REF 9673/1 – Supporting information - Clearing notes and photographs of proposed clearing areas

CLEARING NOTES

BACKGROUND ON OWNER / PLANS

The landowner Mr Mike Beanland purchased a Nature Based camp ground in Northcliffe, from 40 year DPaW employee Sid, who has now retired. The nature based campground previously known as SIDs (now renamed Northcliffe Bush Camp) is the major drawcard for Northcliffe, bringing visitors from around Australia to see its fauna. It is of major benefit to the town as it brings more visitors into town than any other business or tourism drawcard. It is hoped that this new wetland block will be similar and will bring people to see what is hoped can one day become a unique wetland.

www.facebook/northcliffebushcamp

We wish to make this newly purchased block (236 Guernsey Gully) and it's wetland into a wetland nature based tourism location.

We are planning (and have begun to) remove weeds outside the wetlands, and now wish to do more of this, in the wetlands, and to also make the land safe from fire, remove all the mess that is there that has been created by previous less than careful contractors. This is the intention of the application.

The next, medium-term aim is to include ten small discrete camp sites on higher ground, for campers that provide their own totally self contained caravan or RV, so there is no footprint, they bring everything they need and take away what they bring, and they can walk around the wetland.

Longer term and subsequent to substantial mapping and surveys and consultation with experts, we are considering the benefits of creating a small patch of open water / a lake for wetland birds and local fauna. It may also be beneficial to find and open up some parkland cleared space off to the side of the wetland for local fauna - being emus and kangaroos mostly.

Use / function of this wetland can be expanded to include allowing people to observe, by way of trails, the varied parts of the wetlands flora and fauna.

The objective being that the use, development and management of these wetlands should be considered in the context of ecologically sustainable development and best management practice catchment planning.

The wetland has been dissected and previously cleared, with tracks and weeds and large swathes of pushed up dirt currently on site caused by previous owner. (PHOTOS at the end of this document)

The wetland supports a reduced diversity of native flora due to human induced disturbances.

The wetland scores very low due to its having < 10% of the wetland boundary surrounded by land dominated by remnant native vegetation.

The wetland does not support any occurrence of declared rare, priority 1, priority 2, priority 3 or priority 4 flora.

The wetland does not support any permanent or seasonal feeding, breeding, roosting or watering site for regionally significant native fauna, however we are keen to develop this.

Dr Pen described the Meerup suite as "unusual, probably young" and "undergoing rapid change, making them excellent examples of wetland processes and evolution". Something we would be a part of the evolution of, in this project.

Dr Pen also mentions that chief threats to wetlands include weeds and feral animals and we aim to deal with both of these.

Waterbird breeding, feeding and drought refuge habitat is a high value resource that is not in this wetland, however we hope to be able to bring that value to this wetland.

PERMIT DETAILS

The urgency of this application is due to the fact that the works need to be done now and finished within the next few weeks when the rains come in late April.

The machinery is in place and the spray rig is ready and we just need the permit.

Machinery has been brought in to fix up the huge piles of dirt and pushed up into windrows left around by previous owners contractors. The machinery we brought onto the site was purchased brand new in order to avoid any dieback

contamination. This is the first place that the spray rig, ATV and other machinery will go.

This application is for two purposes.

- (1) Fire Hazard Reduction and
- (2) Weed control access tracks.

Fire Hazard Reduction

We have been notified and are required by the Shire to lower the fuel load and have been visited by the Shire Ranger and given instructions on what has to be done.

We can either:

- A) do a burn of the entire block this winter or
- B) carry out discrete smaller burns of the higher ground, and of clearly defined sections with higher fuel loads and in a way that allows fauna to escape, and does not risk the flora of the wetland.

We prefer (B) however to do that we need to prepare for it now, when it is dry.

To do that we need to ensure we are permitted to create the access ways so that we can improve this property.

Effectively, we would like to / need to immediately;

- 1) Create the Firebreak around the outside of the property and
- 2) Create a track surrounding the designated wetlands

To create a Firebreak around the boundary perimeter it needs to be done now, as it is inaccessible in the pre fire season. Last year it was not accessible until January, so has to be done now, pre the April rains.

Prepare for Fire Hazard Reduction.

The next stage after the firebreak and the track around the wetlands would be to divide the property up into multiple small similar flora areas, so that each can be managed differently based on their flora, which itself is based on contours, elevation, watertable and also soil types. By creating tracks between sections, cool winter burns can be done in each discrete section without risk of impacting others or having an uncontrolled burn get from one area into another.

Existing tracks and the two huge cleared roadways that dissect the wetlands currently will both be rehabilitated and returned to the wetlands.

2) Weed Control Access

Track for spray gear access

Create vehicular access track to enable access to both sides of what is currently a gully with weeds, where water will flow down this winter. This in order to access the location and use hand weeding as well as spot weeding via lance and hose from a ute - with safe non residual herbicide to remove the invasive weeds that are moving through the waterway (see PHOTOS at the end of this document of the upstream and downstream ends of the waterway, with thistle growing prolifically)

FLORA DIVISIONS

Create trails and vehicular access around the perimeter of the designated wetland, using flora concentrations to designate each area as per the included diagram.

Avoiding straight lines we preferably will follow contours, and make tracks along natural borders. Creating discrete sections with tracks / a pathway around the perimeter of the defined wetland and between major flora type will serve many purposes, fire and weed control being the initial, but they will also allow management to best occur by giving access to all areas, allowing better mapping and interpretive work also to be done. Experts will be brought in to identify and label flora and signs will identify these for guests.

It is a degraded wetland that we wish to enhance to achieve more ecological functions and create aspects of a wetland that did not exist before.

We subscribe to the 'Wise use of wetlands' (synonymous with sustainable use) that was adopted by the Contracting Parties to the (Ramsar) Convention in 1987 and has also been adopted by the EPA, defining sustainable utilisation as "Human use of a wetland so that it may yield the greatest continuous benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations".

We believe our plans can include both.

We agree with Kruczynski (1990), when his paper proposes the possibility of enhancement that increases one or more of the functions of an existing wetland, such as increasing the productivity or habitat value by modifying environmental parameters, including the creation of open water and emergent vegetation.

Of course doing this requires taking care to ensure enhancement of one wetland does not cause loss to another wetland. However that is not an issue here as the surrounding and downstream area is farmlands and has had a loss of wetlands to dairy grazing already. It will benefit the area to add a small open water area / lake, for the benefit of birdlife and other fauna. A riparian zone incorporation into the design is also in the planning (however this is all down the track and will be the subject of other Permit applications in the years to come).

