly inspections will monitor and document if signage is fit for purpose	Evidence of unauthorised persons, vehicles, and/or stock is detected at any point. Evidence of stock is detected at any point during exclusion times. Damage is detected to any fence or sign.	For evidence of unauthorised persons, vehicles, and/or stock; or evidence of stock in an exclusion area: Step 1: determine access method • Upon being notified or becoming aware of prohibited access to the offset area, the Landholder is to reassess access protocols for any lessees etc., signage and general access within one fortnight. • Damage to signage will be repaired within one fortnight of noting the damage. • If there are areas that have been negatively impacted, the regeneration of those areas will be added to the monitoring sites at *Table 20* and monitored during the quarterly inspections. • Signage will be repaired and maintained as required by the Pastoral Manager, Landholder or suitable qualified person appointed by the approval holder.

Table 13: Greenridge offsets - management actions, triggers and corrective actions

The management actions shown in this table are consistent with the risks identified in the listing advice, conservation advice, and threat abatement plans relevant to each matter.

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
Degradation of Coastal Swamp Oak TEC	Coastal Swamp Oak TEC rehabilitation and enhancement plan	Rehabilitate 22.03 ha (AU3) of Coastal Swamp Oak TEC to achieve the interim targets and completion criteria targets as listed in *Table 16.*	Implementation of the Coastal Swamp Oak TEC rehabilitation and enhancement plan upon approval of this OAMP (refer *Appendix C*). Implementation of this rehabilitation plan will be undertaken over a 5-year period to minimise the impact of seasonal variability on tubestock survival. First planting will be scheduled for spring 2024 with timing dependent on seasonal conditions.	TMR and associated contractors	Monitoring of offset value habitat quality scores will be undertaken in accordance with *Section 8.* The results of monitoring events will be compared against the habitat quality scores in the interim performance targets and completion criteria to determine the progress of the offset area and recorded as part of reporting (see *Section 8*).	Coastal Swamp Oak TEC habitat quality scores, performance targets and completion criteria (*Table 16*) are not on track to being achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger: • Within one month after detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. • Within two months after detection of the trigger, complete a re-evaluation of the suitability of the relevant management measures in the OAMP. The re-evaluation must identify appropriate corrective actions. Step 2: Implementation of corrective action/s The appropriate corrective actions identified under Step 1 will be implemented as soon as practicable, and in any case within six months after detection of the trigger. Lessons learnt from earlier plantings will inform processes and guide continual improvement and innovation in the establishment of the TEC.
	Coastal Swamp Oak TEC management	Increase the habitat quality scores for remnant and regrowth Coastal Swamp Oak TEC (AU1, AU2, AU4) based on the results of baseline and subsequent monitoring events to achieve the interim targets and completion criteria targets as listed in *Table 16*.	Pest animal control management actions in Coastal Swamp Oak TEC Invasive plants and environmental weed control management actions in Coastal Swamp Oak TEC. Undertake planned burns in remnant and regrowth Coastal Swamp Oak TEC in accordance with relevant regional ecosystem fire management guidelines (see *Table 15*). Strategic ecological thinning in regrowth and remnant areas if recommended by appropriate qualified ecologist.	TMR and associated contractors	Monitoring of offset value habitat quality scores will be undertaken in accordance with *Section 8.* The results of monitoring events will be compared against the habitat quality scores in the interim performance targets and completion criteria to determine the progress of the offset area and recorded as part of reporting (see *Section 8*).	Coastal Swamp Oak TEC habitat quality scores, performance targets and completion criteria (*Table 16*) are not on track to being achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger: • Within one month after detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. • Within two months after detection of the trigger, complete a re-evaluation of the suitability of the relevant management measures in the OAMP. The re-evaluation must identify appropriate corrective actions. Step 2: Implementation of corrective action/s The appropriate corrective actions identified under Step 1 will be implemented as soon as practicable, and in any case within six months after detection of the trigger.
Degradation of habitat Koala and GHFF	Koala and GHFF management	Increase the habitat quality scores for remnant and regrowth Koala and GHFF habitat (AU4) based on the results of baseline and subsequent monitoring events to achieve the interim targets and completion criteria targets as listed in *Table 16*.	Pest animal control management actions in Koala and GHFF habitat Invasive plants and environmental weed control management actions in swamp oak TEC. Undertake planned burns in remnant and regrowth Koala and GHFF habitat in accordance with relevant regional ecosystem fire management guidelines (*Table 15*). Strategic ecological thinning in regrowth and remnant areas (e.g., non-eucalypt and non-	TMR and associated contractors	Monitoring of offset value habitat quality scores will be undertaken in accordance with *Section 8.* The results of monitoring events will be compared against the habitat quality scores in the interim performance targets and completion criteria to determine the progress of	Koala and GHFF habitat quality scores, performance targets and completion criteria (*Table 16*) are not on track to being achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger: • Within one month after detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. • Within two months after detection of the trigger, complete a re-evaluation of the suitability of the relevant management measures in the OAMP. The re-evaluation must identify appropriate corrective actions.

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
			GHFF habitat trees) if recommended by an appropriate qualified ecologist.		the offset area and recorded as part of reporting (see *Section 8*).		Step 2: Implementation of corrective action/s The appropriate corrective actions identified under Step 1 will be implemented as soon as practicable, and in any case within six months after detection of the trigger.
Habitat or vegetation loss through land clearing	Maintain the extent of offset value habitat within the offset area	No unapproved and/or intentional clearing of vegetation within the Coastal Swamp Oak TEC, Koala and/or GHFF offset area, except for clearing that is required for fencing, access, firebreaks, ecological restoration and public safety.	Protection of the offset area via a declared area under Section 19E and 19F of the VM Act, as described in *Section 9* to be registered within 12 months of the date of the approval (17 March 2024).	TMR and associated contractors	Updated OAMP with approved declaration of the area for Coastal Swamp Oak TEC, Koala and/or GHFF offset. Reporting to the Australian Government consistent with any and all EPBC Act approval(s).	Any activities in contravention of the declared area management plan.	Step 1: Investigate cause of trigger (e.g. unauthorised access) • As soon as practicable, and in any case within one month of detection of the trigger, identify appropriate corrective actions. Step 2: Implementation of corrective action/s • As soon as practicable, and in any case within two months of detection of the trigger, the appropriate corrective actions must be implemented. These may include (though are not limited to) additional fencing and/or signage and security for the offset area.
			Construction and maintenance of access tracks, fencing and firebreaks will be undertaken in accordance with the requirements of *Table 11.* If vegetation clearing is required for fencing, access (i.e. weed control), firebreaks or public safety, it must be undertaken in accordance with best practice management methods and any applicable legislative requirements. Any clearing and/or ecological thinning will be in accordance with the advice of an appropriately qualified ecologist.	TMR and associated contractors	Quarterly inspections will monitor and document if any unapproved and/or intentional clearing of vegetation within the Coastal Swamp Oak TEC, Koala and/or GHFF offset area Quarterly inspections will monitor and document vegetation clearing that has occurred for fire break, access road or fence line maintenance.	Any unapproved and/or intentional clearing of vegetation within the Coastal Swamp Oak TEC, Koala and/or GHFF offset area	
Degradation of habitat by overgrazing	Grazing management	Domestic livestock to be excluded from offset areas	Ensure suitable fencing to exclude livestock from offset areas	Land manager	Quarterly inspections will monitor and document if presence or evidence of livestock are present on the property	Detection and/or evidence of livestock on the property	Upon being notified or becoming aware of prohibited livestock grazing on the property, the land manager is to remove the livestock from the area (if present) and assess the adequacy of fencing within 10 days. The land manager is to undertake fence maintenance and repairs to resecure the offset area within 10 days.
Entanglement of GHFF in barbed wire fencing	Fencing	All new and replacement fencing to be wildlife-friendly	Any new or replacement fencing will be wildlife-friendly including the use of a plain top wire.	Land manager, TMR	Quarterly inspections	When fencing is being replaced or new fencing is planned/constructed.	Any new or replacement fencing will be wildlife-friendly including the use of a plain top wire.
Introduction, establishment and spread of non-native weeds including restricted invasive plants listed under the Biosecurity Act 2014 *(Qld)*	Invasive plants and environmental weed management listed under the *Biosecurity Act 2014* (Qld)	Weed cover must not exceed 10% cover of the offset area by Year 20. No new restricted invasive plants listed under the *Biosecurity Act 2014* (Qld) are identified at any monitoring site (based on subsequent monitoring events).	All vehicles accessing the offset area are required to have undergone a weed inspection and vehicle hygiene check, confirming that they are weed free, before accessing the site. Chemical and/or mechanical control of all invasive plants and environmental weeds in accordance with the control measures outlined in the Biosecurity Queensland Fact Sheets or other sources of information. If a new weed infestation is identified, consult with local NRM Catchment Group, Healthy	Land manager, TMR and associated contractors	Map invasive plant and environmental weeds as part of baseline and ongoing habitat quality monitoring. Quarterly inspections will observe and record the presence of weeds and success of previously applied weed control measures. The inspection will include before and	Pest plants dominate isolated area and or occur in an area greater than 10% of the offset area. A pest weed species is identified at one or more monitoring sites, or opportunistically during any site	Step 1: Investigate cause of trigger Step 2: Implementation of corrective action(s) Upon being notified or becoming aware of pest plants dominating isolated areas and or occupying greater than 10% of the offset area, TMR is to implement pest control measures within one month. These measures may include, and are not limited to: • foliar spraying • basal bark spraying • stem injection

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
			Land and Water, Council and Queensland Department of Agriculture and Fisheries to determine the invasiveness of the weed and tested/ recommended control measures Control the spread of new infestation/s. Treat new infestation/s promptly to reduce the extent and spread of the infestation.		after photos of the weed control area.	inspection or other monitoring.	• cut stump • cut and swab • stem scraper • wick applicators • mechanical removal.
Increased impacts of feral animals in the offset area.	Pest animal management	Reduction in the observed abundance of wild dog, European foxes and other feral animals from the first year of management.	Participate fully in, and cooperate with, any and all regional pest control programs, unless those would otherwise contravene a part of this OAMP. Implementation of fire ant control baiting program. TMR will coordinate this program with the Department of Agriculture and Fisheries who have carriage of fire ant control programs. Pest animal control program to be implemented via appropriately qualified person/s. Control feral pigs, European foxes and wild dogs via a coordinated multiple pronged management program. Pest control will be undertaken twice within a 3-month period. Additionally, if the land manager, during quarterly inspections of the offset area notes an incursion of feral deer, feral pig or wild dog activity, an additional coordinated multiple pronged management program is to be instigated until the increased activity has ceased and/or the deer, feral pigs and wild dogs are removed.	Land manager, TMR and associated contractors	Monitoring of this management action will be undertaken by an appropriately qualified person appointed by TMR at least four times annually. Quarterly inspections will involve traversing the offset area with streams, low lying areas and vehicle access tracks being noted to record the presence of wallow holes, tracks and visual incidents in the offset area. If detected, these areas will be GPS-recorded and photographed and rechecked at the next quarterly inspection.	Any observed evidence of feral animal presence and/or habitat damage in the offsets area	• Upon being notified or becoming aware of pest animal populations exceeding the threshold, the land manager is to implement all necessary or appropriate control measures needed to reduce pest animal populations to below trigger thresholds. The land manager is to have completed implementation of all necessary or appropriate pest control measures within one month. • The land manager may approach neighbouring landowners to discuss the increased pest animal presence and an integrated control program may be developed. If an integrated control program is considered appropriate, the land manager will make best endeavours to reach agreement with neighbouring landowners to implement such a program. • If impacts from the pest animal populations have not naturally remediated within six months of completion of implementation of the control measures, the land manager is to undertake and complete all works required to remediate those impacts.
Degradation of habitat by feral pigs	Feral pig management	Reduction in mean feral pig relative abundance from the first year of management. With pigs, the gestation period is 3 months, so if control actions are undertaken 3 months apart, the population can be heavily impacted.				Detection of any fire ant nests, which will be reported to the Department of Agriculture and Fisheries. An increase in mean feral pig abundance from first year and subsequent monitoring events.	
Fire: the impact from uncontrolled wildfire or inappropriate fire regimes cause degradation in offset area habitat quality	Fire management	Uncontrolled fire does not occur in the offset area. Planned burns undertaken in remnant and regrowth Coastal Swamp Oak TEC, Koala and GHFF habitat in accordance with relevant RE fire management guidelines (*Table 15*).	Implement fire management in accordance with requirements in this OAMP, including: • Fire breaks reformed every 2 years and slashed as required to enable access and maintain fuel loads below 3,000 tonnes of dry matter yield/ha. • Wildfire response procedure developed • Undertake planned burns in remnant and regrowth Coastal Swamp Oak TEC, Koala and GHFF habitat in accordance with relevant RE fire management guidelines (*Table 15*) and/or weed control works and/or Coastal Swamp Oak TEC rehabilitation and enhancement plan. • Planned burns target mosaic burning resulting in patches of unburnt vegetation providing variation in the stages of response from fire and	Land manager, TMR and associated contractors	Quarterly inspections will monitor and document if there is evidence of wildfire, prohibited burning or force majeure events. Quarterly inspections will monitor and document if a prescribed low-intensity ecological burn has occurred, and recorded in the Annual report with the written advice from an ecologist or other suitably qualified person (e.g. Fire Warden) Weed cover is to be monitored by the same methodology and at the same time	The occurrence of deliberately lit fires. Offset area habitat degradation as a result of a lack of or inappropriate fire regimes as determined through monitoring.	Step 1: Investigate cause of trigger • Within one month of detection of the trigger, complete an investigation into the reasons why the fire management measures have resulted in a decrease in habitat quality scores. That investigation must review adherence to the fire management measures and must identify appropriate corrective actions. Step 2: Implementation of corrective action/s • Corrective action: upon being notified or becoming aware of a prohibited fire in the offset area, the landholder is to reassess and implement new access protocols for any lessees etc., signage and general access within one fortnight. • Corrective action: subsequent to any occurrence of fire in the offset area, the land manager suitable qualified person appointed by the Landholder will: • inspect and repair, and widen if necessary, all firebreaks; and

