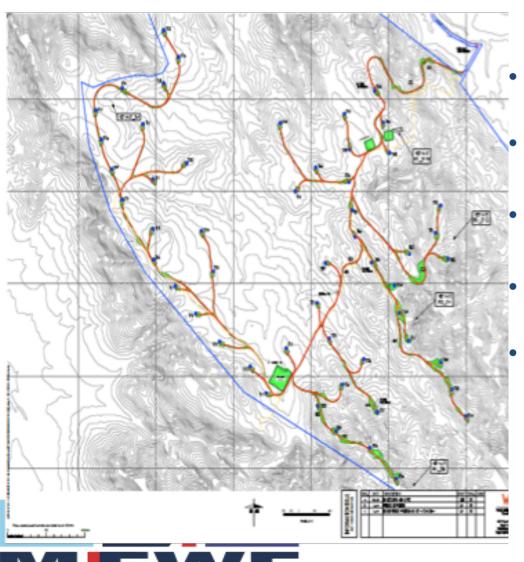




MOUNT EMERALD WIND FARM



Project map – 53 Turbine layout



- Final approvals documents received
- Pre-works commencing
- Agreed turbine layout
- minor amendments to substation location
- Final location of road still being decided



Awareness briefing to Vestas/CPP/Catcon



Early February: Awareness session

History
Commitments
Progress so far
UXO
Cultural Heritage
Environmental /DA requirements
Community concerns







Major Management Issues



EIS identified the following major issues.

Environmental Management Plans have been developed for them:

- Weed and Pest Management;
- Flora and Fauna;
 - Particular Endangered flora/fauna:
 - Quolls, Flying foxes and others;
- Waste Management;
- Water Management;
- Dust and Noise;
- Erosion and Sediment;
- Landowner (Stakeholders).



Environmental Records Required



Document	What is it used for?	Timing
Environmental Management Plan	Details control strategies to mitigate against the potential impacts of a project. Plan to be amended during project to address changes in design and methodology.	Prior to works commence
Site Specific Environmental Induction	Addresses environmental management needs and constraints applicable to the project.	Delivered to all new personnel to site
Induction Register	Records of all site visitors and those who have received site induction	ongoing
Permits, Licences and Approval	Details which approvals have been obtained and their conditions	Duration of project
Monitoring / Inspection Register	Inspection of the site and controls to check that they are functioning correctly	Fortnightly
Waste transport Certificate	Required under legislation to keep official receipts of disposed regulated & trackable wastes.	Ongoing
Weed Hygiene declaration forms	Weed seed control: weed hygiene declarations are required for all plant & vehicles (subcontractors) arriving & leaving site	Waste collected by contractor
Water Extraction Log	Record details of water extraction.	Plant/vehicles arriving and leaving site



Environmental Records continued:



Document	What is it used for?	Timing
Monitoring Results Log	This will document the results of monitoring i.e. pH, turbidity, Acid Sulphate Soils etc	Post monitoring
Audit Reports	Details compliance with contract and system and lists corrective actions required.	After audit has been completed
Cultural Heritage Monitor Timesheets	Document the working hours of any cultural heritage Monitors that work on our job sites (use localised forms)	During monitoring
Fill Agreement	Manage the risks associated with fill/spoil disposal on a private property	Prior to spoiling
Project Diary	Daily site inspections to verify compliance with the EMP, licences, permits and approvals and other environmental performance requirements specified within the contract.	Daily
Project Environment and Sustainability Report	Reporting on environmental incidents, key performance indicators and other environmental matters.	Monthly
Routine Erosion and Sediment Control Plan	Regular reviews of erosion and sediment measures; monthly and when activities or risks change	Monthly



Flora - Preclearance

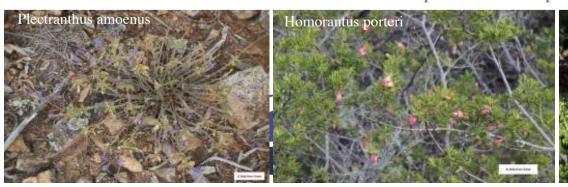
RATCH-Australia Corporation

Significant flora species found on the MEWF project site are very rare or endangered and some are not found else where.

