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Submission to EnergyAustralia Yallourn
Draft Declared Mine Rehabilitation Plan

16 August 2025

To whom it may concern.

The Latrobe Valley Field Naturalists Club has been part of the Latrobe Valley community for many years and would like to make a submission to Mine Rehabilitation in the Latrobe Valley. We hope you take our suggestions and concerns into account.

The club offers opportunities to learn skills and develop knowledge about the natural world through presentations, excursions and field work about and among subjects of interest. Our programs are open to the public at no charge.

The Club has been instrumental in ensuring protection for natural assets in the region, including in the establishment of the Morwell National Park, and other significant parks and reserves. Our special interest groups and many of our members contribute to citizen science programs and to the data used by scientists and researchers. We also assist other local groups and organisations with information and images of local fauna, flora and fungi.

The Latrobe Valley Field Naturalists Club is vitally interested in the long-term project to rehabilitate the mine lands surrounding the Power Stations at Yallourn and Loy Yang and the former Hazelwood Power Station.

Since its formation in 1960, our club has studied the flora and fauna of these areas, particularly the wetlands on the Latrobe River near Morwell, Witts Gully at Hernes Oak, the Brodribb Road wetlands and the Hazelwood Pondage site. The securing of the Morwell River Northern and Southern Wetlands sites is explained in Appendix 1. Being offsets for significant lost wetlands, it is vital to maintain and protect these created wetlands in the long-term.

We have also studied sites along the Latrobe River and around the Yallourn Storage Dam and at Traralgon South and Hazelwood North near Loy Yang. The club's bird group has conducted quarterly bird surveys in the Energy Australia Yallourn wetlands since 2006 and recorded 142 different species of birds in this time.

This submission applies to all these mine land areas, which we believe are best considered together for their total impact on and potential contribution to our local area and their shared waterways.

Our Overall Vision:
The re-purposed mine lands provide our community with an opportunity to:

- create a wonderful bird sanctuary in the wetland areas,
- showcase the diversity of local ecosystems and the associated flora and fauna,
- protect and enhance habitat for locally indigenous plants, animals and vegetation communities,
- Link natural areas through the wider landscape for the benefit of the natural environment and the people and other animals that live here.

Other opportunities could be found to:

- Harvest carp from the wetlands and waterways to be processed into fertiliser for local parks and gardens, especially the well known rose garden in Morwell as well as community and private gardens and community compost projects.
- Establish self guided walks in some areas with significant indigenous vegetation, natural features and birdlife explained.

Managing the land for a good outcome for biodiversity.
The way in which the lands are treated post mine closure will have a big impact on the outcomes for our local plants, animals and ecosystems.

Starting with the waterways, adequate and seasonal flows are important for aquatic creatures. This includes the need for timely over-bank flood events. Creating conditions where invasive species are controlled is important; especially carp in the water, and cats, foxes and deer around the banks.

Waterways and the vegetation that surrounds or should surround them are important corridors for native fauna and a place where many specialised plants grow. Stream-side vegetation in turn mitigates flood risks and shades the waterway. Shading helps to keep the water temperature lower, which is especially important as the climate gets hotter.

We would like to see waterways with gaps in their vegetation cover planted to locally indigenous vegetation of a type suited to their specific Ecological Vegetation Class (EVC). We'd also like to see other potential wildlife and vegetation corridors reserved to achieve a more connected natural environment. Note: these corridors need to be well

designed so that they are wide enough and diverse enough for small birds to traverse them safely. (Single or double rows of Eucalypts don't achieve this. They just provide additional territory for Noisy Miners, an aggressive and territorial native honeyeater, to extend their range at the expense of other birds.)

In particular:
The wetlands at and around Morwell Bridge support many different water birds and waders. Some of these are listed species in danger of becoming extinct. We would like to see these areas protected from invasive species including people, and especially people with dogs. Deer are also an increasing problem, and deer control needs to be in place.

The mine lands generally have significant remnant vegetation and old trees with tree hollows. We would like to see all of the old trees, and all of the offsets that have been planted in response to the loss of other native vegetation protected in perpetuity.