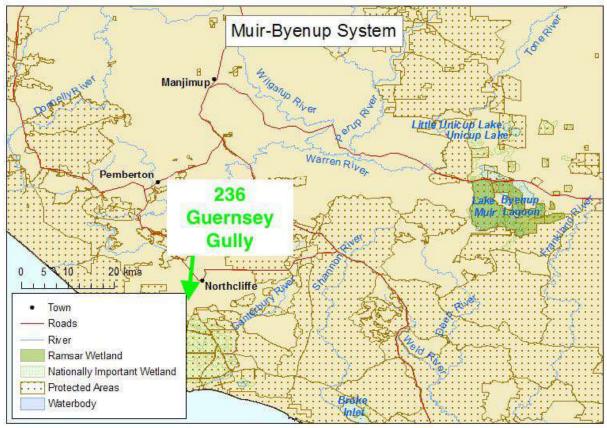
AREA DEFINITION

The property has a major portion of its area listed as an Environmentally Sensitive Area, as it is defined wetland.

It is an area of "seasonally, intermittently waterlogged land," it does not currently include a lake or any or the other features or valuable aspects of a typical valuable wetland.

It is not in the Wetlands of Importance.

It is not on the Australian Ramsar wetland sites, the nearest of which is Lake Byenup / Muir Lagoon, as shown in the map.



The land is not included in RAMSAR, it is not Nationally Important, not in the Conservation Category and not mapped by Dr Pen. It does however meet the final of the five ways to be included as a wetland, that being (e) Mapped by Semenmiuk.

It is (e) MAPPED BY SEMENIUK a wetland mapped in V & C Semeniuk Research Group "Mapping and Classification of Wetlands from Augusta to Walpole in the South West of Western Australia" (1997), published by the Water and Rivers Commission, Perth;

This is visible in the dataset:

https://catalogue.data.wa.gov.au/dataset/geomorphic-wetlands-augusta-to-walpole

The perimeter of the defined wetland in the dataset displays somewhat differently to the Clearing Permit System Map, though both are close approximations of the actual wetland perimeter.

This can be seen in the image – see images further in this document.

THIS WETLANDS' VALUE

The 1997 Water and Rivers Commission Report WRAP 1997 contained 'A Systematic Overview of Environmental Values of the Wetland, Rivers and Estuaries of the Busselton-Walpole Region' (by Dr Luke Pen) in which it can be ascertained that this wetland only supports a low level of attributes, functions and values.

It is a palusplain, seasonally waterlogged flat.

As described by numerous experts and the Environmental Protection Authority the values of a wetland relate to its attributes and functions and can be divided into values which benefit the ecosystem and also human uses.

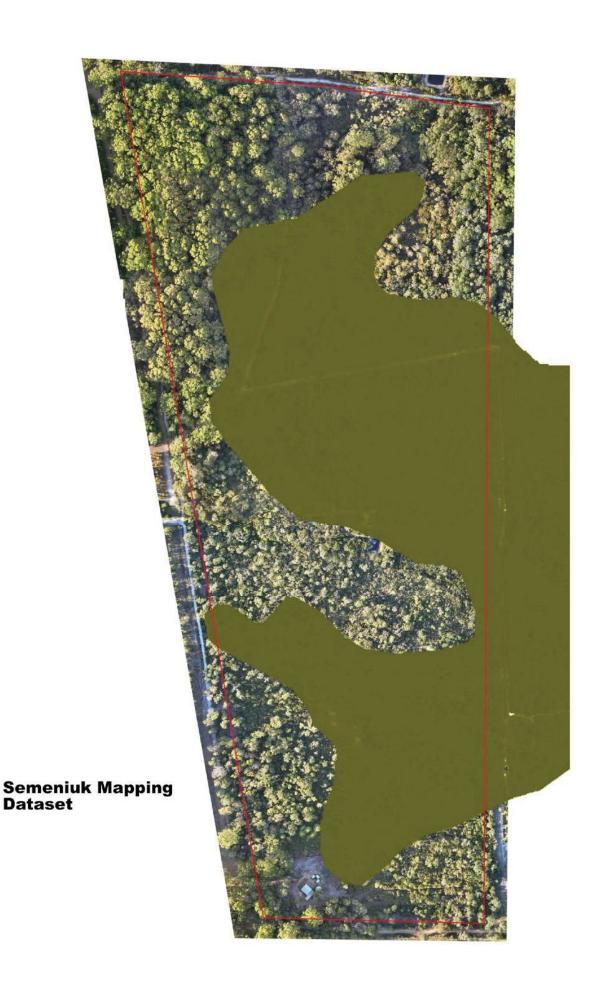
This wetland can be optimised to grow its flora and fauna as well as Human use values:

Human use values include social, such as scenery and public amenity. As is typically done in the evaluation of wetlands on the Swan Coastal Plain, Western Australia, the wetland value greatly increases when it includes recreational activities including swimming, canoeing, boating, fishing, bushwalking, nature appreciation and tourism opportunities.

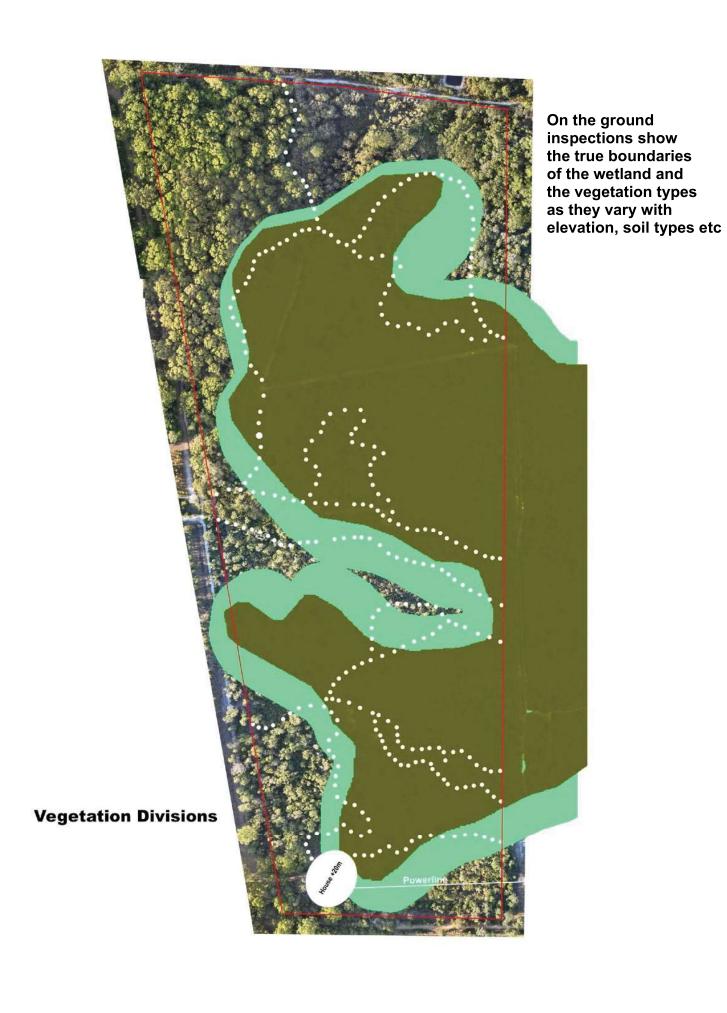
It would seem according to all definitions that MULTIPLE USE is the most suited category for this wetland area.

