

Extract from EPBC Referral 2019/8434

The airstrip and runway orientations are determined by wind conditions and airport safety considerations, these dictate the location of the runway. Aviation legislation then further sets out requirements for the length and width of the runways and taxiways, making it impossible to move away from those standards to accommodate clearing less vegetation. Table 10 details the Shire of Jerramungup's plans around environmental mitigation, management and monitoring of key impact areas, mainly during the construction phase but also pre and post. Table 11 details the Shire's commitment to mitigation actions longer term and on a broader scale to minimise further impacts post construction and to conserve the remainder of the Reserve in line with approved conservation advice and in a manner that supports protecting Matters of National Environmental Significance and their recovery. It is important to note here that the Operational Hygiene Management Plan (Appendix D) details risk and operational hygiene strategies that should be read in conjunction with Table 10 in relation to Dieback *Phytophthora cinnamomi* and weeds.

Table 1 Environmental mitigation, management and monitoring actions directly related to the Proposed Action

MANAGEMENT OBJECTIVE	KEY IMPCATS	MITIGATION/MANAGEMENT ACTIONS	PERFORMANCE TARGET/PERFORMANCE INDICATOR (PI)	TIMING	MONITORING/ REPORTING ACTIVITY	CORRECTIVE ACTION TRIGGER/S	CORRECTIVE ACTION	RESPONSIBILITY
Prevent clearing of Kwongkan TEC, Malleefowl and Carnaby's Black Cockatoo habitat	Clearing of Kwongkan TEC, Malleefowl and Carnaby's Cockatoo habitat exceeding the approved limit	<p>The final design will be assessed against the project area to ensure the required clearing area is no more than the approved area and will allow for a minimum 20 m buffer to remaining remnant vegetation</p> <p>Site induction will include Malleefowl, Carnaby's Black Cockatoo and Kwongkan TEC habitat clearing requirements and procedures as developed by the Shire</p> <p>Habitat not required to be cleared will be physically and clearly marked on site (taped off) and identified as no-go areas, demarcated on relevant drawings and provided to the Construction Contractor Representative</p> <p>Laydown areas, stockpile areas and vehicle turn around, will be located in areas cleared for permanent works and will be signed and marked: Clearing will be avoided for any temporary construction activities</p>	<p>Final designs including no go zones/no clearing zones with minimum 20m buffer</p> <p>Site inductions (condition of site entry) developed to include clearing requirements and procedures including reporting</p> <p>All no go zones physically and clearly marked.</p> <p>PI: No areas outside the clearance zone are cleared or damaged</p>	<p>Prior to any on site activity commencing</p> <p>Prior to any activity occurring on site that is related to the project</p>	<p>Daily site inspections – construction company</p> <p>Vegetation clearance supervisor to oversee operators during main clearance activities</p> <p>Weekly site inspections – Shire. Weekly written construction reports that include clearing amounts</p>	<p>Drawings do not show no go/no clearing zones</p> <p>Clearing within the 20m buffer zone or beyond, entry into a no-go zone</p> <p>Inductions not complete</p>	<p>Clearing will not recommence until no-go areas and clearing boundaries have been reviewed and confirmed to be in place correctly, and Shire CEO provides approval to recommence</p> <p>Environmental incident will be recorded, and the cause investigated</p> <p>Unauthorised clearing of vegetation containing habitat for MNES will be assessed for potential remediation</p> <p>Rehabilitation works will commence within 6-12 months of the incident. Refresher or updated</p> <p>Re-training will be conducted (if appropriate)</p> <p>DCCEEW will be notified along with investigation report during annual compliance reporting if triggers are met and exceeded</p> <p>If the investigation shows that the damage to the environmental values is significant, the DCCEEW will be notified within a week of such investigation</p> <p>Within three weeks of such incidents, the DCCEEW will be provided with an investigation report and corrective actions to remediate the environmental damage to the satisfaction of the DCCEEW prior to recommending the action</p>	<p>Shire of Jerramungup</p> <p>Construction Contractor</p> <p>Environmental Management Contractor</p>
Prevent the introduction and/or spread of Dieback and weeds in the project area and the greater Reserve during construction works and beyond	Degradation of the habitat in and around the project area and into the Reserve due to the spread of Dieback or; the introduction of weeds to previously uninfected areas; or the introduction of a new disease or weed of national significance to the Reserve directly impacting upon Kwongkan TEC	<p>Responsibilities for implementing and monitoring compliance with the OHMP to be made clear during planning and construction contractor engagement</p> <p>All contractors to have completed Green Card Training</p>	<p>Final plans for site incorporate all requirements of the OHMP, areas for parking, lay down, equipment storage, decontamination areas on and off site</p> <p>Delivery of induction to all workers on site prior to approving site entry and completion of Green Card training and</p>	<p>Prior to any on site activity commencing</p>	<p>Site entry controller checks site entry pass for personnel and equipment and vehicles to ensure hygiene requirements have been met upon each entry/exit</p> <p>Daily physical checks to ensure surface water flow in correct</p>	<p>No weed management and operational plan</p> <p>Site induction not completed or entry requirements for decontamination of vehicles and equipment not met</p>	<p>Construction activity cannot commence</p> <p>No site entry allowed</p>	<p>Shire of Jerramungup CEO</p> <p>Construction Contractor Senior Manager</p> <p>Environmental Management Contractor</p>

