



Weeds Management Plan

Charley Creek Project

Northern Territory, Australia

(EL33000, EL33004, EL33005, EL33006, EL33007, EL33008, EL33054, EL33055, EL33201,
EL33204)

Introduction

All individuals who own, manage or occupy land, as well as any other land users in the Northern Territory, are subject to the NT Weeds Management Act 2001.

Once a weed is officially declared under Section 7 of the Act, all land holders, managers, and users are obligated to adhere to the assigned classification.

The three weed classifications in the Northern Territory are (Northern Territory Weed Management Handbook, 2021):

- **Class A:** which requires eradication;
- **Class B:** which requires growth and spread to be contained; and
- **Class C:** which mandates prevention of introduction into the Territory.

Responsibilities

According to the Northern Territory Weeds Management Act, 2001, and to the Northern Territory Weed Management Handbook, 2021:

- Both owners and occupiers of land are required to take all reasonable measures to prevent their land being infested with a declared weed.
- All land users are required to prevent the spread of a declared or potential weed.
- Where a declared weed is identified on land where it has not previously been, or known to have been present, the person responsible for the land must notify the Weed Management Branch (WMB) of its presence within 14 days.
- The owner and occupier of land on which a declared weed or potential weed is present must comply with any relevant weed management plan approved by the Minister in accordance with section 10 of the Act.

Statutory Weed Management Plans

The NT has implemented Weed Management Plans to tackle gamba grass, mimosa, bellyache bush, cabomba, prickly acacia, chinee apple, mesquite, neem, grader grass, and athel pine.

Specifically, in the Alice Springs region, Athel Pine (Figure 1) and Mesquite (Figure 2) Statutory Weed Management Plans are currently in place (March 2023).



The following table of weeds species have been identified in Charley Creek tenements from NR Maps (Natural Resources) web portal of NT Government Department of Environment, Parks and Water Security. Location records are used to avoid infested areas. See list of records at end of plan.

Weed Common Name	Genus Species
Athel pine	<i>Tamarix aphylla</i>
Buffel grass	<i>Cenchrus ciliaris</i>
Burr - Bathurst	<i>Xanthium spinosum</i>
Burr - Noogoora	<i>Xanthium strumarium</i>
Caltrop - terrestris	<i>Tribulus terrestris</i>
Crotalaria - incana	<i>Crotalaria incana</i>
Khaki weed	<i>Alternanthera pungens</i>
Lovegrass - minor	<i>Eragrostis minor</i>
Lovegrass - Pitted	<i>Eragrostis barrelieri</i>
Mesquite	<i>Prosopis pallida</i>
Parkinsonia	<i>Parkinsonia aculeata</i>
Rope cactus - Devils rope	<i>Cylindropuntia imbricata</i>
Rubber bush	<i>Calotropis procera</i>
NA	<i>Arctotheca calendula</i>
NA	<i>Brassica tournefortii</i>
NA	<i>Bromus madritensis</i>
NA	<i>Eleusine indica</i>
NA	<i>Hordeum leporinum</i>
NA	<i>Hordeum murinum</i>
NA	<i>Hypochoeris radicata</i>
NA	<i>Malvastrum americanum</i>

Spread Prevention General Guidelines

Prevention is the most cost-effective method of weed control. Weeds have the potential to infiltrate through various mechanisms and pathways, but their invasion can be prevented by adhering to some basic principles, including:

- Familiarizing with the weed species present in the region and ensuring that they are not unintentionally introduced through contaminated items such as vehicles, machinery, hand tools, soil, feed, mulch, and livestock.
- Being able to identify current and potential weed threats to the NT. Early detection of an outbreak can save millions of dollars.
- Using established roads and tracks and avoiding weed-infested areas.
- Thoroughly cleaning all equipment, vehicles, and machinery after encountering areas containing weeds before leaving.
- Checking boats, propellers, and trailers before entering or exiting waterways.
- Contacting landowners before entering their properties to inquire about any preventative measures in place.
- Disposing of weed plant materials and seeds appropriately by burning and/or burying them at a suitable depth.
- Checking the weed status of commercially available garden plants before planting them on your property.
- Never disposing of aquarium contents into drains or waterways.
- Controlling any existing weed infestations before they spread.