We regularly see White-bellied Sea Eagles around Morwell Bridge wetlands and have observed them nesting there. We don't visit often enough to determine whether their nesting behaviour has resulted in successful breeding for this endangered species. We think they may now breed along the course of the Morwell River nearby, but can't confirm this.

If a bike path is to be constructed through the mine lands between Yallourn North and Morwell, we *strongly recommend* that any sections that unavoidably traverse the wetlands area should be fenced. We also *strongly prefer* that any bike track doesn't follow the course of the Morwell River. Among other things we think there is a Nankeen Night Heron rookery in that area.

If noisy recreation vehicle facilities are to be constructed or allowed in the mine land area, it would be best to site these well away from bird habitat and in particular away from any known bird nesting sites[1].

The parcel of Engie Hazelwood Power freehold land north of the Princes Highway once known as the Northern Wetlands and purchased as an offset, could potentially be managed in conjunction with the Gippsland Water and Energy Australia wetlands adjacent or close by.

Yours Sincerely,
Julie Murray & Jay Duncan,
On behalf of Latrobe Valley Field Naturalists Club

[1] https://www.tandfonline.com/doi/abs/10.1071/MU12026

The following is a submission to the Draft Regional Catchment Strategy which explains our concerns and recommendations for LV Wetlands.

INTRODUCTION

The Draft West Gippsland Regional Catchment Strategy Renewal (RCS) is an overarching strategy that responds to challenges such as population growth, climate change and declining biodiversity.

In the biodiversity report for the local area of Latrobe, it is stated that in the period 1985-2019 there was a loss of:

- 52% native shrubs
- 30% native scattered trees
- 12% native grass herb,

and that only 2 percent of habitat is protected through the Reserve System.[2]

This is well below the World Wide Fund for Nature (WWF-Australia) recommended standard of 15 percent by area of the pre-clearing extent for terrestrial ecosystems. Wetlands in the arid and semi-arid zone, and aquatic ecosystems are generally poorly represented according to the government's 2016 *State of the Environment Report*.[3]

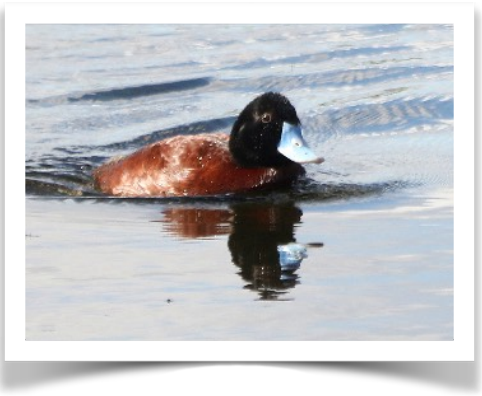
The *Australia's Biodiversity Conservation Strategy 2010–2020* Report states that "Securing and enhancing critical intact habitats through the National Reserve System is the most important and immediate step we can take to increase ecosystem resilience." [4]

PRESERVING WETLANDS IN THE LATROBE REGION

There is an urgent need to increase reserves in the Latrobe Region and there are several areas of wetlands that we would recommend. We note that the Directory of Important Wetlands data has not been updated since 2005.[5]

As well as wetlands there is a need to protect vulnerable riparian ecosystems and deep water refuges for aquatic fauna. Remnant Riparian Forest along the Latrobe River are listed as Vulnerable.

Yallourn Energy wetlands include crucial deep-water habitat for the Blue-billed Duck *(Oxyura australis)* which is listed as endangered in Victoria. The government's action statement recommends securing important breeding sites and protection, enhancing and restoration of key sites in reserves, parks, and private land. Ten listed bird species have been recorded at these wetlands.
(Threatened Species Bird list page 10)



Blue-billed Duck, *(Oxyura australis)*
Photo: David Mules

[2] https://westgippsland.rcs.vic.gov.au/local-areas/local-area-5/

[3] https://soe.environment.gov.au/theme/biodiversity/topic/2016/management-status

[4] http://www.environment.gov.au/system/files/pages/50e1085f-1ef9-4b25-8275-08808133c346/files/biodiversity-conservation-strategy2010-2020.pdf

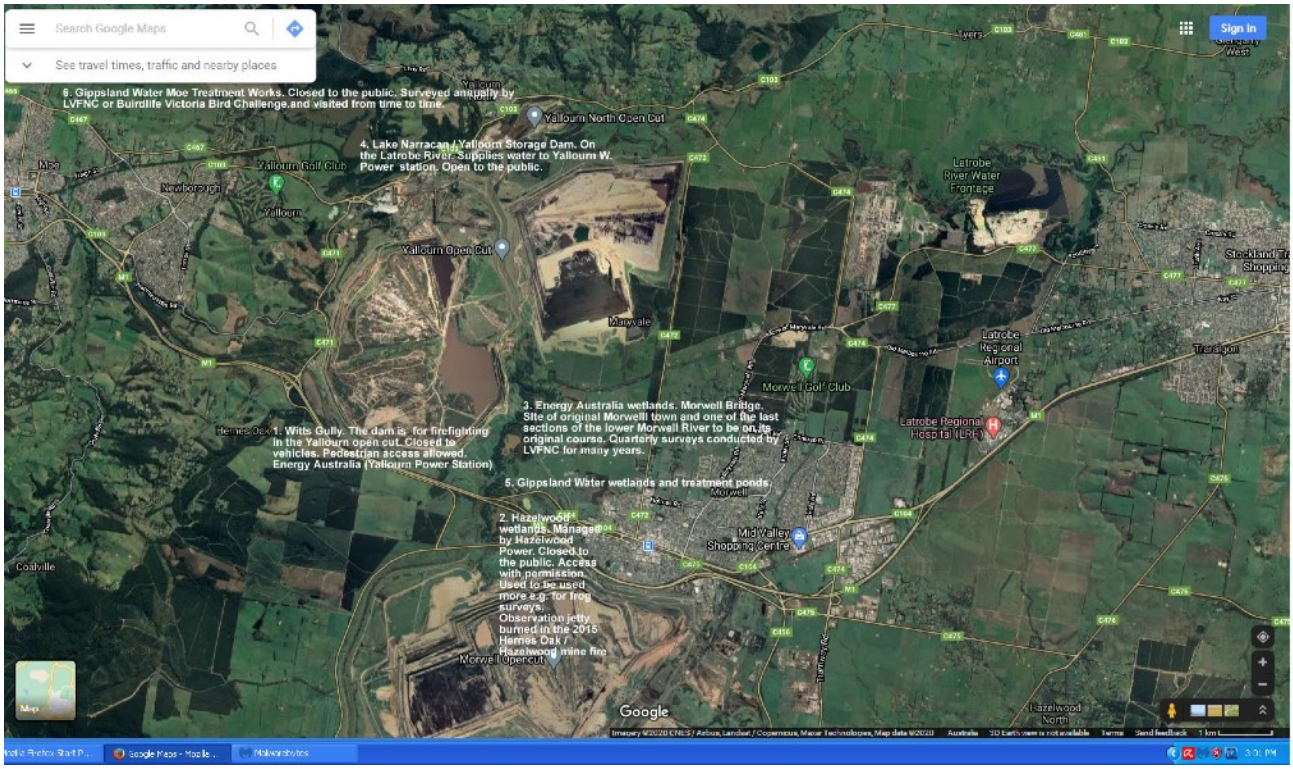
[5] https://www.environment.gov.au/cgi-bin/wetlands/search.pl?smode=DOIW

WETLAND AREAS SUGGESTED FOR RESERVE SYSTEM

Several areas have been identified by the LVFNC as being important habitats for aquatic flora and fauna. The following maps show some important areas of wetlands and riparian ecosystems extending from Boolarra in the South to Yallourn North.

