



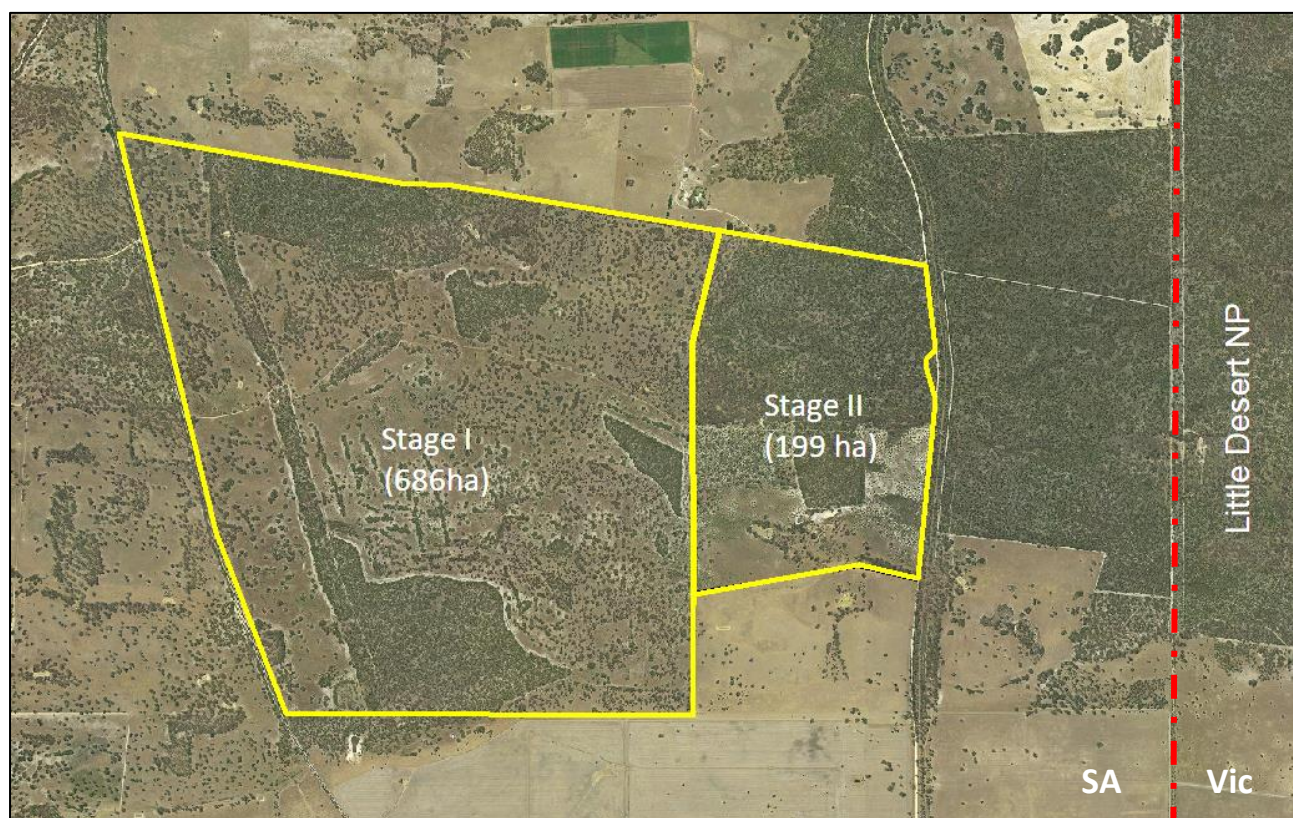
Day 3: Wednesday 4th October 2023 Eaglehawk Waterhole Restoration Reserve

1. NGT's first Restoration Reserve

We acknowledge the traditional custodians of the region that includes the Eaglehawk Waterhole Restoration Reserve, the Potaruwutj people, and respect their deep and ongoing connection to this land.

Eaglehawk Waterhole is also a very special place for Nature Glenelg Trust, as it was our very first restoration reserve. After the original area of the property was secured in 2013, thanks to the support of the Native Vegetation Council (NVC) and Nature Foundation SA, a further 199 hectares was added to the reserve in early 2022, bringing the total reserve size to 885 hectares (2,186 acres).

NGT independently funded the purchase of Stage II, as part of a process that took five years to unfold and was only possible because of the foresight, generosity and cooperation of our neighbour. We especially recognise Charlie Koch and his family from Tallageira Pastoral Company for their patience and commitment to seeing this fantastic outcome for Eaglehawk Waterhole come to fruition.