These species are likely to need to be **translocated**, or **buffered** from the clearing:

- Acacia purpureopetala (critically endangered)
- Pronstenthera clotteniana (critically endangered)
- Melaleuca uxorum (endangered)
- *Grevillea glossedenia* (vulnerable)
- Homoranthus porteri (vulnerable)
- Plectranthus amoenus (vulnerable)

These species will be flagged by a botanist and will be in No Go zones. All but one of these species occur on **ridgelines** to the **south** of the Powerlink Transmission line so this is where its most important to keep a look out.







lelaleuca uxorum

Northern Quoll Management Plan



The *Northern Quoll is* Endangered under EPBC and NCA. It is found in rock piles, tree hollows in rocky woodlands across the site. It is a small mammal (400-800g avg). Males only live 1 year. **There are only 53 predicted across the MEWF plateau.**

There are **strict conditions** to protect the species:

- 1. Clearing/work schedule set.
- 2. **3 nights before**: Traps set along the transect. Traps flagged YELLOW.
- 3. Each night, traps are baited.
- 4. The following morning, traps are checked for quolls.
- 5. Quolls are then collared with a radiotracking device and released a minimum of 1000m from the clearance area (it must be on the site).
- 6. The clearance footprint will be searched methodically for denning individuals each morning prior to starting construction activities.

Search techniques may include manual or visual inspection, radiotracking and when young are in dens, use of sniffer dogs. If any actively occupied dens are located within the construction area, then all bulk earthworks will be halted until such time as the individual shifts den sites.







Habitat Management Plan

All native animals are protected and must not be deliberately killed or injured. Species of conservation significant fauna on the Mt Emerald Wind Farm site:

- *Northern Quoll* Endangered under EPBC and NCA.
- Bare-Rumped Sheathtail Bat Critically Endangered under EPBC and NCA
- Spectacled Flying-fox Vulnerable under EPBC and NCA.

Environmental Legislation protects much more than these species however and before clearing works commence, the following activities **must** take place:

Clearing timetable is finalised at a location.

1. In the days prior to clearing, Ecologists perform a habitat assessment of the alignment:

Flag tree hollows, nests, areas of high fauna activity (scats and other evidence).

Remove non-mobile species where possible – relocate to appropriate habitat

Tree tapping strategy

2. Clearing commences – spotter/catcher assists to ensure that no fauna is injured in the clearing process. All trees tapped in the 24 hours prior to felling are checked by the spotter/catcher to ensure that no fauna are remaining within the hollow.









Washdown Procedures



Wash

- Front to back Top to bottom.
- focus on radiator, wheel arches and tyres, under body, Licence plates, sills; vehicle trays and racks.
- Equipment diggers, shovels, excavators.

Why? So you don't miss any part.

• Efficiency: to minimise time, water use and paperwork.







A clean vehicle is another 'proof' that we are serious about preventing the spread of weeds..

Again you are representing RATCH Australia/Vestas in public even when just driving your vehicle down the road.

Remember that your speed and road behaviour is on show.

Land Management



Bushfire Management and Emergency Evacuation Plan

Mitigation Strategies:

- Open fires are banned on site. Fires include open BBQs, billy fires, brush or rubbish burning.
- Adopt lightning protection measures for turbines and substations.
- Prevent Unnecessary build-up of flammable material near working areas stockpile vegetation and other flammable material well clear of hot work activities.
- Water trucks (also used for dust suppression) will be available for use as fire trucks in the event of fire.
- All vehicles will be equipped with portable fire extinguishers.
- Fire extinguishers and a water cart will be available to the welding crew.
- All appropriate crew members will be trained in the use of fire fighting equipment.
- Emergency Response Plan to include details on local fire fighting contacts.
- Construction management liaison with local Rural Fire Service personnel during high fire periods.
- The establishment of the Asset Protection Zone.
- Clearing and pruning.
- Regularly maintained Fire breaks.