1. Witts Gully
2. Hazelwood Wetlands
3. Energy Australia Wetlands
4. Lake Narracan/Yallourn Storage Dam
5. Gippsland Water treatment ponds
6. Gippsland Moe water treatment works
7. Brodribb Road

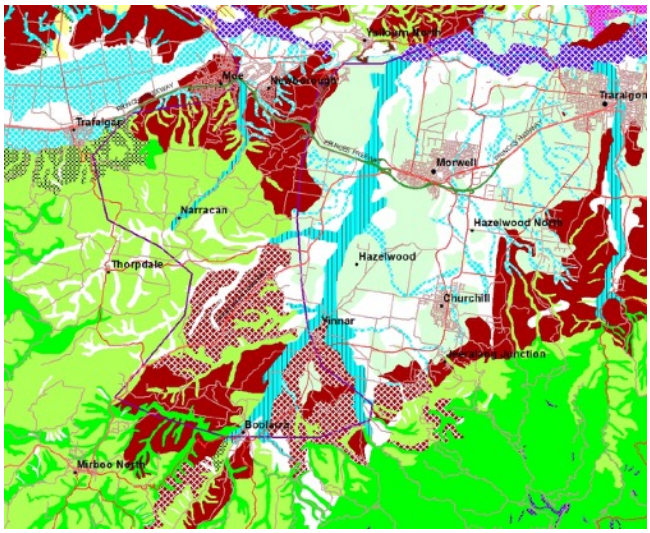
The LVFNC undertakes flora and fauna surveys at several of these locations, including four birds surveys each year of the Energy Australia Wetlands. Bird records for this site going back to 2006 are shared with Energy Australia, Indigenous Designs and more recently have been entered on E Bird.



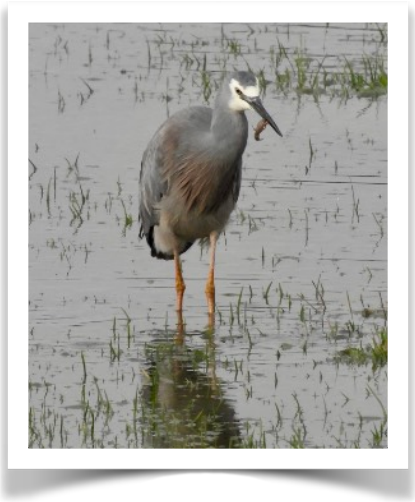
As the power stations close, LVFNC is concerned for the future of these areas of habitat and wetlands currently managed by either Energy Australia or Hazelwood Power (Engie).

WETLAND AREAS SUGGESTED FOR RESERVE SYSTEM *(cont'd)*

Alpine-Strzelecki Biolink



Pre-1750 EVCs in the Biolink



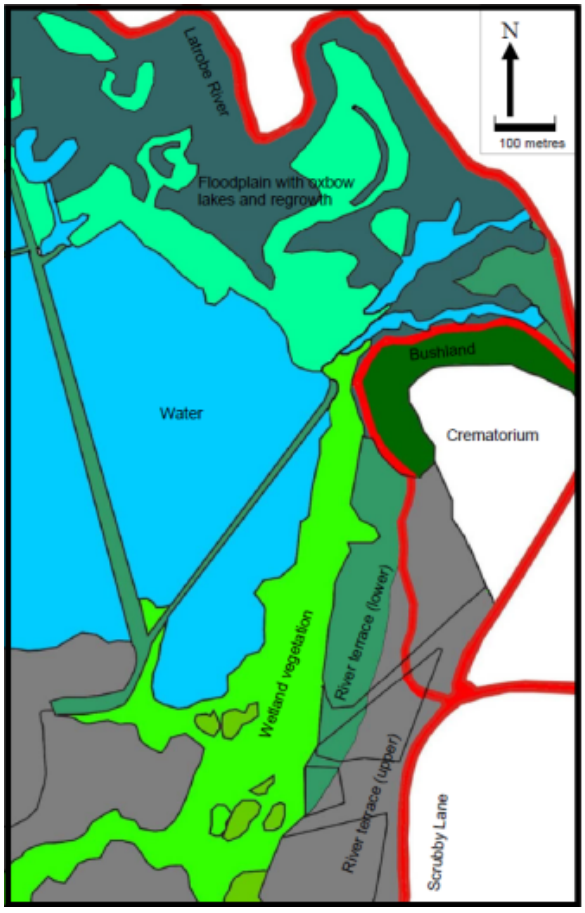
White-faced Heron
(Egretta novaehollandiae)

Hazelwood Power Brodribb Road Wetlands

Brodribb Road is an important wetlands with a bird hide. It is a shallow wetlands with muddy banks for wading birds and fairly extensive reed beds. *(Bird List Page 10)*

WETLAND AREAS SUGGESTED FOR RESERVE SYSTEM *(cont'd)*

The area along the Latrobe River from the APM Aeration Ponds to the Tyers Bridge is also important habitat for birds such as the Yellow-tufted Honeyeater *(Lichenostomus melanops)* and the Swamp Harrier *(Circus approximans)*.