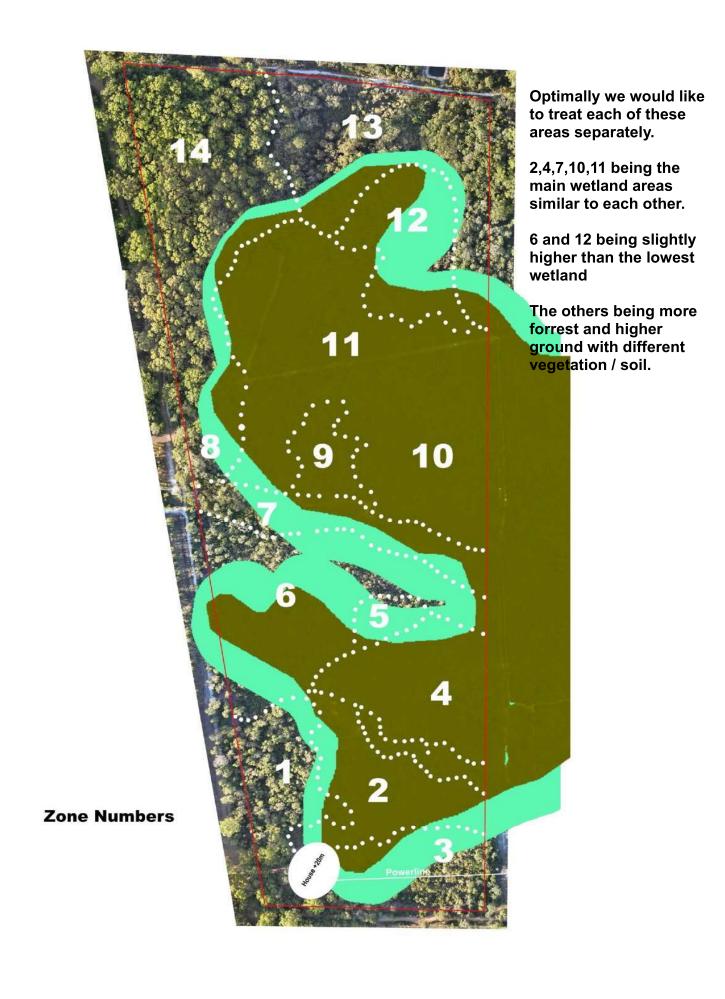


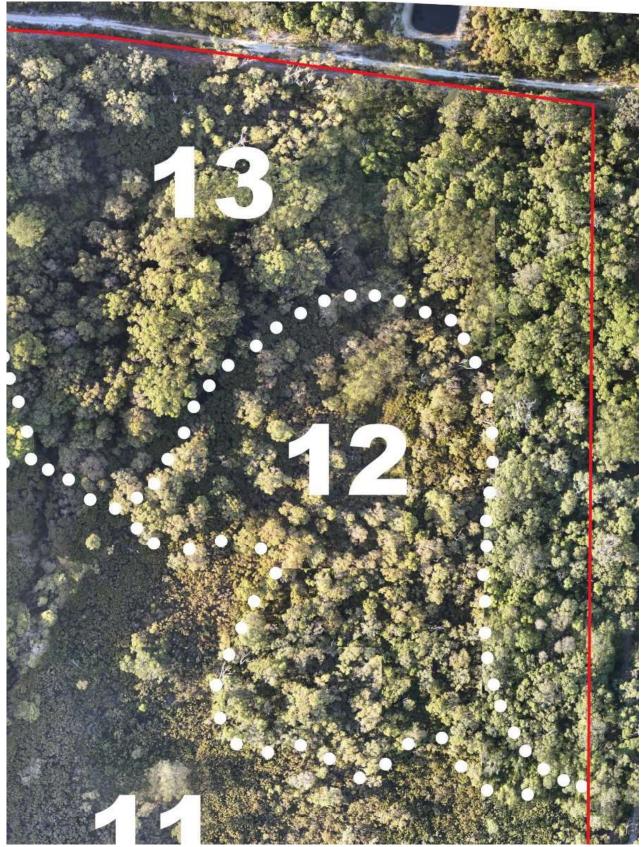
CLEARED AREAS THAT WILL BE RETURNED TO WETLANDS



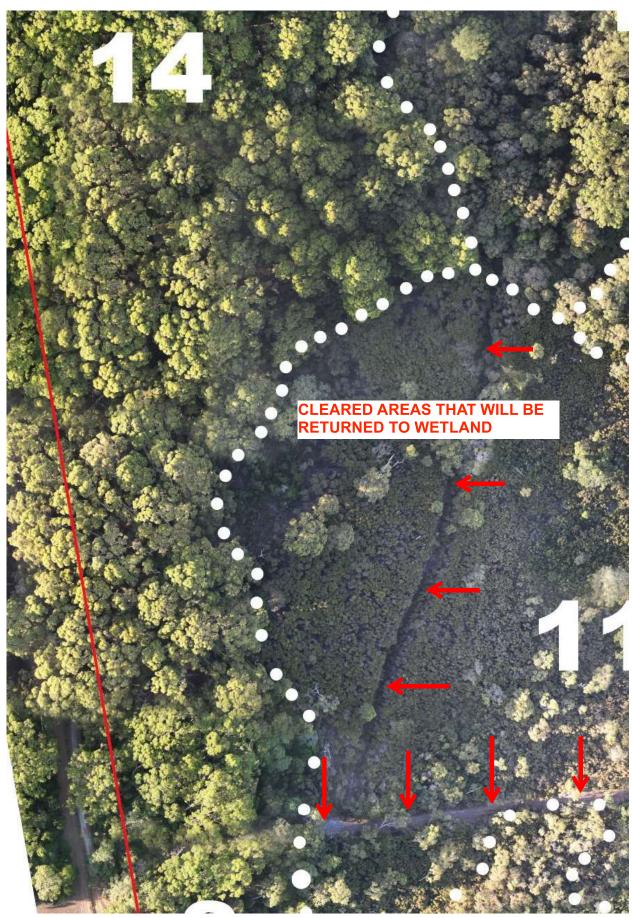




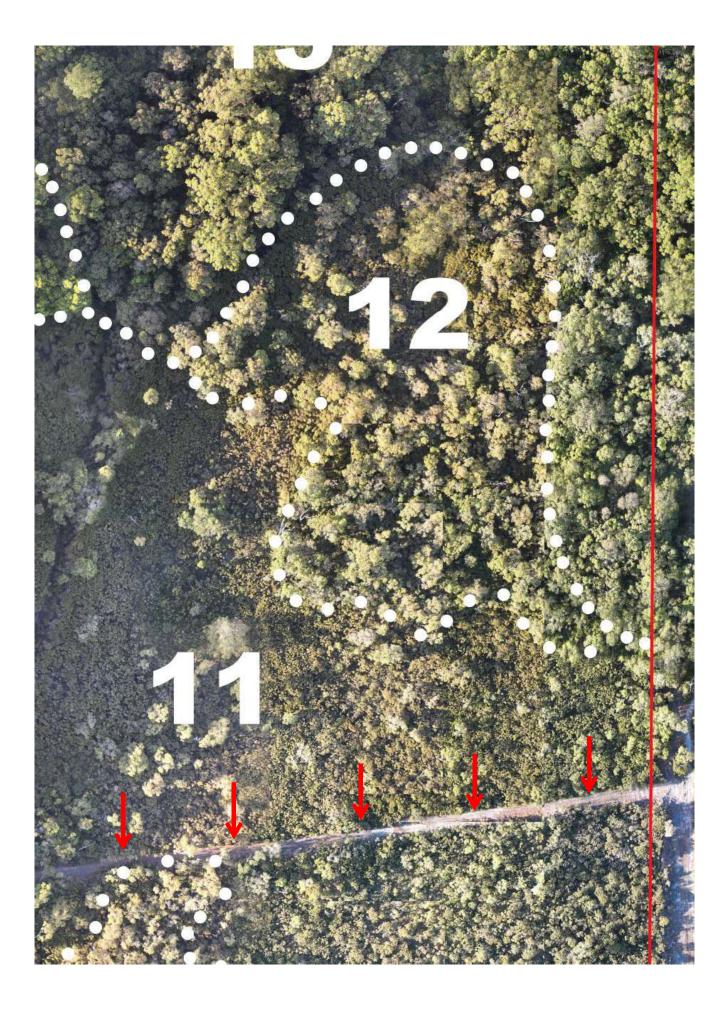


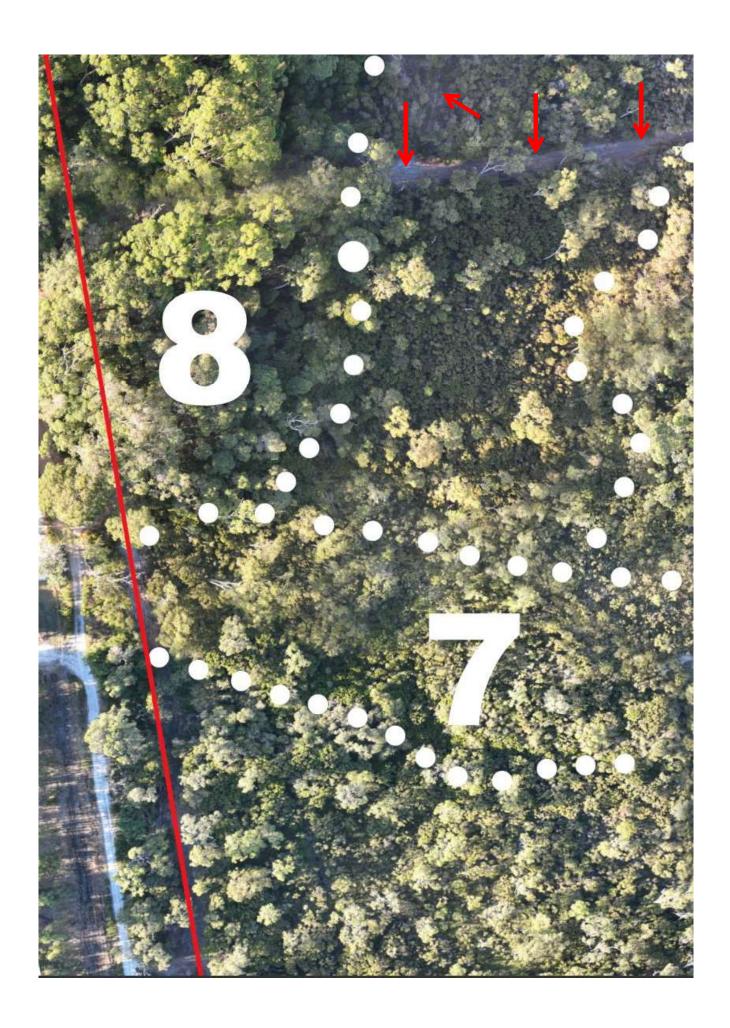


The HIGH RESOLUTION drone photos allow me to zoom in really close to see details of vegetation.



