# 6 Monthly LRMP report January 21 - June 21 Prepared by Matthew Dodd

This report summaries all the LRMP works for the period of January 21 - June 21. Naturelinks at the conclusion of 2021 will provide the annual report for all works undertaken by them in conjunction with local contractors.

Competencies for chemical application were reviewed, and all contractors are adequately qualified (they hold relevant certificates) or are under direct supervision by qualified personnel.

The report is broken down into key identifiable areas on site and then finally a brief discussion about general property maintenance.

#### Phase A & B

Supplementary watering was carried out during the summer months for the plantings completed during 2020.

Significant effort was placed in weed control through this area, especially targeting thistle varieties; methods used were tanker/backpack/boom spraying, brush cutting and slashing. Several site inspections throughout the first half of the year noted natural regeneration after rainfall.

A further 750 Plants are to be planted in the southern corner of Phase A an B, initially intended for Autumn, however due to plant availability this is now scheduled for August. As such, preparation spray runs were completed by Naturelinks. Location of the infill plantings are shown below:

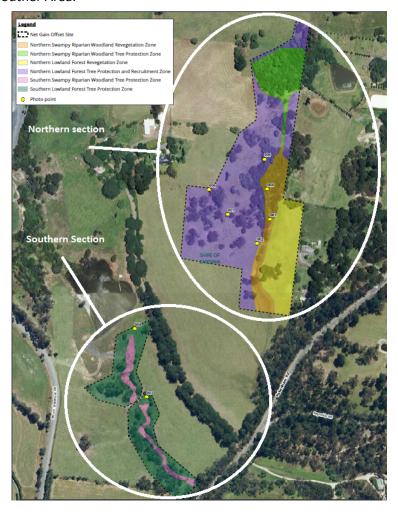


## **Netgain Offset:**

Naturelinks continued to monitor and undertake the weed program throughout the first half of 2021. Activities included

- spot spraying, broadleaf and perennial grass control in both the northern and southern zones.
- Hand weeding around plantings
- Woody weed removal (willow)
- Brush Cutting around plantings and areas of high perennial grass where the local contractors tractor could not reach
- Slashing of open areas for fire prevention during bushfire management season
- Site security monitor and repair fences as required and spraying of weeds by the local contractor in the paddocks surrounding the Netgain offset area.

Below is a monthly detailed summary of the activities undertaken by Naturelinks for the reporting period including quantity and ratio of chemicals used. For clarity, the area is broken down into 2 areas, the Northern and the Souther Area.



Note there were a number of observations of Kangaroos through the netgain area during the reporting period. On occasions Deer have been noticed, and have been chased out of the site.

Month	Description
January 2021	20/01/2021 spot spray of Blackberry, thistles and Ivy in northern section. Site completed. Pack spray of weedy grasses in top half of Southern section WEEDS: Cirsium vulgare Cynodon dactylon var. dactylon Dactylis glomerata Hedera helix Holcus lanatus Phalaris aquatica Raphanus raphanistrum Rubus fruticosus spp. agg. Senecio jacobaea Solanum nigrum s.l. CHEMICALS: Associate 0.1gm/L BS1000 Surfactant Mixed 1ml/L Weedmaster Duo 10ml/L mixed Garlon 600 Standard rate 2ml/L Spot On Blue Dye Mixed 4ml per litre Brushwet Surfactant Mixed 1 ml//L
February 2021	04/02/2021 Northern Section: completed in Blackberry and Thistle spray run in southern half. Began perennial grass spray run in southern half. Hawthorn and Willow run through wetland areas. Grass spray in top half. Grass works ongoing WEEDS: Dactylis glomerata Ehrharta erecta Festuca arundinacea Holcus lanatus Paspalum dilatatum Rubus fruticosus spp. agg. Salix fragilis Senecio jacobaea Sonchus asper s.l. Stenotaphrum secundatum CHEMICALS: Weedmaster Duo 10ml/L mixed Lontrel Mixed 5ml/L Associate 0.1gm/L BS1000 Surfactant Mixed 1ml/L Brushwet Surfactant Mixed 1 ml//L Spot On Blue Dye Mixed 4ml per litre
March 2021	
April 2021	19/04/2021 Pack spray and guard collection top and bottom half of southern section. Damgage to fence from fallen branches reported to quarry. 19/04/2021 Site start for kelly WEEDS: Asparagus asparagoides Cirsium vulgare Cortaderia selloana Galium aparine Hedera helix Rubus fruticosus spp. agg. Solanum nigrum s.l. Sonchus asper s.l. Sonchus oleraceus CHEMICALS: Weedmaster Duo 10ml/L mixed Associate 0.1gm/L Maca 600 High rate 3.4ml/L Kamba M 6ml/L BS1000 Surfactant Mixed 1ml/L Brushwet Surfactant Mixed 1 ml//L Spot On Blue Dye Mixed 4ml per litre
	23/04/2021 Pack spray selective herbicide for blackberry, english ivy. Pack spray non selective herbicide targetting mainly perennial grassy weeds. Handweed around poa bed on boundary fence. All works conducted in Northern section. 23/04/2021 Removal of old stake and guards in northern section, some to be re-used for upcoming plantings. 23/04/2021 Site start allowance for Thomas B. WEEDS: Anthoxanthum odoratum Arum italicum subsp. italicum Cirsium vulgare Dactylis glomerata Ehrharta erecta Hedera helix Holcus lanatus Rubus fruticosus spp. agg. CHEMICALS: Maca 600 High rate 3.4ml/L Associate 0.1gm/L Weedmaster Duo 10ml/L mixed BS1000 Surfactant Mixed 1ml/L Brushwet Surfactant Mixed 1 ml//L
May 2021	20/05/2021 All works conducted in Northern Section. Handweed through poa beds on the southern boundry to promote germination. Pack spray broadleaf weeds bottom NE corner with selective herbicide, pack spray perannual grasses Top Swamp near gate with non selective herbicde. 20/05/2021 SSA 21/05/2021 Pack spray perennial grasses with non selective herbicide poa bed area Northern section on Southern boundry fencline. Pack spray broadleaf weeds with selective herbicide above top swamp (northern section). Pack spray perennial grasses Southern section bottom half on Northern boundry fenceline. WEEDS: Anthoxanthum odoratum Cirsium vulgare Dactylis glomerata Ehrharta erecta Festuca arundinacea Galium aparine Holcus Ianatus Hypochaeris glabra Paspalum dilatatum Plantago Ianceolata Solanum nigrum s.l. Sonchus asper s.l. Vicia sativa CHEMICALS: Lontrel advanced 4ml/L Weedmaster Duo 10ml/L mixed BS1000 Surfactant Mixed 1ml/L Spot On Blue Dye Mixed 4ml per litre BS1000 Surfactant Mixed 1ml/L Lontrel Mixed 5ml/L Weedmaster Duo 10ml/L mixed Spot On Blue Dye Mixed 4ml per litre.
June 2021	02/06/2021 Spray and handweed Southern Section top half North side of creekline. Also looked at weed species that 4 cows had eaten and died at abandoned house. Most likely Daytura is the culprit with another plant to be identified. WEEDS: Anthoxanthum odoratum Bromus spp Cenchrus clandestinus Dactylis glomerata Ehrharta erecta Festuca arundinacea Geranium molle Holcus lanatus CHEMICALS: BS1000 Surfactant Mixed 1ml/L Weedmaster Duo 10ml/L mixed Spot On Blue Dye Mixed 4ml per litre