Map supplied by Kevin Roberts

Fan-tailed Cuckoo (Juvenile)
(Cacomantis flabelliformis)

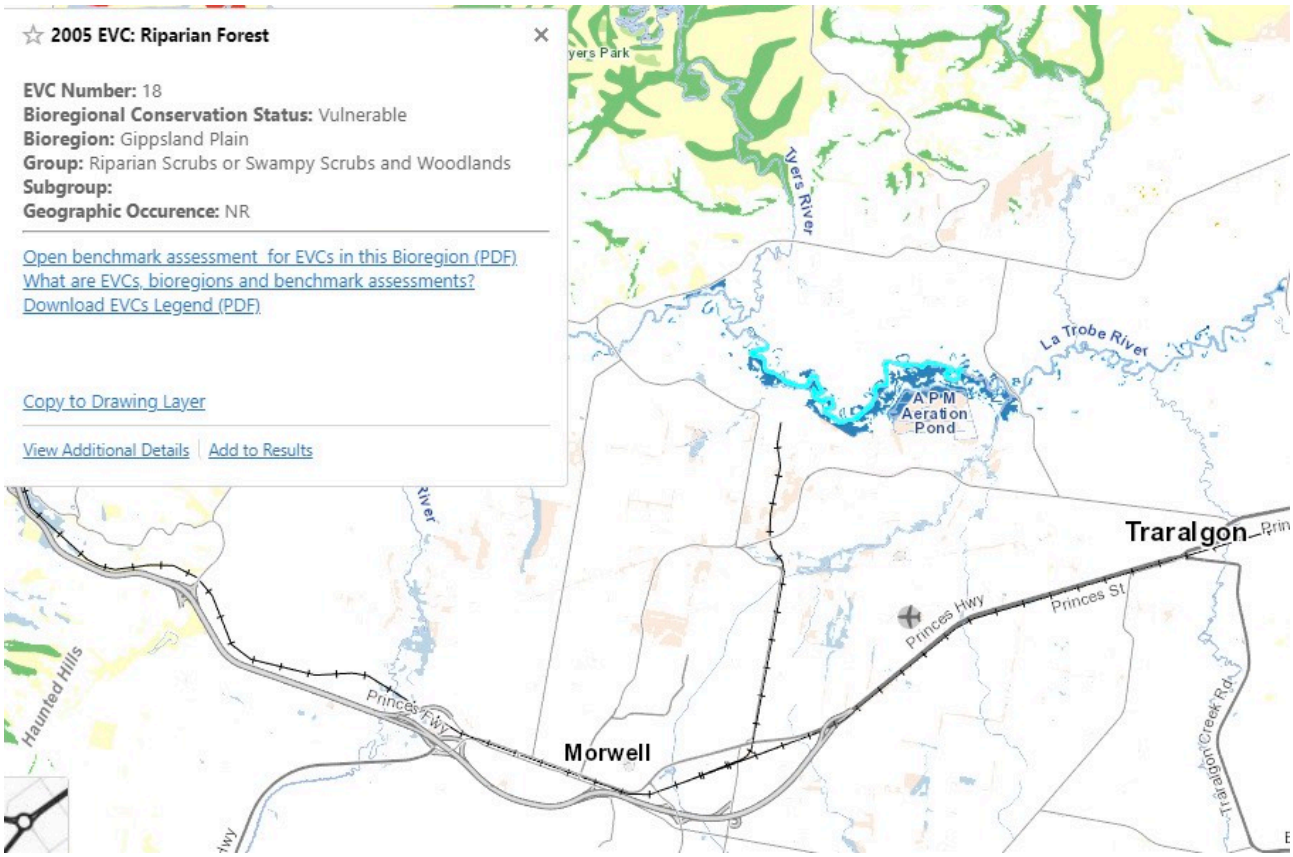
Yellow-tufted Honeyeater
(Lichenostomus melanops)

White-winged Triller
(Lalage tricolor)

Red-browed Finch
(Neochmia temporalis)

LATROBE RIVER

Vulnerable Gippsland Plain Riparian Scrub and Swampy Woodland along Latrobe River



Latrobe River Maryvale, showing river bank erosion and *Pinus Radiata* planting close to riverside.