Community issues already raised



Community issues include:

- Towers how many and how big will they be?
- Access Road where will it be located, how wide and who and where can it be accessed?
- Construction noise and dust; speed limits;
- Construction Operational times; weed and pest spread mitigation;
- UXO's, their risks and destruction;
- Access Route for delivery of turbines;
- Concerns about potential health impacts; operational noise; ongoing land values; operation of crop dusters.
- Management strategies for preventing the spread of weeds weed identification and vehicle washdown;
- Social infrastructure impacts how much additional traffic on the roads; will RATCH and you buy from local business; how much dust will they create ...

Communications and Complaints process



So what's happened on site:



- Consultants will identify and mark vegetation/cultural heritage/habitat areas to be kept, prior to works.
- FLAGGING COLOURS:
 - Protected Vegetation/Habitat YELLOW
 - Cultural Heritage
 - UXO

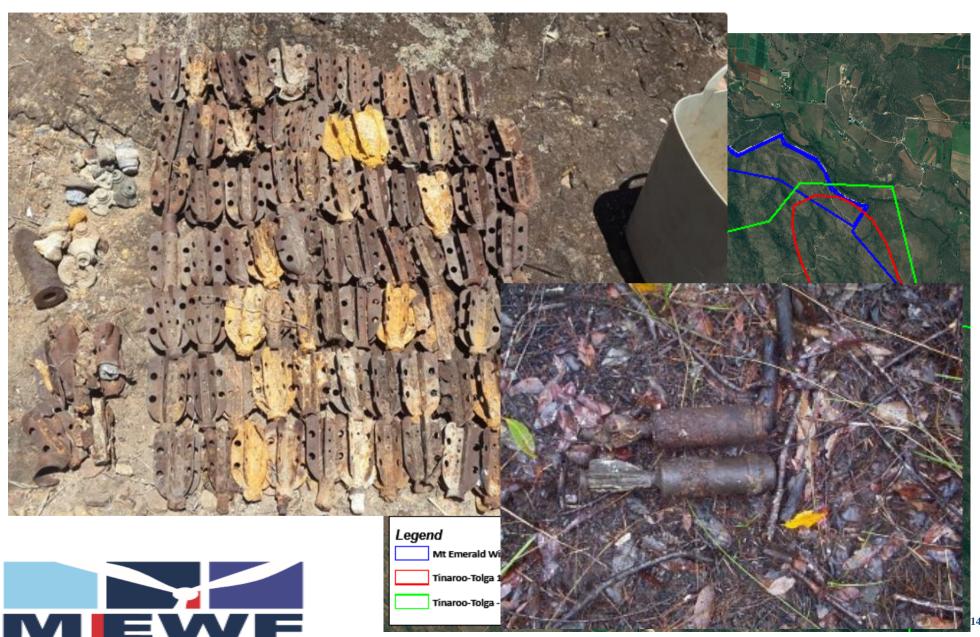
First Quoll trap and relocate this week





UXO Survey –essentially complete





Cultural Heritage process commenced





The Cultural Heritage Team manages the Cultural Heritage Process

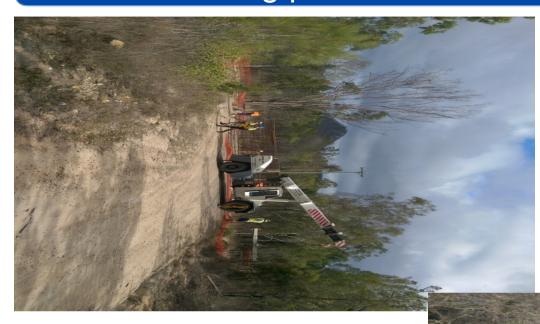
- This involves ongoing surveys by the MBarBarrum people. Surveys identify areas of cultural significance along the alignment WHITE FLAGS
- Management requirements agreed before activity commences

Recommendations from surveys include fencing of identified artefacts, signage and cultural heritage inductions.

Cultural heritage induction video produced

Channel crossing protection works - December







Laydown area preparation





Jobs advertising commencing

RATCH-Australia Corporation

- ICN Gateway
- ICN Briefings March 1 Shangri-La
 Cairns
- State Development March 13th Tolga Race

- New Mt Emerald Wind Farm website launch next Monday – links to jobs and construction information, historical documentation and news
- www.mtemeraldwindfarm.com.au