Table 10 continued	and indirectly impacting potential Malleefowl foraging and breeding habitat and Carnaby's Black Cockatoo foraging habitat	OHMP to be provided as part of site induction and site entry conditions, including decontamination of vehicles at a designated station off site as per the OHMP. Site entry controllers to be appropriately trained in inspecting vehicles and equipment for Dieback and weed risk Development of weed management and operational plan relevant to the project that covers prevention and safe treatment (target to minimise damage to remaining habitat and MNES) and long term weed management treatment and monitoring in the Reserve Action OHMP: hygiene measures, monitoring, green bridge construction, sourcing of clean fill, diversion of surface water away from protected areas Movement of personnel, machines and other vehicles will be restricted to the limits of the areas cleared within the project area or on clearly designated tracks outside the project area as per the plans Weed contaminated topsoil stockpiles shall be quarantined from uncontaminated/clean topsoil stockpiles, clearly signed in the field and identified on a site plan; and areas temporarily disturbed are to be revegetated and stabilised.	OHMP requirements specific to the site Weed management and operational plan is completed and Shire develops and allocates resources to implement weed management and operational plan prior to construction activity commencing. OHMP was successfully implemented Personell, machinery and other vehicles remained within the planned and approved limits of the site at all times Material contaminated with weeds were isolated from clean fill and were clearly identified, stored and disposed of as per the approved plans PI: Weeds are not spread to previously uninfested areas; no new weeds or weeds of national significance are introduced into the Reserve; Dieback does not spread beyond its current limit and the diversion of surface water is as per the OHMP PI: Implementation of a weed management and operational plan commenced prior to construction and continues as part of long - term reserve management, operation and monitoring PI: Disturbed areas have been stabilised and revegetated.	Prior, during and post construction During construction During construction	direction, additional during significantly wet periods Photographic record, GPS of non-conformance Weed monitoring reports. Records of topsoil segregation and burial or licensed waste facilities Records verifying plant and machinery arriving on site is clean Weed monitoring three weeks prior to construction starts to inform treatment options or disposal of topsoil; weed monitoring during construction, every three weeks to assess and treat weeds; post construction as part of Reserve management as per Federal Conservation Advice with weed and die back surveys in and around the project area at intervals post construction 4 months 12 months 20 months Once yearly weeds surveys thereafter to maintain pristine Kwongan TEC All surveys include the collection of samples for Dieback to assess against baseline data. OHMP requires testing for Dieback every year for at least three years post construction	OHMP is not followed. Surface water direction is disrupted away from planned route Infected soil, weed or Dieback is not handled, stored or disposed of correctly New significant weed infestation (i.e. above existing background levels) identified	All operations to cease Within three weeks of such incidents, the DCCEEW will be provided with an investigation report and corrective actions to remediate the environmental damage to the satisfaction of the DCCEEW prior to recommending the action Where new weed infestation is