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
			diversity of habitat. A mosaic is achieved with generally 40–80 per cent burnt within the target communities (refer Southeast Queensland Bioregion Planned Burn Guidelines, Qld Government 2013)				• reassess fuel load reduction practices.
Offset fails to achieve the performance targets and completion criteria within the 10- or 20-year timeframe	Achieve the performance targets and completion scores in *Section 6* at Year 10 or Year 20.	The performance targets and completion criteria are achieved by Year 10 or Year 20.	All management actions outlined in in this OAMP will be implemented to ensure that the interim performance targets and completion criteria are achieved.	TMR and associated contractors	Monitoring of the offset area will be undertaken in accordance with *Section 8*. The results of monitoring events will be compared against the performance targets and completion criteria to determine the progress of the offset area and recorded as part of reporting.	The performance targets and completion criteria are not achieved by Year 10 or Year 20.	Step 1: Investigate cause of trigger • Within one month of detection of the trigger, complete an investigation into the reasons why the interim performance targets or the completion criteria were not achieved within the specified timeframes. This investigation must re-evaluate the suitability of the relevant management measures in the OAMP and must identify appropriate corrective actions. Step 2: Implementation of corrective action/s As soon as practicable, and in any case within eight months of detection of the trigger, complete implementation of the corrective actions identified under Step 1. These may include (though are not limited to): • Increasing the frequency and intensity of pest animal and weed control measures or revising the type of measures to be implemented. • Modifying the fire management measures, to better support enhancement of offset values. If the investigation under Step 1 recommends changes to the management regime, then as soon as possible, and in any case within six months of detection of the trigger, implement a revised OAMP incorporating those recommended changes.
Site access	Unauthorised persons, vehicles, and/or stock are prevented from accessing the site	Public access to the offset area is prohibited. Access is restricted to those authorised persons required to undertake actions described in this management plan, including the landholder, and approval holder staff and their contractors and assigns. The offset area is not to be utilised for any purpose including recreational activities, or any other activities that deter from achieving the outcomes of this plan. No evidence of unauthorised persons, vehicles, and/or stock is detected on site at any point.	Fences will be maintained to prevent unauthorised access and to control stock presence. Signs will be erected at all entrances and potential access points to the site stating that access to the site is forbidden. All signs and any new planned fences will be erected within six months of the approval of this OAMP.	Land manager, TMR and associated contractors	Monitoring of this management action will be undertaken by the land manager or suitable qualified person within 3 months of the offset area being legally secured and during quarterly inspections. Quarterly inspections will monitor and document evidence of unauthorised access to the offset area. Quarterly inspections will monitor and document if signage is fit for purpose	Evidence of unauthorised persons, vehicles, and/or stock is detected at any point. Evidence of stock is detected at any time. Damage is detected to any fence or sign.	For evidence of unauthorised persons, vehicles, and/or stock; or evidence of stock in an exclusion area: Step 1: determine access method • Upon being notified or becoming aware of prohibited access to the offset area, the Landholder is to reassess access protocols for any lessees etc., signage and general access within one fortnight. • Damage to signage will be repaired within one fortnight of noting the damage. • If there are areas that have been negatively impacted, the regeneration of those areas will be added to the monitoring sites at *Table 20* and monitored during the quarterly inspections. • Signage will be repaired and maintained as required by the land manager, TMR or suitable qualified person appointed by the approval holder.

Threat to offset values	Management activity	Performance objectives	Management actions (where, when and how the activity will be carried out).	Who will be carrying out the activity	Monitoring and reporting	Trigger for adaptive management and corrective action(s)	Corrective action and timing
		Fences and signage are erected at all necessary points and kept in good repair throughout the life of the EPBC Act approval.					

