

6 Monthly LRMP report  
Jan 20 - June 20  
Prepared by Matthew Dodd

This report summaries all the LRMP works for the period of January 20 - June 20. Naturelinks at the conclusion of 2020 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.

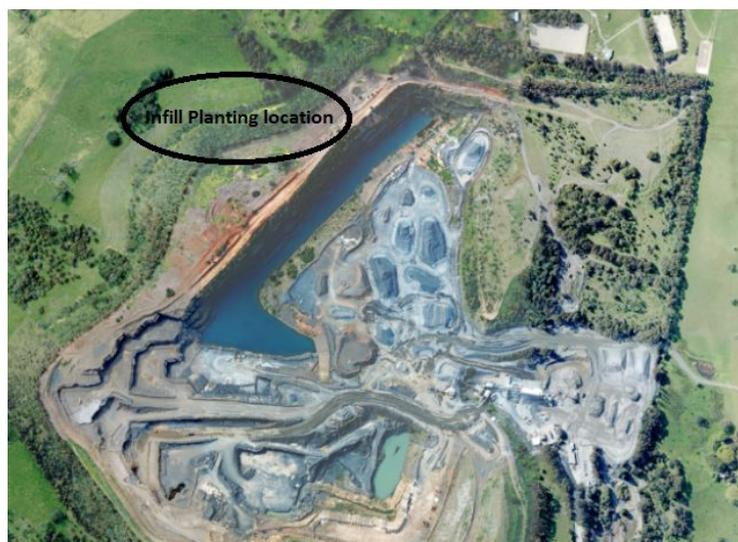
The report is broken down into key identifiable areas on site and then finally a brief discussion about general property maintenance.

### Phase A & B

As reported through 2019, the plantation experienced some die back which was investigated by Naturelinks In the report titled 'Holcim - Mt Shamrock Quarry Phase A & B Planting – Dieback Report, which has been distributed to the ERC.

From this report the following actions were completed during the period of January - June 2020

- Staking of natural regrowth to better enhance the level of regrowth and to protect when conducting weed maintenance
- Introduction of slashing activities around dense areas of grass / thistles etc to reduce the level of competition for moisture
- A further 600 trees (both mid/upper story) were planted by Naturelinks in the following area of the site in May and June, with plans for further planting in later 2020.
- Improved accessibility to water for watering



The following species were planted in the marked area

Phase A & B In-fill List	
Species	Common Name
Eucalyptus Obliqua	Messmate
Eucalyptus radiata subsp. radiata	Narrow-leaf Peppermint
Acacia paradoxa	Hedge Wattle
Hakea nodosa	Yellow Hakea
Acacia mearnsii	Black Wattle
Acacia pycnantha	Golden Wattle
Cassinia aculeata	Dogwood
Allocasuarina littoralis	Black Sheoak
Acacia myrtifolia	Myrtle Wattle

As a trial, recycled cardboard tree guards were used in this area, however they had limited success and were not allowing enough natural light in, and they were easily damaged by fauna (Kangaroos etc). Therefore any new plantings in this area will revert back to the core-flute guards, but upgrade to the 'beast guards' to better protect the plant from damage

Approximately 4 weeks prior to planting, Naturelinks conducted a number of broad leaf and thistle weed control visits. Naturelinks continued to hand water these trees from Jan - June

In addition to this, slashing was conducted by Everitt Earthmoving repairs to remove the bulk of the thistles in the area where it was possible to get a small tractor in and around the planned planting areas.

In Q2 upon inspection it was identified that a number of these plantings were damaged / lost due to Kangaroos, the loss was all in one particular area as shown below. Approx 60 trees were lost and will be replaced in early Q3 aligning with the same species list. The list was reviewed by the ERC and Cardinia Shire.