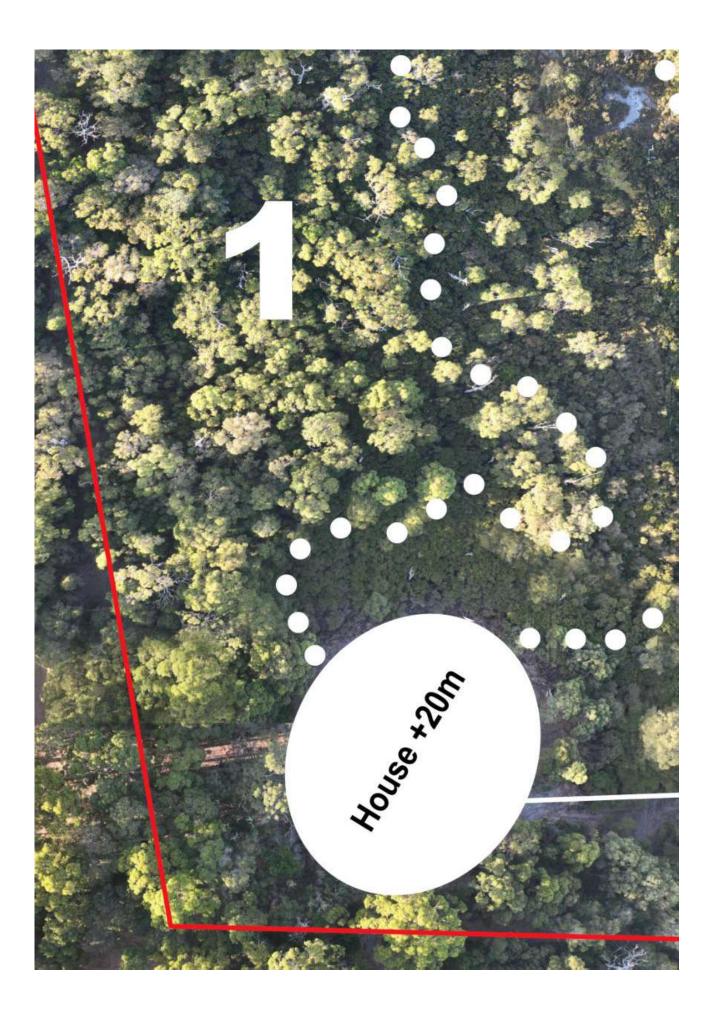
The drone allows very accurate mapping and observations of areas that are around the property.