SOME THREATS TO RIPARIAN ECOLOGICAL VALUES IN THE LATROBE RIVER SYSTEM

- Forestry, mining and agriculture have been responsible for much of the land clearing leading to degradation and loss of habitat in the Latrobe area. Future land use planning should look at restoring and rehabilitating the Gippsland Plain riparian scrubs and woodlands**,** and include restoring areas of plantation along rivers and creeks back to native habitat and fencing as much riparian land as possible to prevent further damage from livestock.

- Much of the Latrobe area is currently allocated to plantations for the pulp industry and there's a threat that areas surrounding rivers and creeks are being encroached upon by plantations.

- A large section of the Latrobe River downstream from Tom's Bridge is subject to erosion and is currently planted to *Pinus Radiata*.

- Recent timber harvesting along Middle Creek led to a great deal of silt being washed down Middle Creek in recent floods at Yinnar. Silt was deposited on local farmland to a depth that isn't within the beneficial range. Better stream-side vegetation along all watercourses and in-stream works to slow water flows would benefit habitat and protect farmland.

- Control of feral deer is critically important in many local riparian areas, including the wetlands at Morwell Bridge, as is fox control for platypus and bandicoot habitat. The elimination of feral cats and containment of domestic pets is needed to protect birds, reptiles, amphibians, koalas, native rodents and other components of the natural ecosystem.

Threatened communities within the Regional Catchment Strategy remit:

- Central Gippsland Plains Grassland Community
- Cool Temperate Mixed Forest Community
- Cool Temperate Rainforest Community
- Strzelecki Warm Temperate Rainforest

The LVFNC studies and surveys flora and fauna in all these areas and is particularly concerned about the potential for catastrophic damage to important vegetation communities and habitats such as remnants on farms and along roadsides and in our existing reserves, wetlands and forests.

CONCLUSION

Much of the Latrobe Valley's ecology has suffered from the impact of mining, forestry and agriculture, and with only 2 percent of habitat currently in the Reserve System this is clearly not in line with the WWF recommendations of 15 percent. "For terrestrial ecosystems, the standard is 15 per cent by area of the pre-clearing extent of each of the 6249 terrestrial ecosystems (as at 2016), with modifications for small ecosystems. This standard is considered a minimum to prevent ecosystems being converted or degraded to the point that they become endangered, or, if currently endangered, to recover to the point that they are no longer endangered."

There is a great need to protect and rehabilitate Latrobe Region's wetland areas in a formal Reserve System especially as private power utilities come to the end of their lifetime and there are no formal protections for important habitat on these properties.

For the life of this strategy, or before it comes into effect, we would like the WGCMA to support the creation of new wetland reserves and, hopefully, the creation of a bird sanctuary in riparian areas currently not fully accessible to the public and belonging to the power companies.

We feel that this is crucial to secure future habitat for the growing number of species ending up on the endangered and critically endangered list.

THREATENED BIRD LIST
Energy Australia, Hazelwood and Brodribb Road Wetlands
Australasian Bittern **CE**
Australasian Shoveler **V**
Baillon's Crake **V**
Blue-billed Duck **E**
Blue-winged Parrot **V**
Eastern Great Egret **V**
Freckled Duck **E**
Gang-gang Cockatoo **E**
Grey Goshawk **V**
Hardhead Duck **V**
Little Egret **E**
Musk Duck **V**
White-Bellied Sea-Eagle **E**
White-throated Needletail **V**

Conservation Status
CE Critically Endangered
E Endangered
V Vulnerable

- These species were listed in the *Alpine Strzelecki Bio-link Feasibility Study* (M Gorman & C. Fraser 2018) as occurring within the proposed Bio-Link corridor.
- Lists for the Morwell Energy Australia Wetlands are from LVNC quarterly surveys conducted between August 2006 and December 2020.
- Rare sightings have generally been confirmed by professional ecologists working for *Indigenous Designs* which is the company contracted to maintain the wetlands.