2. A quick history of Eaglehawk Waterhole prior to 2013

The property was part of a large pastoral station (Run 447) until 1923, when the wider area was sub-divided for closer settlement as the Hundred of Geegeela. Throughout this period the site was grazed, but the property escaped physical clearance until the late 1960s; a time when accelerated rates of land clearance in the surrounding landscape saw large areas of land converted to more intensive agricultural uses.

The last broad-acre clearance at Eaglehawk Waterhole occurred in 1981, and although grazing of the site continued, the new laws left the property in a partially developed state. The previous owners (immediately prior to NGT) purchased the property in 1987 and it continued to be used for grazing, but without major investment in agricultural improvement for several subsequent years, leaving many natural values either intact or recovering (through the process of natural regeneration).

However, a period of renewed activity on the property in the early 2000s involved 1109 trees being cleared without consent from the NVC. The matter was investigated in 2003, and the owner was convicted and fined in 2007. An application to clear regrowth was submitted in 2006, but this was put on hold pending the outcome of the earlier legal proceedings. Further legal proceedings to 'make good' the clearance were imposed with the registration of a Court Order and Heritage Agreement over parts of the property in 2009. A Biodiversity Offset Incentive Scheme (also in 2009) made a payment for fencing and destocking of all of the large, intact areas of native vegetation on the property. This duplicated some of the outcomes of the court order, and led to a further on-title agreement, under a separate Act.

The net effect of this period was a parcel of land with:

- Permanently protected areas almost exclusively consisting of habitat associated with the lowest fertility soil types, such as stringybark woodlands over deep sands;
- The highest fertility soil types, featuring the more threatened box, buloke and gum grassy woodlands, being preferentially cleared and continuing to be grazed;
- Poor layout and configuration of conservation areas; and,
- The bulk of the property, much of which retained significant biodiversity values, still being outside formal conservation and under long-term threat.

This was the situation when the property was placed on the open market for sale in mid-2013, and we identified that if it were purchased and consolidated for biodiversity conservation, it would present a unique opportunity for whole-of-property scale restoration in a priority landscape.

The vast majority of the land was grazed by sheep and partially cleared but still retained significant established tree, shrub and understorey cover, complemented by a number of smaller areas which were already protected under conservation agreements. Given their condition, the grazed and cleared areas provided a unique opportunity to preserve a range of important biodiversity values that we knew would respond favourably to a change in land management, but would have otherwise been eventually lost under a more intensive farming regime which could have occurred if NGT had not stepped in.

The Stage II area also includes areas of remnant vegetation, as well as previously cleared but now revegetated or regenerating areas.

The property is located in the general area highlighted as a priority zone for conservation activities. The property also retains important habitat for species and ecological communities listed as threatened under the Commonwealth *EPBC Act 1999*, including the South-eastern Red-tailed Black-cockatoo and Seasonal Herbaceous Wetlands of the Temperate Lowland Plains.



3. Biodiversity values of Eaglehawk Waterhole

Image 1 - Red-tailed Black-cockatoos frequent the property, especially for watering and feeding. Flocks of up to 150 were observed in May 2015 and approximately 100 in July 2020.



Image 2 – The Fiery Jewel butterfly occurs on the property and has a unique relationship with coconut ants (*Papyrius nitidus*) and the Daphne Heath (*Brachyloma daphnoides*).

Image 3 - Sand goanna (*Varanus gouldii*) first recorded in 2018 (photo by Andy Lines)



Image 4 - Western Pygmy possum (*Cercartetus concinnus*) caught in a pitfall trap in 2015



Image 5 (left) - Nationally listed Buloke woodlands were once more common on the property, and across the landscape, but have been heavily cleared. Its seeds are one of the favoured food species of the Red-tailed Black Cockatoo

Image 6 (right) - Typical species of our herbaceous wetlands - Wildflowers growing on wet flats, incl. the purple Tatiara Pea (*Swainsona procumbens*), the white Swamp Daisy (*Alittia cardiocarpa*), and yellow Swamp Buttons (*Craspedia paludicola*)