evident, herbicide treatment will be undertaken as per weed management plan Review weed management process DCCEEW will be notified along with investigation report during annual compliance reporting if triggers are met and exceeded If the investigation shows that the damage to the environmental values is significant, the DCCEEW will be notified within a week of such investigation. Within two weeks of such incidents, the DCCEEW will be provided with an investigation report and corrective actions to remediate the environmental damage to the satisfaction of the DCCEEW prior to recommending the action Long term, any spread of weeds of national significance or new areas infected with Dieback, that possible originated from project activities, will be reported to DCCEW within 14 days of the finding	
MANAGEMENT OBJECTIVE	KEY IMPCATS	MITIGATION/MANAGEMNT ACTIONS	PERFORMANCE TARGET/PERFORMANCE INDICATOR (PI)	TIMING	MONITORING/ REPORTING ACTIVITY	CORRECTIVE ACTION TRIGGER/S	CORRECTIVE ACTION	CORRECTIVE ACTION RESPONSIBILITY
Prevent injury and mortality to Carnaby's Cockatoo, Malleefowl and any other fauna	Fauna are injured or killed due to increased vehicle traffic in and around the Reserve, clearing of vegetation or other construction processes	A pre-clearing fauna assessment will be undertaken by a suitably experienced expert. A suitably experienced expert will be on site during clearing and will have a written procedure in place to manage fauna in the clearing and construction zone, along with licences and permits to capture and relocate fauna to the greater Reserve. This person will have the authority to stop work and order work to recommence in the presence of fauna. This person will keep records of fauna observed, disturbed, captured or relocated from the site and any cease and recommence work orders During site induction, personnel will be provided with information on the procedure for reporting and recording fauna sightings (alive or dead) and the procedure for managing injured wildlife, this will include contact details for local veterinary clinic and authorised wildlife carers that have	Pre-clearing fauna assessment is undertaken and used to inform timing of specific activities e.g., vegetation clearing Prior to construction a procedure is developed for managing fauna in the clearance and is implemented Fauna are successfully relocated out of the construction zone All personnel report fauna sightings as per induction instructions No incidents of speeding within the construction site boundary or roads into entry/exit points	Prior to construction During construction activities	Daily, immediate reporting of sightings by all personnel Routine daily inspections and opportunistic Constant supervision during vegetation clearing activities	Fauna are present during vegetation or other construction activities Routine inspections find injured or deceased fauna near the construction activities and the impact is attributable to the Proposed Action Vehicle or machinery collisions with fauna	Cease work. Ensure the suitably experienced nominated person on site for fauna management is informed, follow their direction and only commence work when they give clear instructions to do so Follow procedure on reporting, pre-engaged wildlife carer and/or veterinarian to be contacted without delay. Where activities related to the Proposed Action result in a MNES listed fauna fatality: Malleefowl or Carnaby's Cockatoo, this will be recorded as an environmental incident and reported to DCCEW within two weeks.	Construction Contractor On sit/on call fauna expert Additionally, Shire CEO and Senior Manger Construction Contractor where Fauna considered MNES are involved Environmental Management Contractor