## **Rehabilitation update:**

During the Jan - June period a overburden placement campaign occurred, the area stripped and location of placement is shown in the diagram below



A further 0.8 hectares of rehabilitated faces have been identified for hydroseeding and planting for the Spring season of 2021.

The area is shown below, a number of preparatory spray runs have been completed, and further topsoil has been placed in these areas. Hydroseeding is due to start in August 2021. This will be undertaken by a specialist Hydroseeding contractor, Hydroseed, who have completed this task at the site over the previous years. Naturelinks will be supervising this process. The mix of species used will be in line with the updated LRMP as part of the EMP review process. Final Quantities of each species will be provided to the ERC in the Q3 2021 report.



# **Ongoing Maintenance in Rehabilitated surfaces:**

In the first half of 2021, the following activities were undertaken by Naturelinks and site contractors

- Watering of areas which are un-irrigated
- Extension of irrigation lines in the southern areas
- Tanker & Backpack spraying for broadleaf weeds (see species & herbicide usage in table below)
- Brush cutting around tree bases of recent plantings
- Slashing of open areas
- Tree guards and stakes from established trees were recovered for re-use in future plantings
- Preparation spray runs for upcoming planting / hydroseeding areas.

## Weeds observed and targeted

Pampas Grass	Blackberry
Thistle Varieties	Nightshade
Turnip weed	Broome
Daisys	Bristly Oxtongue
Wild radish	lvy

# Herbicides used by Naturelinks

- Kamba M
- Garlon 600
- Weedmaster Duo

# **General Property weed control**

Other areas that were managed for weeds during the first half of the year using suitably qualified local contractors were as follows:

- Settling dam area
- Quarry bund walls
- Quarry road ways
- Car park areas
- Amenity areas
- Toomuc valley properties (commonly known as Whitelys)
- Landslip plantings at the Toomuc Valley properties
- Southern Boundary and fence line
- Western Boundary and fence line
- Pony club Fence line / open areas
- Donnazons property and specifically around Donnazons Dam

Typical weed control methods were tanker spraying, boom spraying, slashing and brush cutting. Target weeds for the period were Thistle, Blackberry, Pampas Grass and Broome.

The preferred chemicals used by the local contractor are

- EVIC Bio 360 (general weeds)
- Garlon / Trike 600 for Blackberries (used interchangeably depending on availability)

## 6 monthly LRMP report

### **Erosion & Slope Stability**

There has been no observed erosion or movement of rehabilitated faces, the surfaces are holding up well, monthly inspections and post rain events and post each blast event show the batters are stable and drainage is working effectively.

## **Water quality**

The site has been discharging water from both the Southern and Northern water holes. On occasions they have been mixed together prior to discharge. There has been 1 exceedance of water quality limits where the conductivity test showed a result of  $1217\mu s$  (the prescribed limit is 1200). The same water has been used for ongoing watering maintenance. Overburden placement near the southern water storage hasn't shown a negative effect on water quality. The same water has been used for ongoing watering maintenance.

## **Non Conformances/complaints**

There have been no observed outbreak of new weed species There has been no complaints related to the LRMP

#### **LRMP Review**

As the LRMP review was conducted in late 2020 as part of the EMP update, this was not conducted in the first half of 2021 as the proposed changes are still current.

#### Plans for the remainder of 2021

- Hydroseed and initial planting run of 0.8H in southern terminal faces
- Minor landslip planting resulting from recommendations from Annual Slope Stability report
- Plant an additional 750 trees in the Southern area of Phase A and B
- Continue monthly weed maintenance at Netgain
- Review the LRMP in detail in conjunction with Naturelinks ahead of the EMP 5 yearly review with the view to further expand the available species
- Bushfire prevention in Q4
- Complete annual reporting requirements.