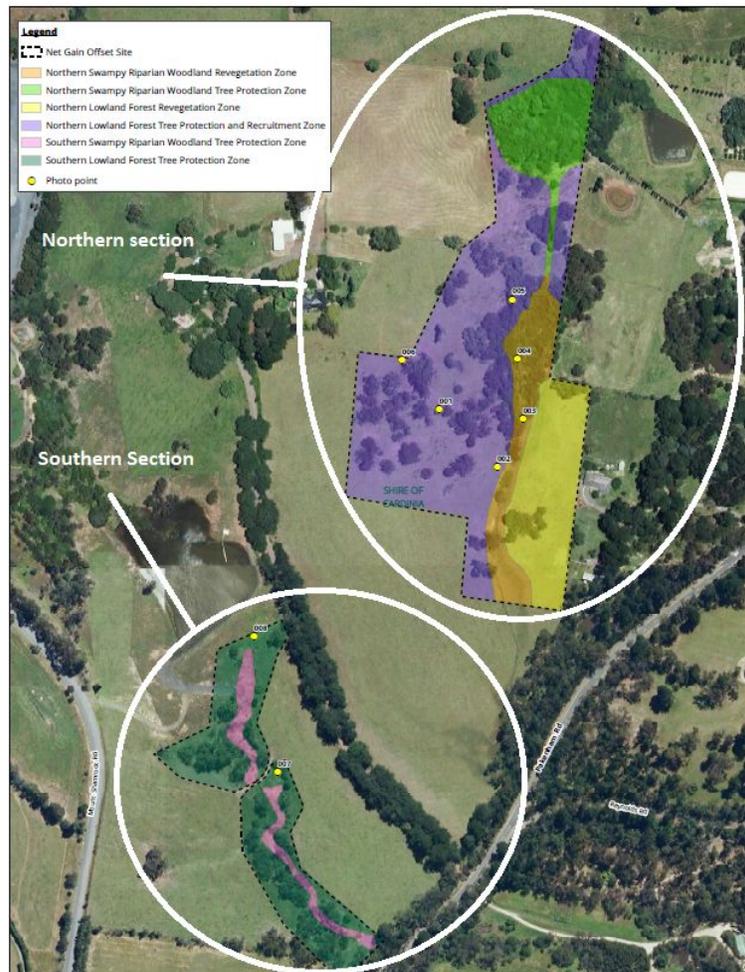


## Netgain Offset:

Naturelinks continued to monitor and undertake the weed program throughout the first half of 2020. 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
- Site security - monitor and repair fences as required and spraying or 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 Southern Area.



Month	Description
January 2020	22/01/2020 Spot spray in the northern section around orchid beds. Broadleaf and perennial grass control in southern zone WEEDS: Anthoxanthum aristatum Dactylis glomerata Hypochaeris glabra Lotus creticus Paspalum dilatatum Plantago lanceolata Sonchus asper s.l. CHEMICALS: Lontrel Mixed 5ml/L BS1000 Surfactant Mixed 1ml/L Weedmaster Duo 10ml/L mixed
February 2020	19/02/2020 Checked landslip - Plantings are doing well. All works conducted in the southern section. Hand weeded and sprayed around plantings, and sensitive remnant areas. 28/02/2020 Pack spray southern section top and bottom half hitting perennial grasses and annual broadleaf with non selective and selective herbicide. WEEDS: Agrostis capillaris s.l. Anthoxanthum odoratum Dactylis glomerata Ehrharta erecta var. erecta Festuca arundinacea Galium aparine Holcus lanatus Paspalum dilatatum Phalaris aquatica Plantago lanceolata Solanum nigrum s.l. Sonchus asper s.l. Sonchus oleraceus CHEMICALS: BS1000 Surfactant Mixed 1ml/L Weedmaster Duo 10ml/L mixed Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre Lontrel Mixed 5ml/L Weedmaster Duo 10ml/L mixed BS1000 Surfactant Mixed 1ml/L Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre
March 2020	24/03/2020 Pack spraying around plantings and high threat weeds in the southern zone. WEEDS: Brassica fruticulosa Bromus arenarius Dactylis glomerata Ehrharta erecta var. erecta Holcus lanatus Sonchus oleraceus Vicia disperma CHEMICALS: BS1000 Surfactant Mixed 1ml/L Kamba M 6ml/L Weedmaster Duo 10ml/L mixed Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre
April 2020	01/04/2020 Willow removal from top swamp north section. Handweed and spot spray in top swamp area 17/04/2020 Tanker spray of lontrel in areas with large broadleaf infestations becoming a problem in northern section of Net gain WEEDS: Hypochaeris radicata Lonicera japonica Onopordum acanthium ssp. acanthium Plantago lanceolata Salix fragilis Sonchus asper s.l. Sonchus oleraceus Taraxacum officinale spp. agg. CHEMICALS: BS1000 Surfactant Mixed 1ml/L Lontrel Mixed 5ml/L Weedmaster Duo 10ml/L mixed Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre BS1000 Surfactant Mixed 1ml/L Lontrel Mixed 3ml/L Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre
May 2020	29/05/2020 spot spray around sensitive areas in southern and northern section 29/05/2020 Tanker spray of thistles etc at Northern section WEEDS: Arctotheca calendula Galium aparine Hypochaeris radicata Onopordum acanthium ssp. acanthium Plantago lanceolata Senecio jacobaea Sonchus asper s.l. Sonchus oleraceus Taraxacum officinale spp. agg. CHEMICALS: BS1000 Surfactant Mixed 1ml/L Lontrel Mixed 3ml/L BS1000 Surfactant Mixed 1ml/L Kamba M 6ml/L Weedmaster Duo 10ml/L mixed Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre
June 2020	24/06/2020 brush cutting and chainsaw work tidying up fallen tree in Southern section. Backpack thistle run and perennial grasses in northern section. Deer observed on-site and damaging vegetation WEEDS: Dactylis glomerata Holcus lanatus Onopordum acanthium ssp. acanthium Plantago lanceolata Taraxacum officinale spp. agg. CHEMICALS: BS1000 Surfactant Mixed 1ml/L Lontrel Mixed 5ml/L Weedmaster Duo 10ml/L mixed Spot On Blue - Herbicide Dye CONCENTRATE Mixed 4ml per litre

**South East Extraction Area:**

The South East Extraction area is defined as the area below



Following some of the recommendations from the previous Naturelinks Report, Holcim installed a number of fixed irrigation systems to assist with watering key areas (especially around areas of previous high loss). The areas where fixed irrigation systems were installed is shown below.



Note it is planned based on the success of these irrigation lines to irrigate extra areas in the latter half of 2020 so that Naturelinks can spend their time on more value added tasks such as broadleaf & perennial grass control. The areas likely to have the lines installed are the lower batters which are difficult to access and have had higher mortality rate of plantings.

Naturelinks primarily focused on preparation for infill planting during the first half of 2020. Activities included but not limited to are:

- Watering by tanker of un irrigated areas (multiple)
- Brush Cutting of perennial grasses around planting (multiple)
- Backpack spraying broadleaf weeds (multiple)
- Tanker spraying areas where suitable (multiple)

### Southern Extraction and Phase C

This area is well established and the main focus in this area is weed control and infill planting of patches. Similar to South East extraction, the activities undertaken in this area are as follows:

- Brush Cutting of perennial grasses around planting (multiple)
- Backpack spraying broadleaf weeds (multiple)
- Tanker spraying areas where suitable (multiple)
- Slashing open areas to reduce perennial grasses and fire prevention
- Weeds specifically targeted were Blackberry, Pampas grass, Broome and Thistles

In addition to the weed control activities, In June 2020, infill planting occurred in this area, species and quantities are listed below

Species	Common Name	Quantity
Dianella tasmanica	Tasman Flax-Lily	450
Poa ensiformis	Purple Sheath Tussock Grass	250
Poa larbillardieri	Common Tussock Grass	400
Tetrahena Juncea	Forest Wire-grass	200
Themeda triandra	Kangaroo Grass	350
Eucalyptus fulgens	Green Scent Bark	100
Eucalyptus cypellocarpa	Mountain grey gum	50
Pomaderris aspera	Hazel Pomaderis	50
Oleria Lirata	Snowy daisy bush	50

## General Property:

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, 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)

## Plans for the remainder of 2020

- Draw on the positive learnings of slashing as a method of Thistle/Grass control and continue this method throughout the remainder of the year
- Install additional irrigation systems throughout the South East extraction area to allow Naturelinks to undertake more value added tasks
- Conduct fire prevention slashing around property and Phase A and B specifically
- Plant an additional 700 Trees in the South west area of Phase A and B
- Replace the 60 damaged plantings in Phase A and B
- Infill planting of both the SE extraction area and Southern extraction area
- Continue monthly weed maintenance at Netgain
- Spread topsoil on the southern Batter and undertake weed maintenance to allow hydroseeding in 2021
- 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