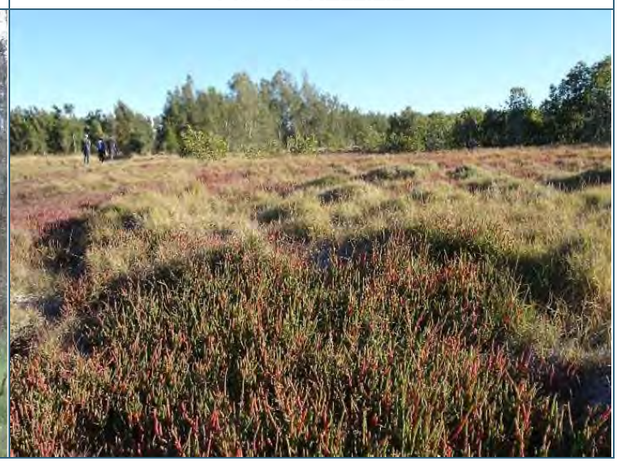
Table 14: Tabooba offsets fire management strategy

Offset area	Assess-ment unit	Area (ha)	Corresponding regional ecosystem	Regional ecosystem recommended fire strategy	Recommendations from the *Planned Burn Guidelines South East Queensland Bioregion* (Queensland Government 2013)
Koala and GHFF	AU1	49.84	12.8.16 remnant	SEASON: Summer to late autumn. INTENSITY: Low. INTERVAL: 3-6 years. STRATEGY: Aim to burn 40-60% of any given area. Spot ignition in cooler or moister periods encourages mosaics. ISSUES: Control of weeds is a major focus of planned burning in most areas. Maintain ground litter and fallen timber habitats by burning only with sufficient soil moisture. Burning should aim to produce fine scale mosaics of unburnt areas.	Key indicators of a healthy open forest or woodland (refer to the photos below): • Healthy open forest has a grass; sedge; or shrub-dominated understorey (or various mixtures); with a few canopy species of variable sizes (to eventually replace the canopy) and a healthy canopy. • Lower and mid stratum trees are scattered (e.g. eucalypts, wattles and she-oaks), but are not having any noticeable shading effects on ground stratum plants. • Fallen logs and hollow bearing trees may be present. • In shrubby open forest, shrub layer is dominated by sclerophyllous (hard-leaved) species (e.g. grass trees, banksia, pea-flowers) with healthy foliage. • In grassy or mixed open forest, grass clumps and/or sedges are well formed. • Grassy open forest is easy to walk through or see through. • Generally few weeds present.
	AU2	145.02	12.8.16 advanced regrowth	Follow guidelines for AU1 (12.8.16) with minimum interval of 6 years between fires until remnant status is achieved.	
	AU4	50.62	12.8.14 remnant	SEASON: Summer to winter. INTENSITY: Plan for low to moderate. Unplanned occasional high intensity wildfire will occur. a: Low to moderate. INTERVAL: 4-8 years maintains a healthy grassy system. 8-20 years for shrubby elements of understorey. STRATEGY: Aim for 40-60% mosaic burn. Needs disturbance to maintain RE structure (eucalypt overstorey with open understorey of predominantly non-rainforest species). a: Aim for 40-60% mosaic burn. Burn with soil moisture and with a spot ignition strategy so that a patchwork of burnt/unburnt country is achieved. ISSUES: Typically lower rainfall than other moist RE types, but prefers sheltered slopes and gullies where it maintains moist environment. Frequent fire is needed to maintain understorey integrity, keeping more mesic species low in the profile of the understorey so that other species can compete. It is essential that wildfires are not the sole source of fire in this ecosystem.	
	AU5	19.8	12.8.14 advanced regrowth	Follow guidelines for AU1 (12.8.14) with minimum interval of 8 years between fires until remnant status is achieved.	

Table 15: Greenridge offsets fire management strategy

Offset area	Assess-ment unit	Area (ha)	Corresponding regional ecosystem	Regional ecosystem recommended fire strategy	Recommendations from the *Planned Burn Guidelines South East Queensland Bioregion* (Queensland Government 2013)
Coastal Swamp Oak TEC	AU1	14.20	12.1.1 remnant	SEASON: Early winter or storm burning seasons. INTENSITY: Low to moderate. INTERVAL: Aim for a 6-7 year minimum threshold at a broad scale planning level. STRATEGY: Aim to retain at least 25-50% unburnt in any given year. This RE needs disturbance to maintain structure. Use fire to reduce opportunistic native (*Allocasuarina* spp.) or weed species dominance. Active fire management is required to reduce the accumulation of a significant dry fuel layer. Burns planned in surrounding REs should account for the disturbance requirements of this fringing vegetation. ISSUES: The fire ecology of this TEC is poorly known. Monitoring the impact of fire and recovery of the TEC is highly desirable. A long fire interval could increase fire intensity when fire occurs, thus detrimentally affecting the tree layer. Recovery should be relatively quick (approximately 10 years to a woodland/open forest community). A 'grassy' ecosystem might be lost if fire is excluded or too frequent (<2 years). Signs of problems in this community might include the regeneration of 'whipstick' communities and/or the presence of weeds (such as lantana). Fire exclusion and buffering from fire is not necessary. Where obligate seeding allocasuarinas are present in the under- and mid-storeys, fires causing 100% leaf scorch will kill these trees; therefore, fires of this intensity should be avoided. A seven-year minimum fire interval is required for obligate seeding allocasuarinas and casuarinas.	Fringing Coastal Swamp Oak TEC are fire-adapted communities which should be burnt in association with surrounding fire-adapted communities. Key indicators of health in fringing swamp she-oak forest: • Open to dense canopy of swamp she-oaks • *Melaleuca* and/or mangroves may be intermingled on the margins. • The ground stratum may be present as a sparse cover of salt-tolerant plants (e.g. marine couch); a cover of fallen 'leaves' (cladodes) and devoid of ground plants or with reeds, sedges and/or ferns. • Few or no weeds e.g. groundsel are present. • These areas may be subject to tidal inundation. Signs of where fire management is required in fringing swamp she-oak forest: • It is difficult to see through or walk into the forest • Increasing infestation of weeds, particularly groundsel • Accumulation of dead material in sedge/fern understorey where present • Build up of fine fuels such as dead grass material, leaf litter, suspended leaf litter, bark and twigs. Accumulation of elevated fuels is high or above.
	AU2	5.16	12.1.1 regrowth		
	AU3	22.03	RE12.1.1 non-remnant (cleared)	Fire exclusion. Manage as per AU1 and AU2 when vegetation meets high value regrowth and or RE 12.1.1 remnant status.	Fire exclusion. Manage as per AU1 and AU2 when vegetation meets high value regrowth and or RE 12.1.1 remnant status.
	AU4	22.78	12.3.20 remnant	SEASON: Late summer to mid-winter (after rain). INTENSITY: Planned and occasional unplanned burns (typically of higher intensity) influence the ecology of *Melaleuca* ecosystems. INTERVAL: Heath 8-12 years, Sedge 12-20 years, Mixed grass/shrub 6-20 years. STRATEGY: Aim for a 25-70% burn mosaic (in association with surrounding ecosystems, as *Melaleuca* ecosystems often occur in patches or along natural drainage lines). Fires may, depending on the conditions and type of vegetation, burn areas larger than just the *Melaleuca* ecosystem. Ensure secure boundaries from non-fire-regime-adapted ecosystems. Consider the needs of *Melaleuca* ecosystems based on understorey (i.e., heath dominated, sedge dominated or mixed grass/shrub) when planning burns. High soil moisture (or presence of water on the ground) is required, as avoidance of peat-type fires must be maintained. ISSUES: Fire regimes for *Melaleuca* ecosystems require further fire research. *Melaleuca* forests are fire-adapted, but too high an intensity or frequent fire will slow or prevent regeneration and lead to lower species richness (since these communities contain numerous obligate seed regenerating species that require sufficient fire intervals to produce seed). High intensity fires may kill trees and lead to whipstick regeneration. Too frequent fire may result in a net loss of nutrients over time from an already nutrient poor system. Fire associations are significantly influenced by understorey composition. *Melaleuca* communities with a heath understorey should burn in a similar way to coastal heath (8-12 years). Sedge understorey communities will burn in association with the surrounding ecosystems (so will often burn with them but sometimes not, such that these communities have a slightly less fire frequency). Mixed understorey communities burn in a similar way to dry sclerophyll, in association with the surrounding dry sclerophyll, though somewhat less frequently due to the additional moisture present in *Melaleuca* communities.	Key indicators of a healthy *Melaleuca* community • Understorey may contain a sparse to dense ground layer of grasses, sedges, forbs, ferns, orchids, shrubs, or any mix of these in the understorey, with *Melaleuca* species of variable sizes and a healthy canopy. • Cabbage tree palms may be present in the mid stratum or sub-canopy of some coastal communities • Permanent or seasonal standing water may be present. Some of the following may indicate that fire is required to maintain a *Melaleuca* community: • There is a dense accumulation of dead material (grasses/sedges/ferns) and grasses are beginning to collapse (no longer erect) • Increasing density of monkey vine (*Parsonsia* spp.) in the mid stratum • Surface and near-surface fine fuels such as leaf litter, bark and twigs have accumulated to High hazard (using the Overall Fuel Hazard Assessment Guide). • There has been a mass germination of *Melaleuca* in amongst or just above the ground layer • There has been a flush of pine wildlings or groundsel which have grown up and begun to shade out ground layer. Sometimes these form a whipstick stand of many closely spaced narrow trees.
Koala	AU4 AU5 AU6	28.22 4.74 12.48	12.3.20 remnant 12.3.20 regrowth 12.3.20 non-remnant (cleared)		
GHFF	AU4 AU5 AU6	28.22 4.74 12.48	12.3.20 remnant 12.3.20 regrowth 12.3.20 non-remnant (cleared)		

Offset area	Assess-ment unit	Area (ha)	Corresponding regional ecosystem	Regional ecosystem recommended fire strategy	Recommendations from the *Planned Burn Guidelines South East Queensland Bioregion* (Queensland Government 2013)
Saltmarsh			RE 12.1.2	STRATEGY: Do not burn deliberately. No fire management required. Largely non-flammable vegetation.	Limit fire encroachment into mangroves and saltmarsh Mangroves do not require fire and generally do not burn. Sometimes mangroves can be scorched in nearby planned burning operations or wildfire, but it is rare that any lasting damage is done. Care needs to be taken when burning around saltmarsh however, as it is potentially flammable. The main strategy is to burn with high tides or recent rain with groundwater seepage protecting saltmarsh vegetation. Although saltmarsh may occasionally burn, do not intentionally introduce fire. In most instances fire management should aim to limit fire encroachment into mangroves and saltmarsh areas maintaining mosaic burning in surrounding fire-adapted vegetation communities.

Plate 1: RE 12.8.16	*Plate 2: RE 12.1.1*	*Plate 3: RE 12.3.20*	*Plate 4: RE12.1.2*
			

5.1 Responsible parties

As the approval holder, TMR is accountable for implementing the OAMP, and commits to doing so. Completing the actions listed in the OAMP will be ensured through the annual reporting requirements (*Section 8*). TMR will coordinate reporting, reviewing, inspections, auditing and any adaptive management changes to the plan. A person within TMR (e.g. Environment Manager or equivalent) will be assigned the responsibility of managing offset requirements for TMR.

TMR will maintain accurate records substantiating all activities related to the management of the offset area, and the monitoring of the offset site, as described in *Section 8*. These records will be made available to the Department on request.

TMR, its subcontractors or assigns, will undertake the offset management actions and day to day management of the site, including fencing, managing fire breaks, weed management, feral animal management and grazing management. TMR, its subcontractors or assigns, will also undertake the landholder reporting as per *Table 19*.

TMR will engage suitably qualified persons to undertake the biocondition assessments, ecological studies and surveys, prepare reports and undertake inspections, as required in *Table 18* and *Table 19*.

5.2 Emergency procedures

Incidents identified at any of the offset sites will be reported by the lessee to TMR. The level of severity will dictate the necessary actions through TMR's formal incident management system. General incidents, for example, wild dog incursion, will be managed by TMR and responses to incidents adversely impacting habitat quality on the offset site, or MNES directly, will be coordinated by TMR, to ensure remediation or enhanced management measures (*Table 12* and *Table 13*) are implemented to address the incident as soon as reasonably possible.

TMR will notify the Department (within the timeframe stipulated by the action approval conditions) after becoming aware of any incident, non-compliance with conditions, or non-compliance with any of the commitments made in this OAMP (see also *Section 10*).

6 Offset completion criteria and performance targets

Offset completion criteria have been determined for each MNES based on an understanding of the specific habitat, connectivity and other ecological values for Coastal Swamp Oak TEC, Koala, and GHFF. These criteria were initially derived from detailed ecology survey information of both the impact and offset sites, as detailed in the OS.

The targeted habitat quality meets guidelines published by ANZMEC (2000),[16] stating completion criteria should be:

1. Specific enough to reflect the unique set of environmental, social and economic circumstances.
2. Flexible enough to adapt to changing circumstances without compromising objectives.

[16] *Strategic Framework for Mine Closure.* (2000). Australian and New Zealand Minerals and Energy Council and Minerals Council of Australia. Canberra, ACT.

3. Include environmental indicators suitable for demonstrating that rehabilitation trends are heading in the right direction.
4. Undergo periodic review resulting in modification if required due to changed circumstances or improved knowledge.
5. Based on targeted research which results in more informed decisions.

The completion criteria and the 'with offset' non-native species attribute (provided in *Appendix J*, *Appendix K* and *Appendix L*) establishes the acceptable limits to non-native species in the offset area. These will be achieved as a requirement of this OAMP.

Over the course of the management period, a set number of interim completion criteria have been proposed for each MNES to track the trajectory of habitat quality improvement towards the desired final completion criteria (*Table 16*). The timing for these interim targets corresponds with the 5 yearly targeted species surveys and detailed ecological condition monitoring in Years 5, 10, 15 and 20.

Interim targets were derived for each MNES by identifying the attributes expected to increase over the period of the approval. The values were determined by differentiating between specific attributes, of which the majority were longer term targets (e.g. species richness, tree canopy cover, number of large trees) and those where an initial benefit could be realised early (e.g. recruitment of woody species, non-native plant cover).

The completion of management actions identified in *Table 12* and *Table 13* will enable the offset sites to improve and achieve the scores required, thus meeting and maintaining the completion criteria required of the offset. The annual reports (see *Section 8*) will provide transparency regarding how the site management actions are being implemented, and where relevant, identify any force majeure events impacting the offset site, and any non-compliance with the OAMP.

Table 16: Interim targets and completion criteria

MNES	EPBC status	Stage 1 impact area (ha)	Impact site quality (- /10)	Offset property	Offset Area	Habitat start quality score (- /10)	Habitat quality score Year 5 (- /10)	Habitat quality score Year 10 (- /10)	Habitat quality score Year 15 (- /10)	Habitat quality score Year 20 (- /10)
Coastal Swamp Oak TEC	END	15.9*	8	Greenridge	Remnant RE 12.1.1 AU1: 14.2 ha	8.0	8.0-8.5	9.0		
				Greenridge	Regrowth RE 12.1.1 AU2: 5.16 ha	7.0	7.0-7.5	7.5-8.0	8.0-8.5	9.0
				Greenridge	Non-remnant (cleared) RE 12.1.1 AU3: 22.03 ha	3.0	3.5-4.0	4.0-4.5	5.0-5.5	6.0
				Greenridge	Remnant RE 12.3.20 AU4: 28.22 ha	8.0	8.0-8.5	9.0		
				Greenridge	Regrowth RE 12.3.20 AU5: 4.74 ha	7.0	7.0-7.5	7.5-8.0	8.0-8.5	9.0
				Greenridge	Non-remnant RE 12.3.20 AU6: 12.48 ha	2.0	3.0	4.0-6.0	6.0-8.0	9.0
Phascolarctos cinereus Koala	VUL	73.81	7	Tabooba	Remnant RE 12.8.16 AU1: 49.84 ha	8.0	8.0-8.5	9.0		
				Tabooba	Advanced regrowth RE 12.8.16 AU2: 145.02 ha	6.0	7.0-7.5	8.0		
				Tabooba	Young regrowth RE 12.8.16 AU3: 48.10 ha	4.0	4.0-4.5	5.0-5.5	6.0-6.5	7.0
				Tabooba	Remnant RE 12.8.14 AU4: 50.62 ha	8.0	8.0	8.0		
				Tabooba	Advanced regrowth AU5: 19.80 ha	7.0	7-7.5	8.0		
				Greenridge	Remnant RE 12.3.20 AU4: 28.22 ha	8.0	8.0	8.0		
				Greenridge	Regrowth RE 12.3.20 AU5: 4.74 ha	7.0	7.0-7.5	7.5-8.0	8.0-8.5	9.0
				Greenridge	Non-remnant RE 12.3.20 AU6: 12.48 ha	4.0	4.0-4.5	5.0-5.5	6.0-6.5	7.0
Pteropus poliocephalus GHFF	VUL	68.76	7	Tabooba	Remnant RE 12.8.16 AU1: 49.84 ha	6.0	6.0	6.0		
				Tabooba	Advanced regrowth 12.8.16 AU2: 145.02 ha	5.0	5.5-6.5	7.0		
				Tabooba	Young regrowth RE 12.8.16 AU3: 48.10 ha	5.0	5.0-5.5	5.5	5.5-6	6.0
				Tabooba	Remnant RE 12.8.14 AU4: 50.62 ha	6.0	6.0-6.5	7.0		
				Tabooba	Advanced regrowth RE 12.8.14 AU5: 19.80 ha	5.0	5.0-5.5	6.0		
				Greenridge	Remnant RE 12.3.20 AU4: 28.22 ha	6.0	6.0-6.5	7.0		
				Greenridge	Regrowth RE 12.3.20 AU5: 4.74 ha	6.0	6.0	6.0	6.0	6.0
				Greenridge	Non-remnant RE 12.3.20 AU6: 12.48 ha	2.0	2.5-3.0	3.0-4.0	5.0-6.0	7.0