Table 10 continued		<p>been formally briefed and engaged by the Shire to support injured fauna as a result of the project</p> <p>Where the cause of death of fauna within the project area is unknown, it will be investigated and a post-mortem undertaken by a veterinarian.</p> <p>A 40km zone maximum speed limit will be applied throughout the construction site and within 300m of all entry and exit points to the site. Signage will be used on the approach to site entry and throughout the sight to slow down for wildlife with the limit posted</p> <p>Monitor and evaluate population trends of Faunal Assemblages in response to post clearing activities and construction of the new cross runway</p>	<p>PI: No fauna are injured or die due to the Proposed Action</p> <p>PI: There is no delay in reporting fauna sightings or in obtaining expert assistance for injured wildlife</p> <p>PI: The death of any wildlife investigated by a suitably qualified person and a post-mortem was undertaken by a veterinarian without delay (where cause not known)</p> <p>PI: All recording and reporting requirements for fauna interactions are kept and where required reported to statutory authorities</p> <p>PI: Post construction fauna surveys are undertaken to assess any changes to fauna assemblages at 6 months post and then once/year thereafter for three years</p>				Record all fauna incidents regardless of species as per the procedure	
MANAGEMENT OBJECTIVE	KEY IMPCATS	MITIGATION/MANAGEMNT ACTIONS	PERFORMANCE TARGET/PERFORMANCE INDICTOR (PI)	TIMING	MONITORING/ REPORTING ACTIVITY	CORRECTIVE ACTION TRIGGER/S	CORRECTIVE ACTION	CORRECTIVE ACTION RESPONSIBILITY
Prevent destruction or disturbance of any recent Malleefowl mounds in and adjacent to the project area e.g., within 350m of the project area	Malleefowl breeding and nesting processes are disturbed or cease due to project activities	<p>A pre-clearing fauna assessment will be undertaken by a suitably experienced expert with experience identifying Malleefowl, Malleefowl tracks, scratchings and mounds</p> <p>Where the pre-clearing fauna assessment identifies any evidence of breeding or nest/mound building, within 350m of the project boundary, in any direction, works will cease until eggs have hatched and young dispersed or the mound is abandoned without egg laying having occurred</p>	<p>A pre-clearing fauna assessment will be undertaken by a suitably experienced expert and results will be used to inform when construction activity can commence</p> <p>If a Malleefowl mound was detected or evidence of breeding/nesting/mound creation is found, all works ceased until eggs hatched and young dispersed or until mound building was abandoned without egg laying</p> <p>PI: No Malleefowl mounds are destroyed or breeding/nesting/mound building efforts disturbed within 350m of the PA site edges in any direction</p>	Prior to construction, allowing enough time to search 350m from all PA site edges	<p>Prior to any construction activity</p> <p>Throughout construction and during daily site inspections</p>	Discovery of Malleefowl activity within 350m of the project boundary in any direction before or during construction	<p>Work stops until fauna expert approves recommencement</p> <p>A fauna incident will be recorded as per the procedure with relevant dates and criteria used to determine when to commence work</p> <p>DCCEW will be notified within two days of any Malleefowl activity being identified</p>	<p>Construction Contractor</p> <p>On sit/on call fauna expert</p> <p>Additionally, Shire CEO and Senior Manger Construction Contractor as Malleefowl are a MNES</p> <p>Environmental Management Contractor</p>
MANAGEMENT OBJECTIVE	KEY IMPCATS	MITIGATION/MANAGEMNT ACTIONS	PERFORMANCE TARGET/PERFORMANCE INDICTOR PI	TIMING	MONITORING/ REPORTING ACTIVITY	CORRECTIVE ACTION TRIGGER/S	CORRECTIVE ACTION	CORRECTIVE ACTION RESPONSIBILITY
Prevention of pollution and the attraction of vertebrate pest species to the site or into the Reserve	<p>General waste, including food waste attracting new vertebrate pest species e.g., introduces Rats, into the reserve or encouraging the congregation of existing pest species around the site of the PA e.g., Cats and Foxes</p> <p>Human excrement polluting the site and surrounds and attracting vertebrate pests</p> <p>Construction waste, chemicals or hazardous material contaminating soil, surface water or ground water and impacting upon MNES and the</p>	<p>General waste receptacles will be provided in sufficient size and number to support the number of personnel at the site and will be collected regularly by a licenced waste operator. Waste receptacles will be sturdy and sealed to minimise access by pests</p> <p>Bathroom facilities will be provided in sufficient number to support the number of personnel at the site</p> <p>Waste management, bathroom use, chemical spills and hazardous materials containment will be covered in the site induction</p>	<p>All personnel follow waste disposal and bathroom use requirements.</p> <p>Procedures are followed for chemical spills and appropriate equipment is available for clean-up</p> <p>Construction and general waste regularly removed</p> <p>PI: The site and Reserve are not polluted or contaminated by the activities of the Proposed Action</p>	<p>Arranged prior to construction</p> <p>Actioned throughout construction</p>	<p>Daily routine site inspections</p> <p>Keep records of any incidents of spills, invasive pest species</p> <p>Report contamination and spills to appropriate authorities</p>	<p>Littering at the site</p> <p>Pest species frequenting or living at the site</p> <p>Chemical spill or hazardous waste contamination occurs</p>	<p>Major chemical spills or contamination reported to statutory authorities and DCCEW and remediate site to their requirements</p> <p>Pest species reported to fauna expert or Shire contact</p> <p>Re-training of personnel</p> <p>Repair leaking machinery and vehicles</p> <p>Deny site entry if issue is identified at point of entry</p>	<p>Construction Contractor</p> <p>Shire of Jerramungup</p> <p>Environmental Management Contractor</p>