Prevention Guidelines for Mineral Exploration

The following guidelines are provided by the Northern Territory Government, Weed Management Branch, in relation to Mineral Exploration activities (Preventing Weed Spread is Everybody's Business):

- Use NR Maps to identify declared weeds that are relevant to the area.
- Conduct a thorough survey to map the location and density of declared weeds and send the information to the Weed Management Branch.
- Prior to commencing work, contact land managers for the most up-to-date weed information.
- Ensure that operations staff can identify the relevant declared weeds for the region.
- Before commencing work, clean and inspect equipment, particularly when it's coming from another state, to prevent weed seed contamination.
- Avoid passing through weed-infested areas. If unavoidable, clean vehicles before moving to weed-free zones.
- Before moving between sites or crossing property lines, clean machinery, vehicles, and equipment.

- Choose a flat, easily accessible area that doesn't drain into waterways for cleaning. Record the clean-down location.
- After the first rainfall post-disturbance, inspect corridors, tracks, and clean-down areas and control weeds before they establish.
- Minimize land surface disturbance and protect native vegetation.
- Do not import or export contaminated materials such as sand, gravel, rock, and fill.
- Collaborate with relevant government agencies and landholders, particularly those with adjoining, overlapping, or adjacent corridors.

Vehicle Hygiene Guidelines

Without proper vigilance, vehicles such as quad bikes, boats, and farm machinery can quickly spread weed seeds. It's important to implement a strict inspection regime before and after traveling, particularly when going to areas known to be infested with weeds.

Additionally, many plants have developed special adaptations, such as hooks or burrs, which easily attach to clothing, footwear, or animal hair, aiding their spread. To avoid spreading weed seeds to clean areas, people and animals should be checked prior to moving.

The checklist below can be used as a guide to establish a vehicle hygiene checking program (Weed Management Handbook, 2021):

- **Before Travel** → Before travelling check clothing and shoes are free of mud and seeds.
- **Inside the Vehicle** → Check the foot wells and mats to make sure that no weed seed has fallen off your shoes.
- **Engine** → Check radiator and grill.
- **Around the Vehicle** → Check along wheel trims, mud flaps, tyres and tray of the vehicle for mud and weed seed.
- **Quad Bikes/Machinery** → Check around the wheels and where mud or weed seed may be caught.
- **Underneath the Vehicle** → Check the undercarriage and guards to ensure that there is no mud or weed seed.
- **Washing Down Procedures** → Establish a designated location to wash down your vehicle.

URO's Adopted Measures

1. Adhere to all Australian and Northern Territory Regulations, guidelines and best practices in relation to weed management.
2. Collaborate with all relevant government agencies and landholders.
3. Contact landowners before entering their properties to inquire on up-to-date preventative measures in place.
4. Familiarize with the weed species present in the region and outlined by government agencies and landholders and develop/collect up to date training material for all URO's direct employees and contractors.
5. Plan exploration campaigns in a way to minimize land surface disturbance, off-track driving and protect native vegetation.
6. Use established roads and tracks and avoid weed-infested areas.
7. Clean all machinery, vehicles, and equipment before entering or leaving a designated drill site, before leaving a weed infested area, when crossing property lines.
8. Identify designated vehicle cleaning locations with landowners. In case a new cleaning location needs to be established, select a flat, easily accessible area, far away from possible water draining pathways.
9. Mark the location of any new established vehicle cleaning areas and monitor these, together with all accessing tracks, as part of URO's rehabilitation program after the first rainfall post-disturbance.
10. Adhere and follow all the other Prevention and Vehicle Hygiene Guidelines.

All known weed occurrences in the Charley Creek tenement areas:

Common Name	Genus Species	Latitude	Longitude	Size	Dia	Density	Cat	Treatment	Seedlings	Juveniles	Adults	Seed Pres	Past Treat	Herbicide	Year
Rubber bush	Calotropis procera	-23.1381	132.1783	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1821	132.1466	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1825	132.1504	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.185	132.1523	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1381	132.1783	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1867	132.1555	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
	Malvastrum americanum	-23.2333	132.4306	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2001
Rubber bush	Calotropis procera	-23.1852	132.1521	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1375	132.1791	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1377	132.1789	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1846	132.152	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.183	132.1471	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.137	132.1793	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1867	132.1555	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1821	132.1466	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1838	132.154	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
Rubber bush	Calotropis procera	-23.1854	132.1522	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1822	132.1508	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1857	132.1514	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1761	132.1499	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
Caltrop - terrestris	Tribulus terrestris	-23.1653	132.1513	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1960
Buffel grass	Cenchrus ciliaris	-23.2333	132.4306	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2001
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1761	132.1499	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1786	132.1512	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
Rubber bush	Calotropis procera	-23.1831	132.1472	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1846	132.152	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1822	132.1508	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1849	132.1523	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1854	132.152	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
	Brassica tournefortii	-23.2081	132.4619	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2001
Rubber bush	Calotropis procera	-23.183	132.1443	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.185	132.1526	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.183	132.1472	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1854	132.152	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1375	132.1791	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Caltrop - terrestris	Tribulus terrestris	-23.0819	132.6679	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1955
Rubber bush	Calotropis procera	-23.1852	132.1521	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1831	132.1472	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1838	132.154	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1825	132.1504	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.185	132.1526	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1821	132.1506	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.137	132.1793	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1365	132.1793	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1741	132.1489	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
Rubber bush	Calotropis procera	-23.183	132.1443	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
	Malvastrum americanum	-23.2081	132.4619	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2001
Rubber bush	Calotropis procera	-23.1365	132.1793	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rubber bush	Calotropis procera	-23.1904	132.1575	50			3	No treatment	No	Yes	Yes	Not recor	Not recor	No treatm	2015
Athel pine	Tamarix aphylla	-23.1729	132.1496	20			4	Friiled	No	No	Yes	Not recor	Not recor	Access	2015
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1741	132.1489	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1377	132.1789	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Buffel grass	Cenchrus ciliaris	-23.2081	132.4619	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2001
Rubber bush	Calotropis procera	-23.1853	132.1522	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1904	132.1575	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1821	132.1506	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
	Eleusine indica	-23.1653	132.1513	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1954
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.1786	132.1512	50			3	No treatment	No	Yes	Yes	No	Unknown	No treatm	2015
Rubber bush	Calotropis procera	-23.1857	132.1513	20			6	Not applicable	Not recorded	Not recor	Not recor	Not recor	Not recor	Not applic	2018
Crotalaria - incana	Crotalaria incana	-23.3486	132.5513	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1958
Lovegrass - Pitted	Eragrostis barrelieri	-23.5486	133.2013	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Rope cactus - Devils rope	Cylindropuntia imbricata	-23.6511	133.4975	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2004
Burr - Noogoora	Xanthium strumarium	-23.5504	133.4839	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.5593	133.4213	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.5588	133.4661	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.5421	133.4838	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Khaki weed	Alternanthera pungens	-23.5819	133.1679	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1980
Burr - Noogoora	Xanthium strumarium	-23.5192	133.3969	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2011
	Hordeum murinum	-23.5153	133.1346	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
	Arctotheca calendula	-23.5152	133.1346	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1979
	Hordeum leporinum	-23.5152	133.1346	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1979
	Bromus madritensis	-23.5152	133.1346	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1979
Burr - Noogoora	Xanthium strumarium	-23.4319	133.7846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1981
Mesquite	Prosopis pallida	-23.4387	133.7748	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Bathurst	Xanthium spinosum	-23.4219	133.7482	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Bathurst	Xanthium spinosum	-23.4319	133.7846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1981
Burr - Noogoora	Xanthium strumarium	-23.4319	133.7846	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Bathurst	Xanthium spinosum	-23.4131	133.7125	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.4219	133.7482	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.4319	133.7846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1978
	Hypochoeris radicata	-23.4152	133.7846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1974
	Malvastrum americanum	-23.3486	133.4846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1968
	Malvastrum americanum	-23.4152	133.6679	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1962
Parkinsonia	Parkinsonia aculeata	-23.4219	133.7482	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Bathurst	Xanthium spinosum	-23.4319	133.7846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1978
	Malvastrum americanum	-23.4153	133.668	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
	Malvastrum americanum	-23.3486	133.4846	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Noogoora	Xanthium strumarium	-23.4131	133.7125	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Burr - Bathurst	Xanthium spinosum	-23.4319	133.7846	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
	Malvastrum americanum	-23.1153	133.2846	20			6	Unknown	Not recorded	Not recor	Not recor		Not recor	Not recor	1900
Lovegrass - minor	Eragrostis minor	-22.7667	133.3833	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	2006
	Malvastrum americanum	-23.1153	133.2846	20			6	No treatment	Not recorded	Not recor	Not recor	Not recor	Not recor	Not recor	1964