Brodribb Road Wetlands:

Species List

Australian pelican
Little black cormerant
Little pied cormerant
Black cormerant
Darter
Baillon's Crake
Australian grebe
Hoary-headed grebe
Black swan
Black duck
Australian shelduck
Australian wood Duck
Hardhead
Grey Teal
Chestnut Teal
Pink-eared Duck
Coot
Swamp hen
White faced heron
White-necked heron
Great egret
Royal spoonbill
Yellow billed spoonbill
Masked lapwing
Black-fronted dotteral
Red-kneed dotteral
Japanese Snipe
Wedge-tailed Eagle
Whistling kite
Swamp harrier
Black shouldered kite
Brown falcon
Nankeen kestrel
Brown Goshawk
Yellow-tailed black cockatoo
Little Corella
Galah
Crimson rosella
Gang Gang Cockatoo
Eastern Rosella
Pallid cuckoo
Horsfields bronze cuckoo
Fan-tailed cuckoo
Australasian pipit
Superb-fairy wren
Brown Thornbill
Yellow-rumped thornbill
Red wattlebird
New-holland Honeyeater
Yellow -faced honeyeater
White-eared Honeyeater
Brown-headed Honeyeater
Spotted Pardalote
Striated pardalote
European goldfinch
Scarlet robin
Flame robin
Rufous Whistler
Golden whistler
Grey shrike-thrush
Grey fantail
Willie wagtail
Black-faced cuckoo-shrike
Reed warbler
Golden-headed cisticola
Magpie lark
Magpie
House sparrow
Red-browed Finch
Welcome swallow
Common starling
Common Myna
Little raven
Australian raven
Eastern Spinebill
Scarlet Honeyeater

Appendix 1

REPLACEMENT WETLANDS PROJECT

PROGRESS REPORT ON WORKS COMPLETED UP TO 2006

Introduction

The early stages of expansion of the Hazelwood Open Cut Brown Coal Mine in the new Hazelwood West coalfield required the draining and removal of a natural, but managed, Melaleuca Swamp Scrub Wetlands (approx. 16 Ha) at the former confluence of Eel Hole Creek and Morwell River (both relocated by the SECV in 1979).

In response to community sensitivities, a series of made-made Western Wetlands (approx. 15 Ha) were established between the then permanent western face of the Mine (under the SECV) and the Strzelecki Highway. These wetlands also in turn have to be drained and removed. This interconnected series of wetlands, including a former reach of the Morwell River, were awarded 'Land for Wildlife' status by the then DNRE in May 1996.

1. Securing the Land

In 1999 Hazelwood Power (now International Power Hazelwood) secured lands adjacent to the Morwell River and Brodribb Road/Monash Way to build **Replacement Wetlands** for the SECV-developed Western Wetlands that would be lost through the Hazelwood West Phase-1 mine development.

The lands that were secured as replacement sites were as follows:

- The Morwell River Northern Wetland site adjacent to the Gippsland rail line, purchased from the SECV shell (approx 12 Ha);
- The Brodribb Road Wetland site near the Power Station, purchased from the SECV shell (approx. 12 Ha); and
- The Morwell River Southern Wetland site adjacent to the M1 Freeway and Strzelecki Highway (approx. 50 Ha), leased from Gippsland Water for 40-years.

2. Wetlands Design

The design criteria for development of the sites were based on physical site access restrictions imposed by Vic Roads. Neither the Southern nor the Northern Wetland sites had safe public access, so the Brodribb Road site was developed for future public access. Other design requirements included, no change to local water regimes at the sites and no spoil to be removed from sites to minimise earthworks costs.

A Restricted Tender was issued following consultant Dunstan Engineering's search for companies with the required specialist expertise. The design was undertaken by the successful tenderer Woodward-Clyde (now URS), with input from officers of DNRE (flora and fauna), WGCMA, EPA, Latrobe City, LVFN and other interested parties.

The Conceptual Design for all three sites was completed early in 1999 and presented to the HP Management Team and the Environmental Review Committee (ERC), and with minor changes was accepted.

Source: International Power Hazelwood, 2006