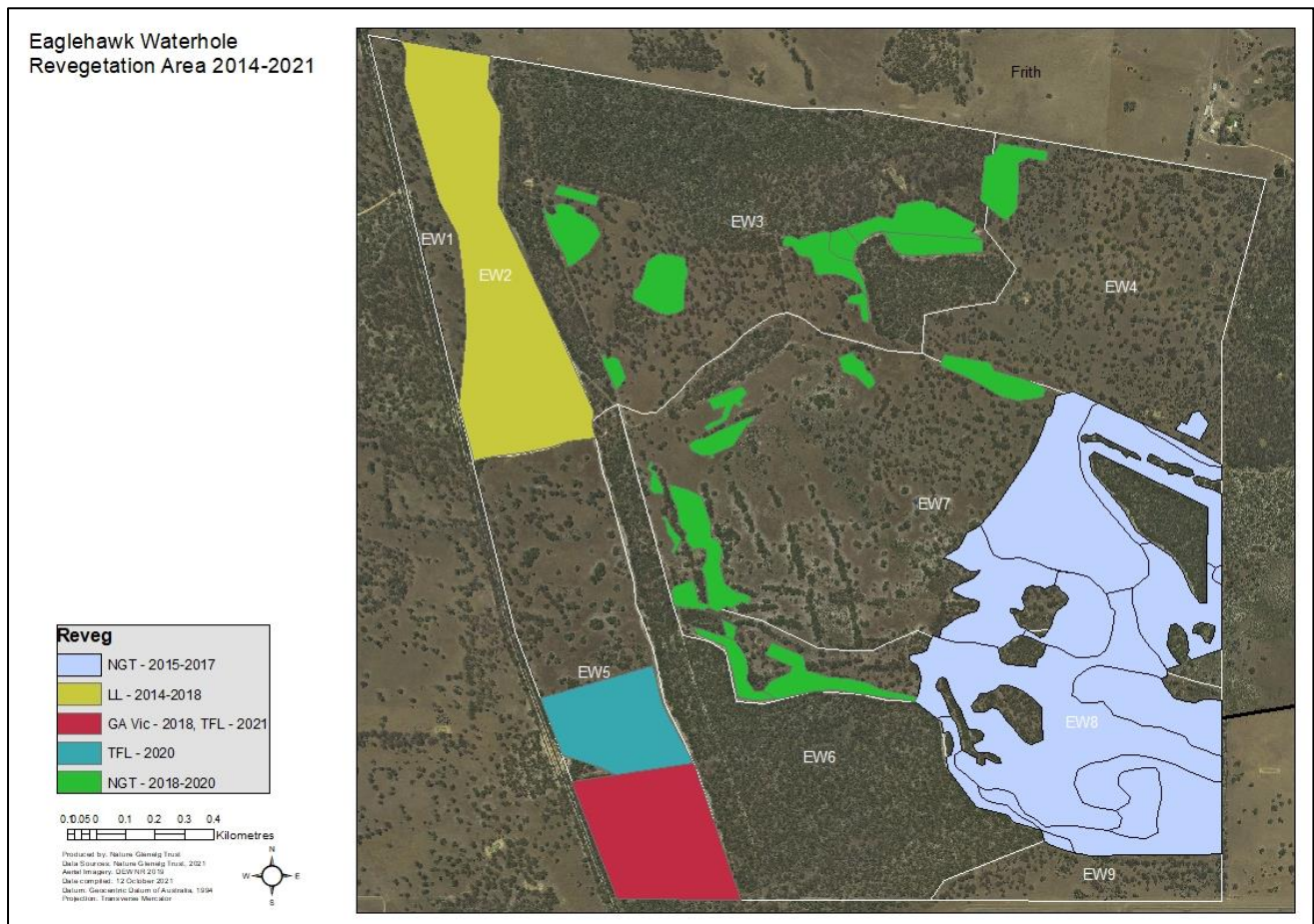
4. Revegetation over the last ten years

The first stage of restoration was kindly supported by the *Landscape Links* project delivered by Natural Resources South East, now the Limestone Coast Landscape Board. The five-year project (2014-18), called *Restoring priority habitats through large scale revegetation in the South East of South Australia*, funded restoration works in the Bangham district to create landscape scale corridors. The area restored via this project (see area EW2 below) now contains a diverse planting which is reaching maturity with flowering and seed crops present for many species.