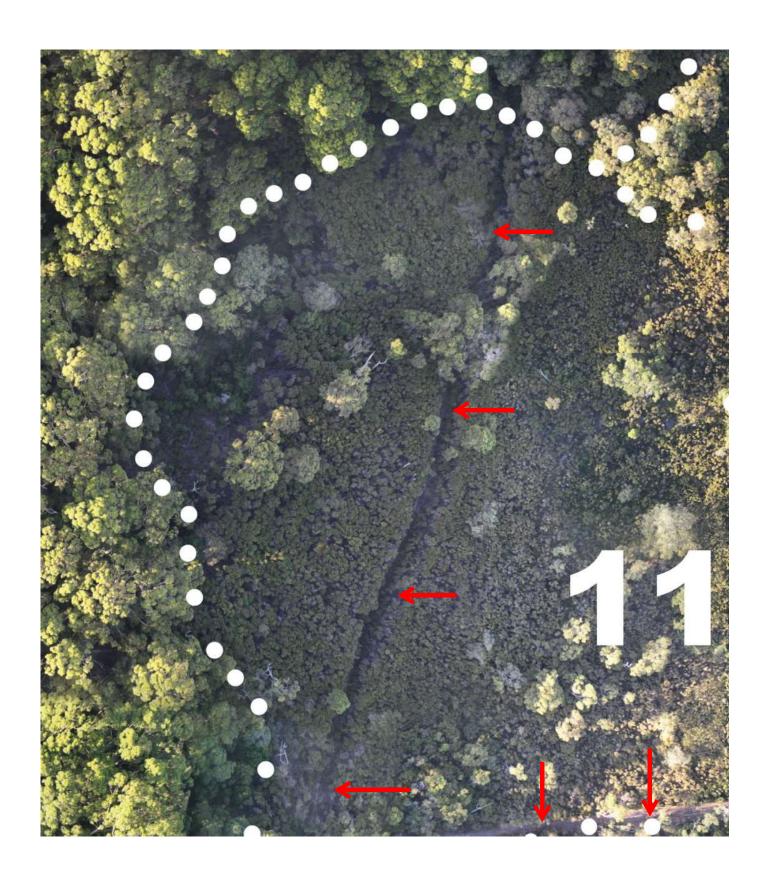






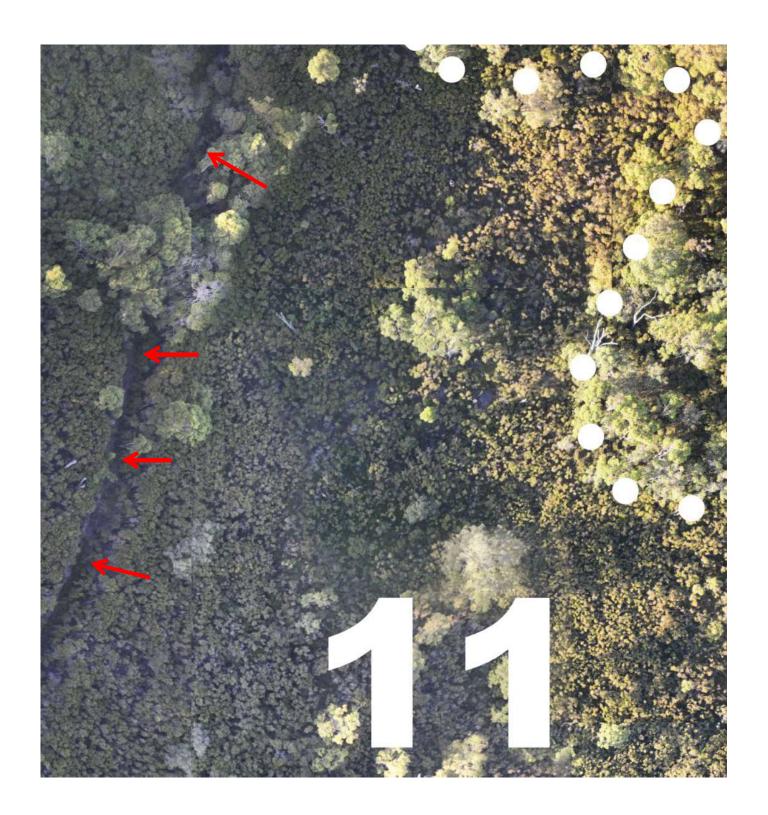


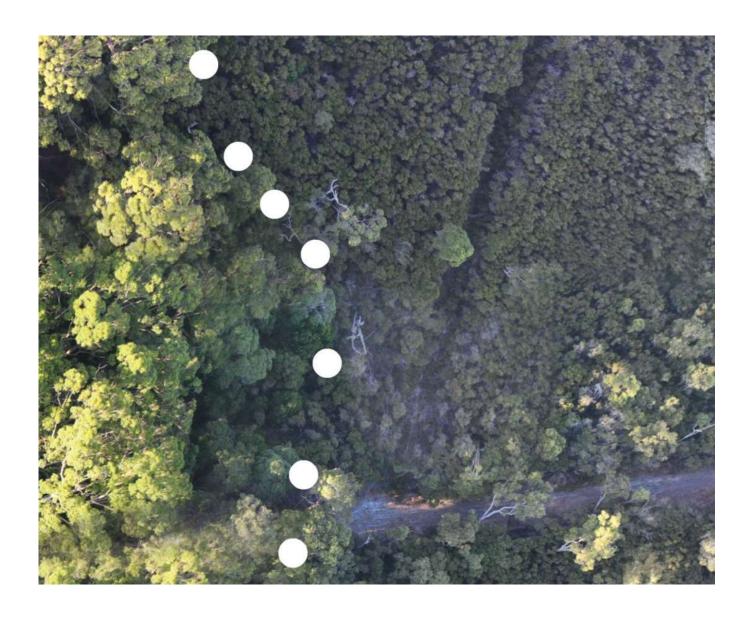














Weeds taller than 2m at the uphill part of the waterway, go right across the property to the other side



Weed after weed, in almost impenetrable bush alongside the waterway



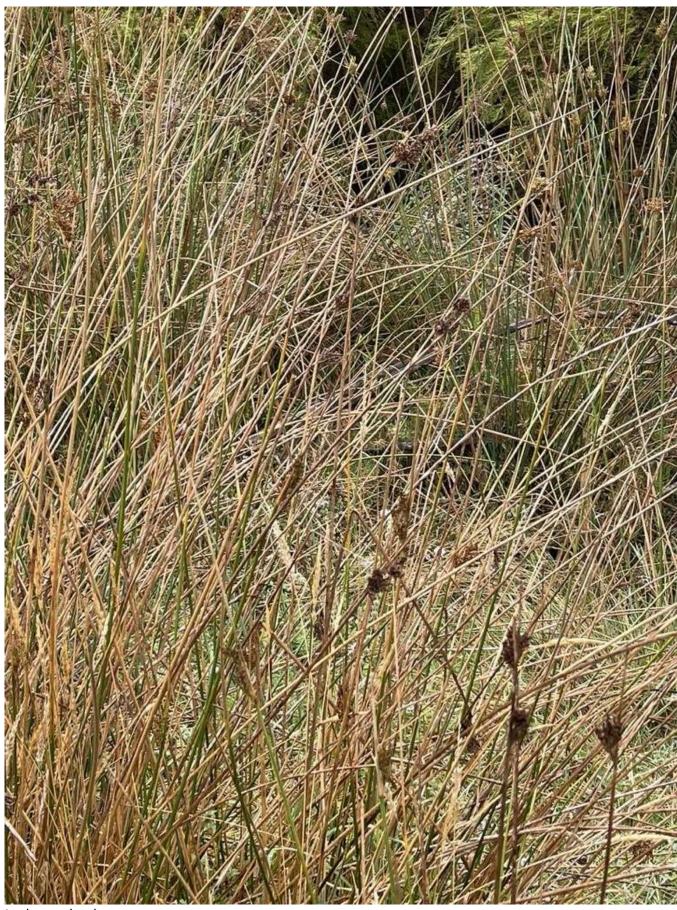
From the location of the house of the previous owner (now deemed unfit for human habitation) the weeds spread downhill and into the wetland.



The weeds have been spreading for years, however we have managed to get most of the ones uphill, but the ones that have spread downhill and into the wetland are the major problem now. From uphill (left) to downhill (right) they have spread.



In the wetlands



In the wetlands



In the wetlands



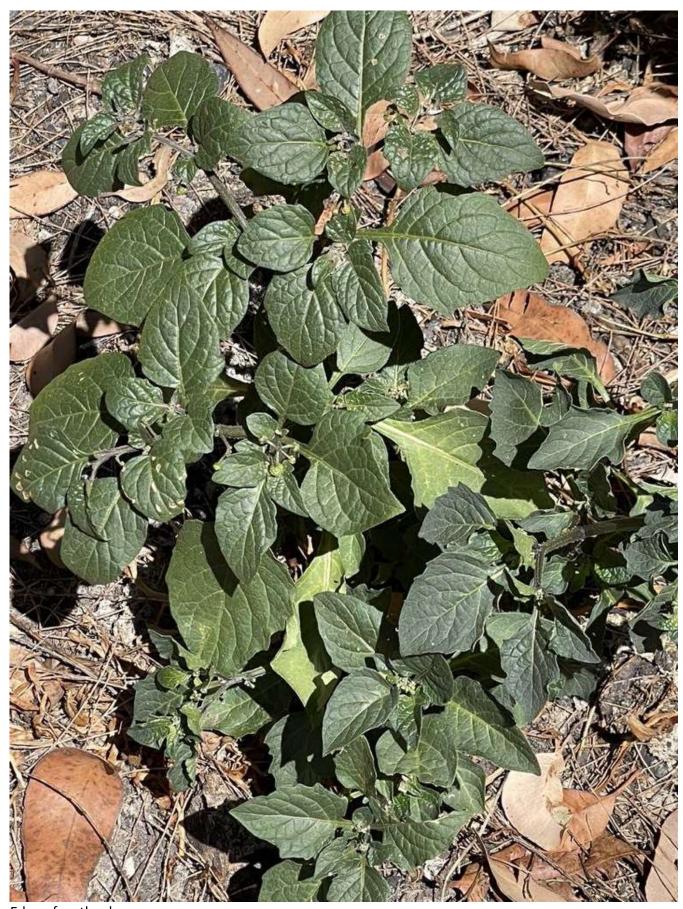
wetlands



Between the wetlands and the parts that have been disturbed



On the edge of the wetland



Edge of wetland



Many of these growing along the perimeter of the wetland





The contractor hired by the government just pushed the soil up into huge windrows, shoving it into the wetland, to make a firebreak. Less than 50% of the perimeter of the boundary has been cleared in this manner, other parts he was unable to get onto, despite it being late in the year. It was too boggy even in December to operate in the lowlands. Thus our desire to get in early now and fix up the mess.



About 1.5km of clearing was done, with the end result being – this mess.





All along the downhill edge of the property we can see the same weeds that we see at the uphill end of the waterway, spreading downhill. Spot spraying can be done, once we remove these windrows and get access to the land behind these walls. We will separate the soil from the dead plants and create heaps with the dead plants to burn over the winter.



More of the weeds in amongst the firebreaks pushed up against the wetland









Wherever there is a clearing, such as this between the wetland on our property and the cleared part belonging to the neighbour, the kangaroos and emus can often be seen.