<p>Table 10 Continued</p>	<p>greater Reserve directly or indirectly</p>	<p>Procedures will be in place for emergency chemicals spills or release of hazardous material into the environment, this will include instruction on immediate action required and reporting obligations</p> <p>Construction waste will be removed periodically and to local government requirements and by licenced operators where required</p> <p>Machine and vehicles to be in good repair with no oil, fuel or other leaks</p> <p>Chemical spill kits in place and are appropriate to meet the spills</p>	<p>PI: Vertebrate pest species do not congregate or live at the site and no new species are identified</p> <p>PI: Any chemical spills or contamination is reported and remediated in line with statutory requirements</p>					
<p>Prevent fires originating in the project area escaping to the Reserve</p>	<p>Damage to Kwongkan TEC, Malleefowl foraging and potential breeding habit and Carnaby's Cockatoo foraging habitat</p> <p>Damage to Malleefowl habitat from fire is a key threatening process with long lasting effects >30 years</p>	<p>Smoking will not be permitted in the project area, reserve or immediately adjacent to the reserve</p> <p>Construction activities that may increase the risk of starting a fire will not be undertaken on days when weather conditions are high or above an FDI of 32.</p> <p>Daily updates provided by managers at daily toolbox talk</p> <p>Procedures and equipment for construction site fire safety will be in place</p> <p>Procedures and equipment for suppressing and managing a bushfire caused by construction activity will be in place</p> <p>Appropriate fire safety and training will be covered in the site induction</p>	<p>No personnel are found to be smoking in the project area, the Reserve or areas immediately adjacent to the Reserve</p> <p>Procedures for construction and bushfire safety and management are in place, along with all relevant equipment which meets all regulatory standards</p> <p>PI: Fire does not start as a result of any activities related to the controlled action</p> <p>PI: Fire caused by the Proposed Action is quickly suppressed before it can enter and damage the Reserve</p>	<p>Throughout construction</p>	<p>Monitor personnel re: smoking</p> <p>Daily monitoring of fire danger rating</p> <p>Immediately report fire through 000 emergency call</p>	<p>Personnel are smoking in or adjacent to the site or the Reserve or there is evidence of smoking</p> <p>Weather conditions are high or above an FDI of 32.</p> <p>A fire occurs</p>	<p>Immediate referral to supervisor for disciplinary action and retraining</p> <p>Modify or cease work based on fire danger rating</p> <p>Report fires immediately through 000 emergency call</p>	<p>Construction Contractor</p> <p>Shire of Jerramungup</p>

Table 2 Additional, long term, broader scale mitigation actions to conserve the remainder of the Reserve and support Matters of National Environmental Significance and their recovery

Conservation Target	Mitigation Action	Timing	Responsibility, Monitoring & Reporting
<p>MNES – fauna, EPBC Threatened & specially protected fauna, BC Act</p>	<p>If vegetation is damaged during construction, longer term as a result of construction, or through ongoing airfield maintenance activities at any time in the future, and rehabilitation or revegetation is required to remediate damage, a Fauna specialist will be consulted to identify suitable habitats within the Bremer Bay Airfield that support populations of threatened faunal species prior to the revegetation occurring</p>	<p>Within one month of the Shire being made aware of the damage</p>	<p>Shire Reporting internally within the Shire and to relevant state and federal regulators as required, also see Table 10 for during construction</p>
<p>MNES – fauna, EPBC Threatened & specially protected fauna, BC Act</p>	<p>Follow up fauna surveys in and around the site of the PA that can be used to assess any ongoing impacts from the PA, add value to the Shire's fauna data base and those for the Fitzgerald Biosphere</p>	<p>Throughout construction as per Table 10 6 months post constructions and once annually thereafter in an ongoing capacity</p>	<p>Shire Reporting internally within the Shire and to relevant state and federal regulators and stakeholders as required</p>
<p>MNES – fauna, EPBC Threatened & specially protected fauna, BC Act</p>	<p>Invasive species control and monitoring, especially the impacts of feral cats and foxes on native fauna within the Bremer Bay Airfield and Government Reserve 24521</p>	<p>Throughout construction as per Table 10 6 months post constructions and once annually thereafter in an ongoing capacity as part of fauna surveys</p>	<p>Shire Reporting internally within the Shire and to relevant state and federal regulators and stakeholders as required</p>
<p>MNES – Kwongkan TEC, EPBC Act Threatened & specially protected flora, BC Act</p>	<p>Ensure chemicals, or other mechanisms used to manage weeds, do not have significant adverse non-target impacts on the TEC</p>	<p>Ongoing and during construction as per Table 10</p>	<p>Shire Reporting internally within the Shire and to relevant state and federal regulators and stakeholders as required</p>

Table 11 continued

<p>MNES – Fauna & TEC, EPBC Act</p> <p>Threatened & specially protected flora & fauna, BC Act</p>	<p>Develop and implement appropriate fire regimes for priority site. Ensure a representative range of age classes and post-fire stages of the TEC are maintained across the landscape, including old growth/long unburnt Kwongkan</p> <p>Manage fires in the area to minimise the risk of inappropriate fire regimes, in this case ecologically frequent fire – the order of less than three or more decades, including the exclusion of fire in much of the airfield reserve remaining as Kwongkan has been found to be a very long-lived community that stabilises with age (Barrett et al. 2009; Hopper 2009; Hopper et al. 2021)</p>	<p>6 months post constructions and once annually thereafter in an ongoing capacity</p>	<p>Shire</p> <p>Reporting internally within the Shire and to relevant state and federal regulators and stakeholders as required</p>
<p>MNES – Kwongkan TEC, EPBC Act</p> <p>Threatened & specially protected fauna, BC Act</p>	<p>Weed and Dieback surveys to maintain pristine Kwongkan TEC</p> <p>All surveys include the collection of samples for Dieback to assess against baseline data as noted in the OHMP</p>	<p>Pre/during construction as per Table 10</p> <p>4 months 12 months 20 months Once yearly surveys thereafter</p> <p>Beyond construction, treatment of new weeds discovered or rectification of hydrology issues or factors causing further spread of Dieback will be actioned within 8 weeks of being reported to the Shire</p>	<p>Shire</p> <p>Reporting internally within the Shire and to relevant state and federal regulators and stakeholders as required</p>