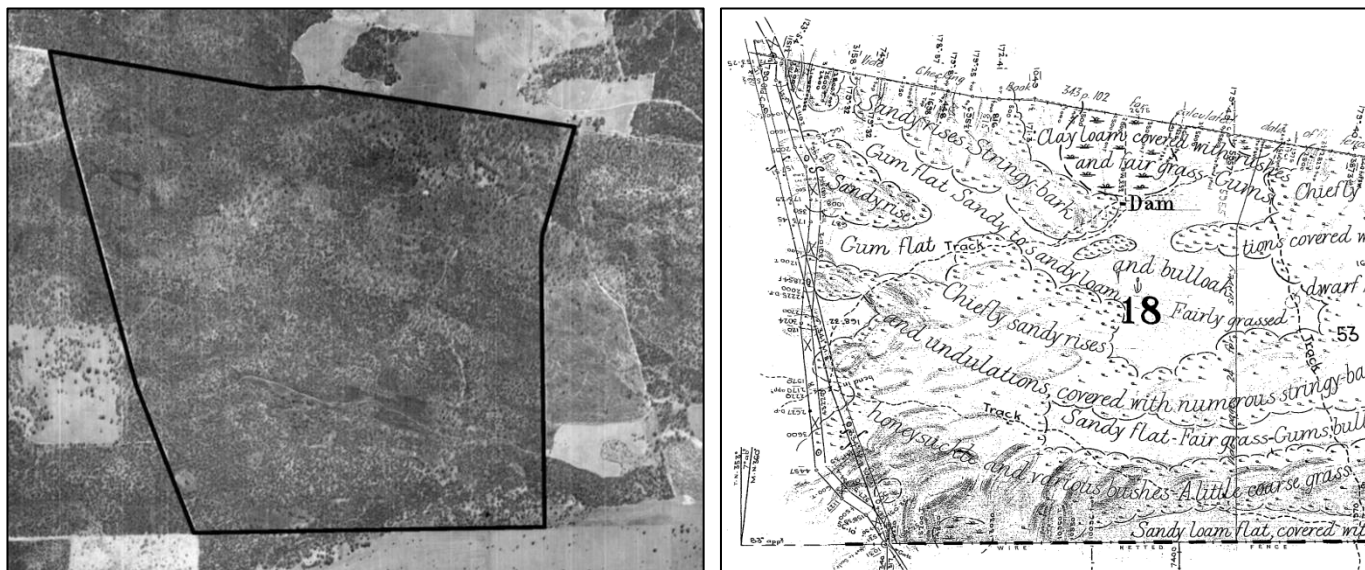
The early days of the Landscape Links plantings, which we check on today

NGT was subsequently successful in applying for grants through the 20 Million Trees program and ran two projects back to back from 2015-2019. These two projects further boosted revegetation, weed and vermin control throughout the reserve along with local volunteers engagement. A range of other organisations have also contributed to revegetation at the site including Greening Australia and Trees for Life (SA).



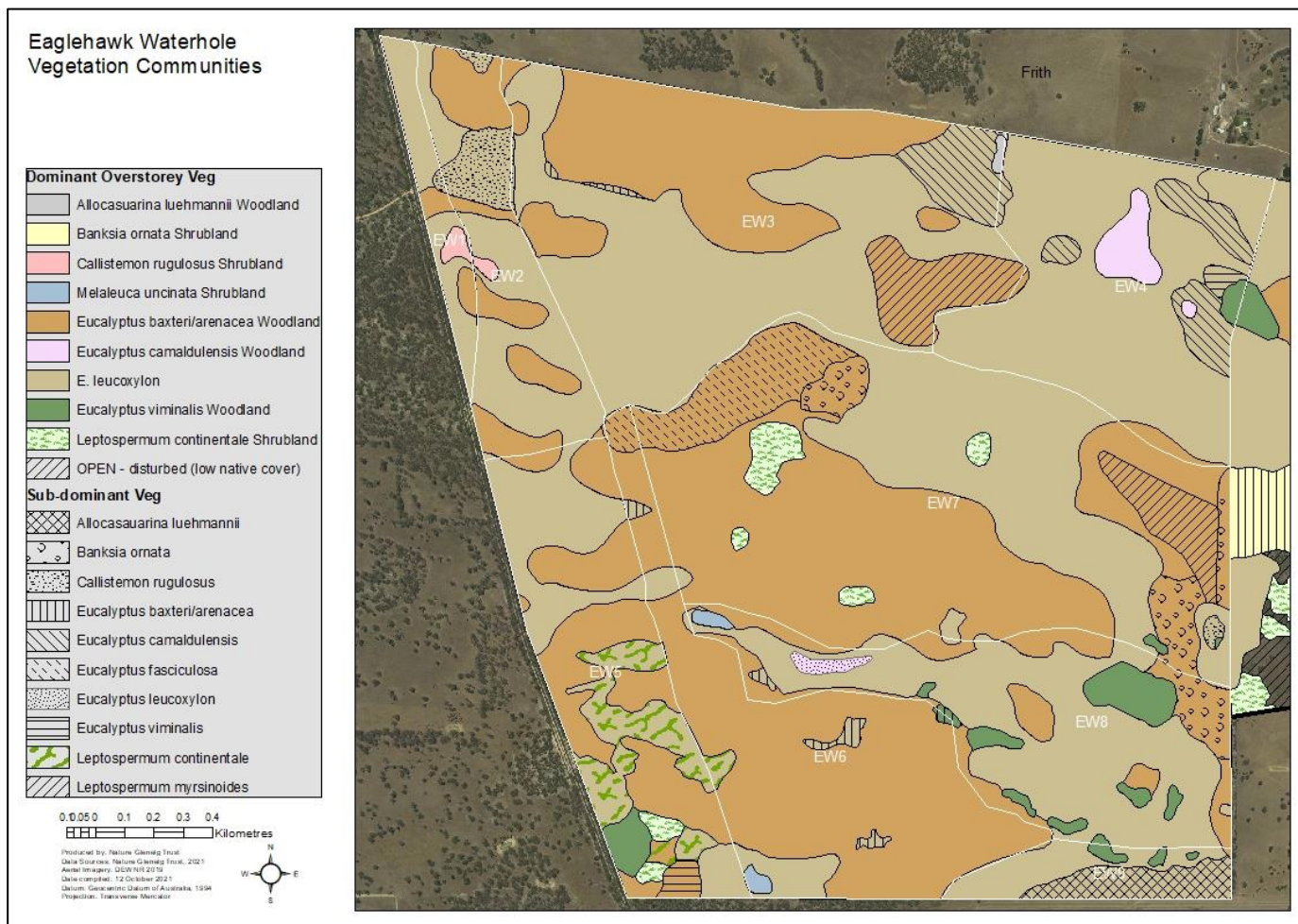
Revegetation progress at Eaglehawk Waterhole