Rabbits and foxes are also around and these will be removed.





What we will be cleaning up in the coming days, separating the soil that is mixed into the vegetable matter in sometimes 2m high piles.









In some places the fuel load of bark, leaves and fallen branches is over 1m deep and is a major concern of the fire control officer in the area.



The defined WETLAND is on the right where the Ti-trees are, and the larger trees on the left become parkland as the land rises uphill.



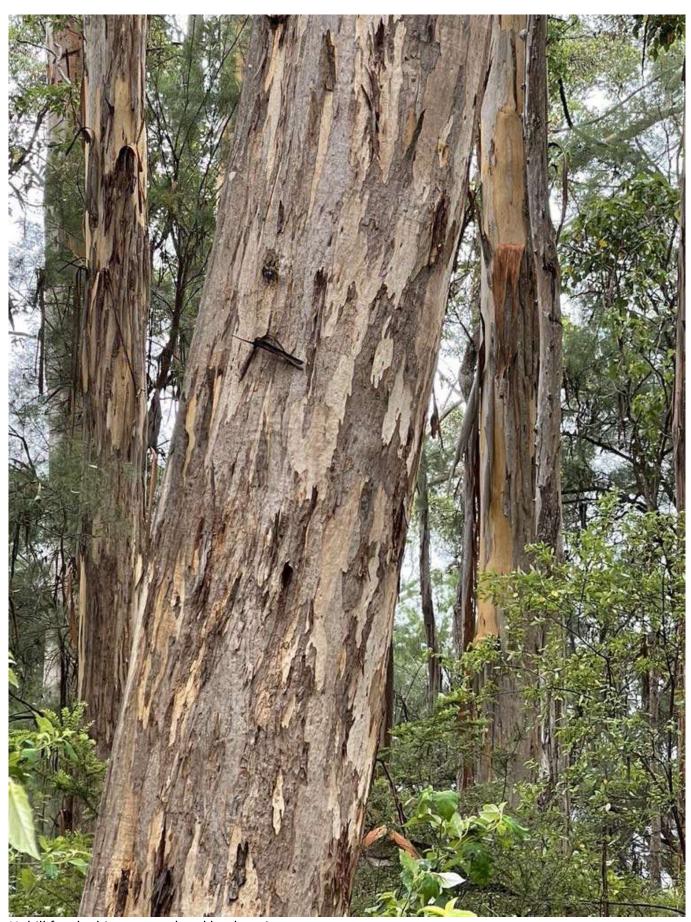
At the edge of the treeline we can look down onto the top of the Ti trees that fill the wetland.



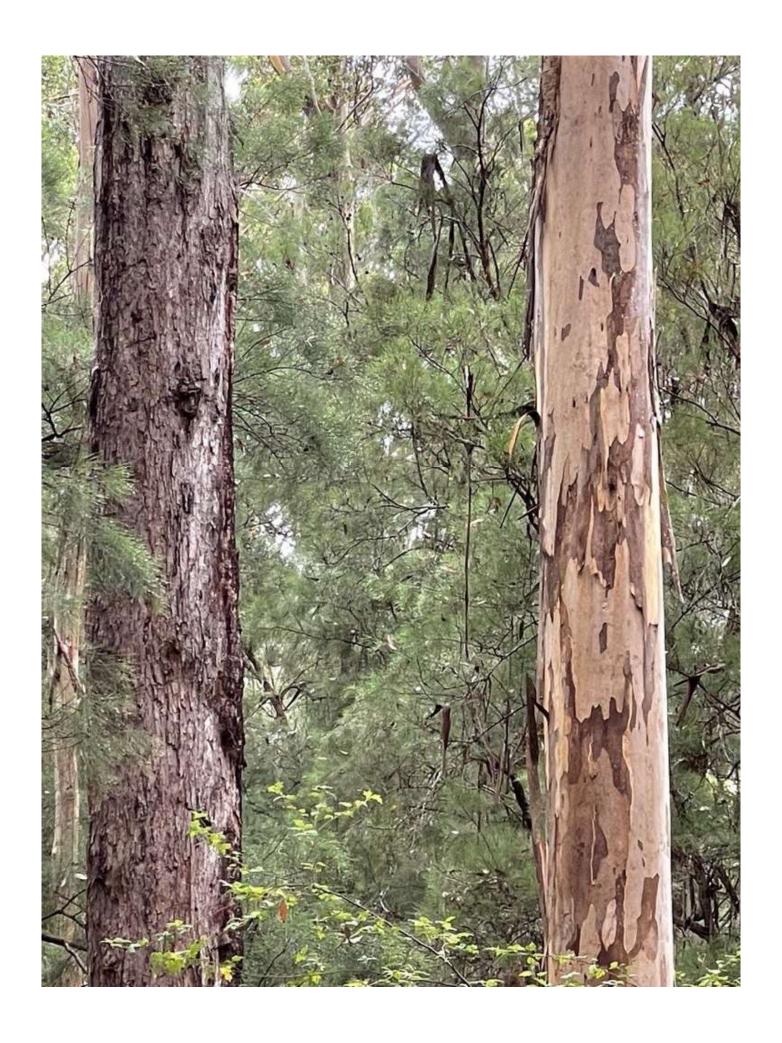
In the valley where the Ti trees are thick, and in places where tracks have been cleared, there is also other groundcover. This is one place where there were piles of soil and dead vegetation pushed up, which we have removed and spread out and cleaned up, so it looks good again and animals can once again move through it.

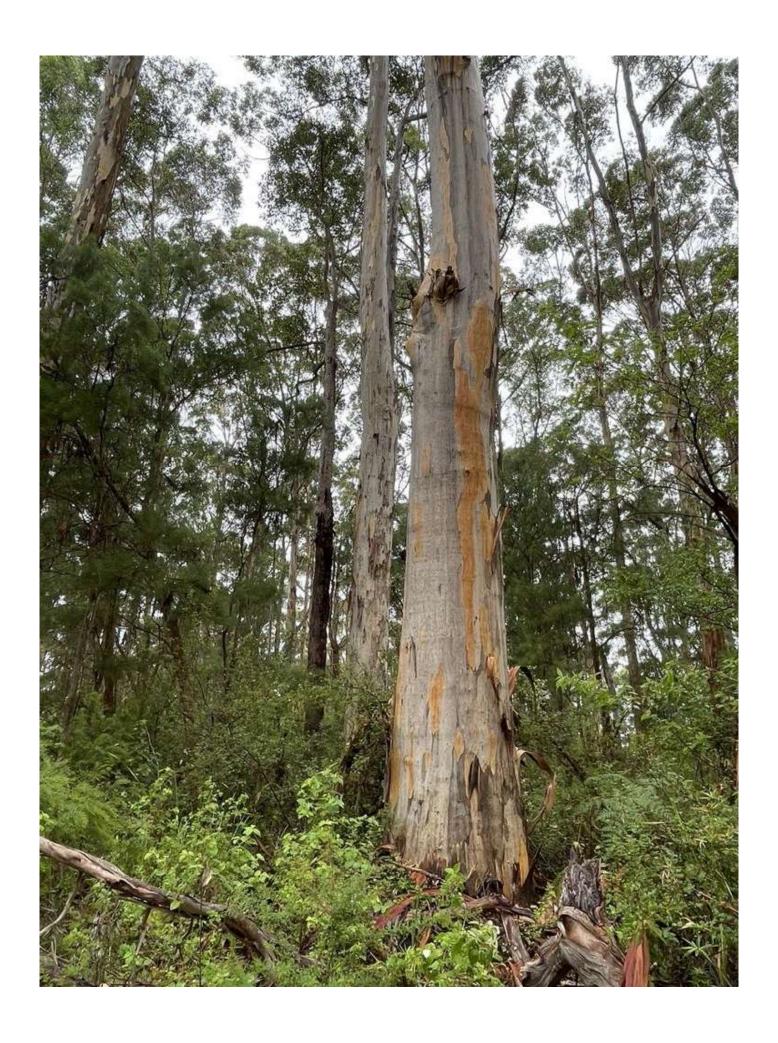


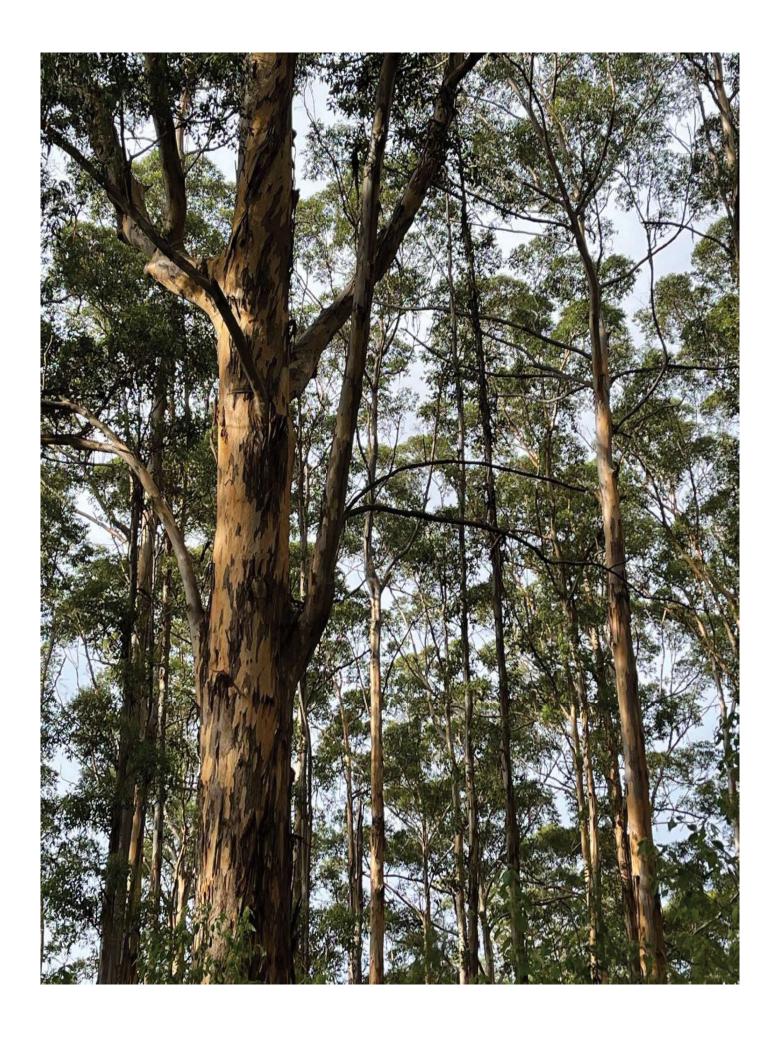
Along what used to be a fenceline, now overgrown. Actually remnants of the fences are still there, but we will be removing the fencelines as there are no stock



Uphill for the big trees and parkland setting









In areas where there has been disturbance, this has occurred.

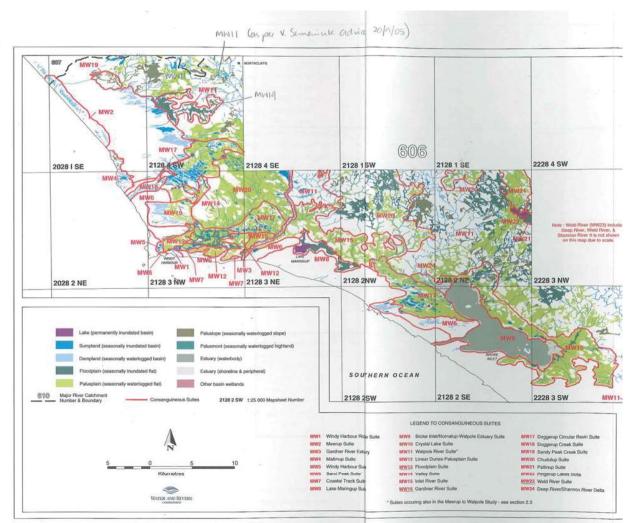


Figure 9: Preliminary Description of Consanguineous Wetland Suites in Domains throughout the Meerup to Walpole Area



RESOURCES:

- 1) Pen, L. (1997) A Systematic Overview of Environmental Values of the Wetlands, Rivers and Estuaries of the Busselton-Walpole Region. Water and Rivers Commission Report # WRAP 7.
- 2) A methodology for the evaluation of wetlands on the wetlands of the Swan Coastal Plain, Western Australia. December 2017.
- 3) Environmental Guidance for Planning and Development, May 2008. Environmental Protection Authority
- 4) Environmental Protection (Environmentally Sensitive Areas) Notice 2005
- 5) Native Vegetation Regulation Fact Sheet, Environmentally sensitive areas
- 6) Mapping and Classification of Wetlands From Augusta to Walpole in the South West of Western Australia, Water and Rivers Commission, 1997

I am now making my way through the excellent online resource, "guide to managing and restoring wetlands in Western Australia"