An important aspect of planning a habitat restoration project is determining the vegetation types you are trying to restore and their distribution across a site. Luckily at Eaglehawk, there was plenty of remnant and residual vegetation to provide a basic blueprint, as well as early survey maps and old aerial imagery of the site (see below) that precedes clearance, which we have been able to use as a guide.



1958 aerial image (left) and 1918 survey diagram (right)

Below is the vegetation map for the property that guides our work.



Vegetation community map for Eaglehawk Waterhole – Stage I area (updated in 2020)

4. Other activities over the last ten years

- Removal of sheep, development of a management plan, and negotiation for whole of property Heritage Agreement underway
- Fox runs undertaken by the Binnum-Benayeo Hunting group each July from 2014 to present
- Bird surveys undertaken by members of BirdLife SE SA, through the Landscape Links project
- Baseline flora and fauna surveys including small mammals, birds, and reptiles with assistance from Field Naturalist Society of SA in 2015
- Active revegetation since 2014 now encompassing over 75% of the previously cleared sections of the property.
- Regular surveillance, mapping and control of various weed species especially Salvation Jane, Golden Wreath Wattle, Phalaris and Skeleton Weed.
- Active vermin surveillance, mapping and control of rabbits undertaking warren ripping and fumigation and spotlighting shoots. This work remains ongoing.
- Camping area upgrade with fire place, toilet, and rustic shelter.
- Southern boundary fence upgrade and removal of all internal fencing (almost exclusively by volunteers).
- NGT staff commitment during this time has included Andy Lines who lived on site in a caretaker role from 2015-2019, then late 2020 to early 2021, then back again in mid 2022 to present day.
- Long term connection created with Frances Primary School whereby the students come out to the reserve and help with activities and are provided an environmental education experience.
- Research of Aboriginal Heritage (by Andy Lines) looking into old reports and details relating to the clan, place names and features of significance in the district.
- Yarning Circle field day with South East Aboriginal Focus Group in Spring 2020. Preparation of a seasonal calendar for the property (by Andy and Bryan) relevant to the regional seasonal calendar concept provided to NGT on the day.
- In 2016, good diversity of 'wet flat' flora was observed around the dams, justifying further consolidation of this work in 2022-23.
- Cultural surveys and inclusion of cultural heritage into planning and on-ground actions
- Mapping of fire scars, vegetation communities, weeds and threatened species
- Burn planning and implementation including flora and fauna monitoring



Prescribed burn undertaken in autumn 2022

An example of one of the two dams which have had remediation works undertaken to prevent water from running off the flats and into the dams.



The fascinating journey of recovery at Eaglehawk Waterhole continues to unfold. For more information or to support our work, please visit the NGT website: www.natureglenelg.org.au or contact us by emailing info@natureglenelg.org.au.

As well as an incredible level of community and volunteer support throughout, the project activities presented in this summary have been made possible thanks to partnerships or direct grant funding support from a range of organisations and programs:

