Eremophila forrestii subsp. viridis targeted flora survey

Memo report

September 2022

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MEMORANDUM	
To	Hastings Technology Metals Limited
From	Anders Environmental Consulting
Date	20 September 2022
Subject	Results of the *Eremophila forrestii* subsp. *viridis* September 2022 targeted survey

Chain of authorship and review			
Name	**Task**	**Version**	**Date**
[redacted]	Draft report for client	1.0	September 2022
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EXECUTIVE SUMMARY

Hastings Technology Metals Limited (Hastings) are proposing to construct the Onslow Rare Earths Plant (OREP) within the Ashburton North Strategic Industrial Area (ANSIA) to process rare earth concentrate from the Yangibana Rare Earths Project (Yangibana Project) located approximately 270 km north-east of Carnarvon.

One Priority flora species, *Eremophila forrestii* subsp. *viridis* (Priority 3) occurs within the OREP development envelope, with 839 plants recorded. Known targeted surveys available to Hastings within the Onslow area prior to this survey have recorded 7,273 individuals. In addition to this Project, other proposed projects in the vicinity may impact on the species. A targeted survey was undertaken with the objective of finding additional populations of *Eremophila forrestii* subsp. *viridis* in the region. A total of 1,444 individual plants were recorded over a five-day survey in September 2022, which increases the recorded number of plants recorded within the Onslow area to 8,717.

Eremophila forrestii subsp. *viridis* was found in a range of habitats extending potential search areas beyond dunes to cliffs, slopes, swales, and dune basins. The results of the survey showed that *Eremophila forrestii* subsp. *viridis* populations extend within a 70 km radius from the OREP development envelope. This survey has expanded the range and habitat type of *Eremophila forrestii* subsp. *viridis.*

The ongoing success of each targeted survey indicates the high potential for *E. forrestii* subsp. *viridis* to occur in un-surveyed areas. This study has demonstrated that the species occurs in a wide variety of habitat types and is likely to occur in the greater un-surveyed Onslow region. The total record of plants is expected to be underestimated as it was limited to targeted survey areas.

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DEFINITIONS

Acronym	Definition
Anders	Anders Environmental Consulting
BC Act	*Biodiversity Conservation Act 2016*
BOM	Bureau of Meteorology
Cwth	Commonwealth
DBCA	Department of Biodiversity Conservation and Attractions
DMIRS	Department of Mines, Industry Regulation and Safety
DotEE	Department of the Environment and Energy
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ESA	Environmentally Sensitive Area
ha	Hectare
IBRA	Interim Biogeographic Regionalisation of Australia
km	Kilometre
m	Metre
mm	Millimetre
MNES	Matter of National Environmental Significance
NVCP	Native Vegetation Clearing Permit
PEC	Priority Ecological Community
TEC	Threatened Ecological Community

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

Hastings Technology Metals Limited (Hastings) are proposing to construct a processing plant within the Ashburton North Strategic Industrial Area (ANSIA) approximately 13 km south-west of Onslow. The processing plant will process rare earth ore transported by haul trucks from the Yangibana Rare Earths Project (Yangibana Project), which is located approximately 270 km north-east of Carnarvon within the Gascoyne Region of Western Australia.

As part of the environmental approvals for the processing plant, several flora and vegetation surveys were undertaken within the processing plant disturbance envelope and the wider Onslow area, including the most recent survey undertaken in July 2022 (Anders 2022). One conservation significant species, *Eremophila forrestii* subsp. *viridis* (Priority 3) was recorded with 839 individuals recorded within the OREP development envelope and potentially impacted by the project and individuals recorded regionally.

In 2022 Hastings submitted a Native Vegetation Clearing Permit (NVCP) for clearing within the proposed OREP development envelope. DWER flagged the likelihood that DBCA will consider the impact of 839 to *E. forrestii* subsp. *viridis* individuals within the OREP development envelope at an unacceptable level, in consideration of other proposed projects being planned in the vicinity of the Project. Hastings commissioned a targeted survey in July 2022 outside the OREP development envelope to reduce the impact on *E. forrestii* subsp. *viridis.* Following the July survey, the known targeted surveys available to Hastings within the Onslow area have recorded 6,712 individuals.

Hastings engaged Anders Environmental Consulting (Anders) to undertake a follow up targeted survey in September 2022. The purpose of the targeted survey was to identify additional populations of *E. forrestii* subsp. *viridis* outside the OREP development envelope. This memo outlines the findings of the September 2022 targeted survey.

1.2 CONSERVATION SIGNIFICANT FLORA

Threatened flora are plants which have been assessed as being at risk of extinction. Under the *Biodiversity Conservation Act 2016* (BC Act), the Western Australian Minister for the Environment may declare species of flora to be protected if they are considered to be in danger of extinction, rare or otherwise in need of special protection. Species that are considered Threatened and need to be specially protected because they are under identifiable threat of extinction are listed under the BC Act. These categories are defined in Table 1.

Table 1 Conservation codes for species listed under the Western Australian BC Act

Code	Category
CR	Critically endangered species Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines."
EN	Endangered species Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines."
VU	Vulnerable species Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines."
EX	Extinct species Species where "there is no reasonable doubt that the last member of the species has died," and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).
EW	Extinct in the wild species Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).
MI	Migratory species Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).
CD	Species of species conservation interest Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).
OS	Other specially protected species Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Species that have not yet been adequately surveyed to warrant being listed under the WC Act, or are otherwise data deficient, are added to a Priority Lists under Priorities 1, 2 or 3 by the Western Australian Minister for the Environment. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. Categories and definitions of Priority Flora and Fauna species are provided in Table 2.

Table 2 Conservation categories for species listed by DBCA and endorsed by the Minister for the Environment

Conservation Code	Category
Priority One	Poorly known species Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g., agricultural, or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
Priority Two	Poorly known species Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g., national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
Priority Three	Poorly known species Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
Priority Four	Rare, Near Threatened and other species in need of monitoring (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

2.0 METHODOLOGY

2.1 DESKTOP ASSESSMENT

Targeted surveys are used to gather comprehensive information on significant flora. A targeted survey aims to determine the size and extent of all significant flora populations in the survey area and to place any impacts into context (EPA 2016).

A Department of Biodiversity, Conservation and Attractions (DBCA) state-wide species-specific database search was undertaken prior to the survey, to identify all known records of *E. forrestii* subsp. *viridis.*

Several flora and vegetation surveys, including targeted surveys for *E. forrestii* subsp. *viridis* have been undertaken within the Onslow area, these include surveys by:

- Eco Logic Australia (2021)
- Anders Environmental Consulting (2021)
- Spectrum Environmental (2020)
- 360 Environmental (2020)
- RPS (2019).

Eco Logic Australia (ELA) undertook data modelling of the potential distribution of *E. forrestii* subsp. *viridis* within the Onslow area (ELA 2021). The modelling was based on habitat preferences, soils, and landform. The modelling identified 20 discreet search areas. In 2021 ELA conducted a targeted survey of *Eremophila forrestii* subsp. *viridis* within seven of the discreet search areas. Five areas were surveyed during the Anders July 2022 survey (Anders 2022) and a further two areas were surveyed during the September 2022 survey, with six areas remaining un-surveyed. One of the un-surveyed areas is impacted by another project and was removed for the list of discreet search area, reducing the number of un-surveyed areas with potential habitat to five.

2.2 TARGETED FLORA SURVEY

The targeted survey involved undertaking a regional search within the wider Onslow area to locate and map populations of *E. forrestii* subsp. *viridis.* The focus of the survey was to map the distribution of *E. forrestii* subsp. *viridis* and to locate populations within 70 km from the OREP development envelope, including within the Cane River Conservation Reserve. The targeted survey was undertaken in accordance with EPA Flora Guidelines (EPA 2016) over five days from 31st August to 4th September 2022. A team of six people conducted the targeted survey, this included Lead Botanist Catherine Krens (Flora collection licence number FB62000188), three Hastings personnel, and two field assistants.

The survey was undertaken within the known flowering time for *E. forrestii* subsp. *viridis,* which is during August. The majority of plants were flowering at the time of survey, which aided in identification of plants within the field (see Plate 1).

Plate 1 ***Eremophila forrestii* subsp. *viridis* flowering**

The targeted survey was undertaken within a range of areas including:

- Cane River Conservation Park
- Within un-surveyed discreet search areas
- Along Onslow Road, Twitchen Road and Warrirda Road
- Adjacent to previous populations
- Within suitable habitat including dunes systems and forest scrub.

Search areas further from the OREP development envelope were prioritised to record the population extent of *E. forrestii* subsp. *viridis* within the wider Onslow area.

Transects were walked in parallel lines at 10m to 30m spacing and track logs recorded on GPS units to show survey effort. Locations of individual plants or small groups of plants were recorded up to an area 10m x 10m, with the central point of each location recorded on a GPS. For each location of *E. forrestii* subsp. *viridis* the following information was recorded:

- GPS location
- Photograph of *E. forrestii* subsp. *viridis* (not at all locations)
- Number of individual plants within the location
- Size of location (i.e., 10m x 10m).

2.3 LIMITATIONS

Limitations are common in flora surveys which may result in reduced data quality and survey effort and deviations from the EPA guidelines. An assessment of the limitations of the survey as outlined in the EPA guidelines (2016) are addressed in Table 3.

Table 3 Limitations of the flora and vegetation survey

Limitation	Determination	Justification
Availability of contextual information at a regional and local scale	**Not a constraint**	Spatial data from all previous *E. forrestii* subsp. *viridis* surveys as well as DBCA known records from the state-wide search were available to the field team and loaded onto GPS units.
Competency/experience of the team conducting the survey, including experience in the bioregion	**Not a constraint**	The survey was led by Catherine Krens who is a Senior Botanist with over 15 years' experience undertaking flora surveys including targeted searches within Western Australia and the Carnarvon bioregion. The field team members have experience undertaking targeted surveys. Prior to beginning the survey, populations of *Eremophila forrestii* subsp. *viridis* were visited and photographs were taken to familiarise the field team with *Eremophila forrestii* subsp. *viridis* features.
Proportion of flora recorded and collected and any identification issues	**Not a constraint**	All locations of *Eremophila forrestii* subsp. *viridis* plants encountered within the transects were recorded on GPS units. *E. forrestii* subsp. *viridis* was flowering during the time of the survey which aided in identification of individuals.
Effort and extent - was the survey area fully surveyed	**Major constraint**	Not all discreet search areas were surveyed due to the large distances (in excess of 4 km) from tracks. Several roads were closed during the survey and areas near previous records near Ulara Road which were likely to contain additional populations were unable to be surveyed.
Access restrictions within the survey area	**Major constraint**	Unsealed roads including Twitchen Road and Onslow-Peedamulla Road were closed by Shire of Ashburton due to a large amount of rainfall (14.4 mm) on 3rd September which reduced targeted searches to areas along sealed roads (Warrirda Road and Onslow Road).
Survey timing, rainfall, season of survey	**Major limitation**	The survey was undertaken in spring during the known flowering time for *E. forrestii* subsp. *viridis.* The majority of plants were flowering, which aided in identification in the field. A large amount of rainfall was recorded during the survey in Onslow (14.4 mm) on 3rd September.
Disturbance that may have affected the results of survey such as fire, flood or clearing	**Not a constraint**	No disturbance apart from existing tracks and road verges were observed which did not affect the results of this flora survey.

3.0 EXISTING ENVIRONMENT

3.1 CLIMATE

The climate of the Carnarvon bioregion is semiarid to arid with predominantly winter rainfall. Spatially averaged median rainfall is 208 mm (Keogh et. al. 2005). The closest Bureau of Meteorology (BOM) weather station with a temperature and rainfall dataset is Onslow Airport (weather station 005017).

Onslow Airport recorded a long-term mean maximum temperature ranging between 25.6˚C (July) to 36.5˚C (January) (1940 to 2022) (Figure 1) (Bureau of Meteorology 2022). The rainfall in the 12 months prior to the survey (August 2021 to July 2022), was 123.1 mm above the long-term average of 308.9 mm (Bureau of Meteorology 2022). In the three months prior to the survey (May 2022 to July 2022), 333.4 mm of rainfall was recorded, which is 217.3 mm above the long-term average of 116.1 mm for the same time period (Bureau of Meteorology 2022) (Figure 1). May had a large rainfall spike with 310.4 mm of rainfall recorded. A large amount of rainfall occurred during the survey. 14.4 mm was recorded on 3rd September 2022 which is 13.1 mm above the mean rainfall for September.

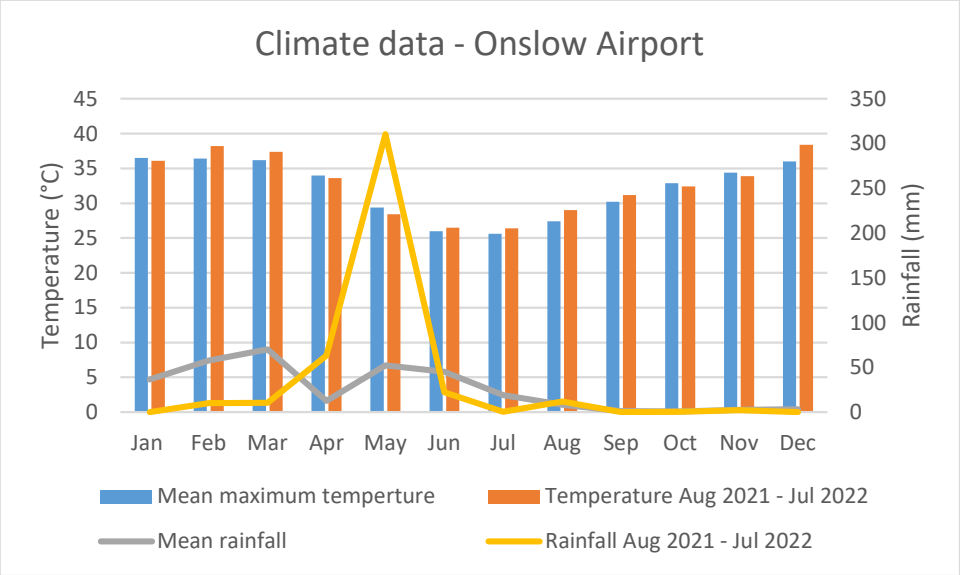


Figure 1 Climate data recorded at Onslow Airport weather station (Rainfall and maximum temperature 12 months prior to survey and long-term average) (Bureau of Meteorology 2022).

3.2 IBRA BIOREGION

The survey area occurs within the Carnarvon Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion and specifically the Cape Range Subregion (CAR01). The Carnarvon Bioregion is characterised by low and gently undulating landscape with open drainage. Vegetation is mainly acacia shrublands and saltbush/bluebush shrublands, with areas of tussock grassland in the north (Rangelands 2008).

3.3 VEGETATION

Mapping of pre-European vegetation units within Western Australia is based on broad scale mapping by Beard (1976) at 1:3,000,000 which showed the distribution of 75 major categories of plants at the time of European settlement. Beards mapping was re-assessed by Shepherd et al. (2002) with some larger vegetation units divided into smaller units. Together, this pre-European database contains a total of 819 vegetation types recognised within Western Australia.

Some vegetation types have been extensively cleared since European settlement and have been constrained by development. The EPA has an objective to seek to retain at least 30% of the pre-clearing extent of each ecological community (DBCA 2019).

Four broad vegetation associations are mapped within the discreet search areas and are described below and their representation at a local, regional, and state level is shown in Table 4.

- **Cape Yannare Coastal Plain 127:** Bare areas, mud flats
- **Cape Yannare Coastal Plain 589:** Hummock grasslands, grass steppe; soft spinifex
- **Cape Yannare Coastal Plain 670:** Hummock grasslands, shrub steppe; scattered shrubs over *Triodia basedowii*
- **Cape Yannare Coastal Plain 676:** Succulent steppe; samphire.

Table 4 Broad vegetation types within the state, regional and local representation (DPIRD 2019b)

Vegetation association	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	Current extent managed in DBCA lands (%)
Representation across Western Australia				
Cape Yannare 127	737,724.05	697,871.38	94.60	11.64
Cape Yannare 589	807,698.58	802,713.40	99.38	1.89
Cape Yannare 670	147,897.10	147,794.60	99.93	11.66
Cape Yannare 676	2,063,413.95	1,963,881.55	95.18	14.69
Representation across the Carnarvon Bioregion				
Cape Yannare 127	102,780.91	101,489.55	98.74	1.94
Cape Yannare 589	78,100.80	77,834.93	99.66	0.0
Cape Yannare 670	147,808.61	147,792.06	99.99	11.67
Cape Yannare 676	51,983.51	51,232.57	98.56	28.92
Representation across the Shire of Ashburton				
Cape Yannare 127	95,314.48	93,097.98	97.67	0.01
Cape Yannare 589	92,433.42	92,167.55	99.71	13.93
Cape Yannare 670	130,267.09	130,164.59	99.92	1.99
Cape Yannare 676	45,155.52	44,695.18	98.98	25.23

4.0 RESULTS

4.1 DESKTOP ASSESSMENT

A number of *E. forrestii* subsp. *viridis* targeted surveys have been undertaken within the Onslow area between 2010 and July 2022 with a total of 7,273 *E. forrestii* subsp. *viridis* plants recorded (Table 5). *E. forrestii* subsp. *viridis* is known to occur from three records around the Onslow area (Florabase 2022) and one population has been recorded within the Cane River Conservation Park approximately 60 km south-east of the Onslow records (Florabase 2022).

Regional populations have been recorded more than 50 km from the OREP development envelope, with populations recorded within Cane River Conservation Park to the south, along Onslow-Peedamulla Road to the east and south-west of the Harding River to the west.

4.2 TARGETED SURVEY

The focus of the targeted search was to locate populations of *E. forrestii* subsp. *viridis* within the wider Onslow area. Five days was dedicated to undertaking a regional survey within 70 km of the OREP development envelope, this included a targeted search within the Cane River Conservation Area approximately 67 km south-east of the OREP development envelope where a total of 78 *E. forrestii* subsp. *viridis* plants were recorded. The two ELA discreet search areas able to be accessed during the survey both contained populations of *E. forrestii* subsp. *viridis.*

The September 2022 survey recorded a total of 1,444 *E. forrestii* subsp. *viridis* plants, which added to the 7,273 plants recorded during previous surveys resulting in a total of 8,717 plants occurring within the Onslow area. This included 894 plants within the OREP development envelope and 7,823 plants outside the development envelope.

A summary of all *E. forrestii* subsp. *viridis* records is provided in Table 5. Recorded populations and survey effort during the September 2022 is provided in Figure 2 with detail in Figure 3 and Figure 4. Populations recorded in all surveys up to and including September 2022 are shown in Figure 5.

Table 5 Number of *E. forrestii* subsp. *viridis* previously recorded within the Onslow area

Survey	Total number of plants recorded	Number within development envelope	Number outside development envelope
Biota 2010	3	0	3
ENV Australia 2011	30	0	30
RPS 2019	328	0	328
Biota 2020	561	0	561
RPS 2021	928	876	52
ELA 2021	2848	0	2848
360 Environment 2021	1237	0	1237
Spectrum 2021	1072	2	1070
Anders July 2022	266	0	266
Anders September 2022	1444	16	1444
Total plants	**8,717**	**894**	**7,823**

4.2.1 *EREMOPHILA FORRESTII* SUBSP. *VIRIDIS*

E. forrestii subsp. *viridis* is a much-branched shrub with grey-green tomentose leaves and pink to cream flowers which are known to flower during August (Plate 3 and 3). *E. forrestii* subsp. *viridis* was also flowering during the July 2022 and September 2022 survey, suggesting the flowering time may range from July to September. It favoured more open vegetation and was mainly recorded in low open Triodia hummock grassland.

Plate 2 Close up of *E. forrestii* subsp. *viridis* in flower

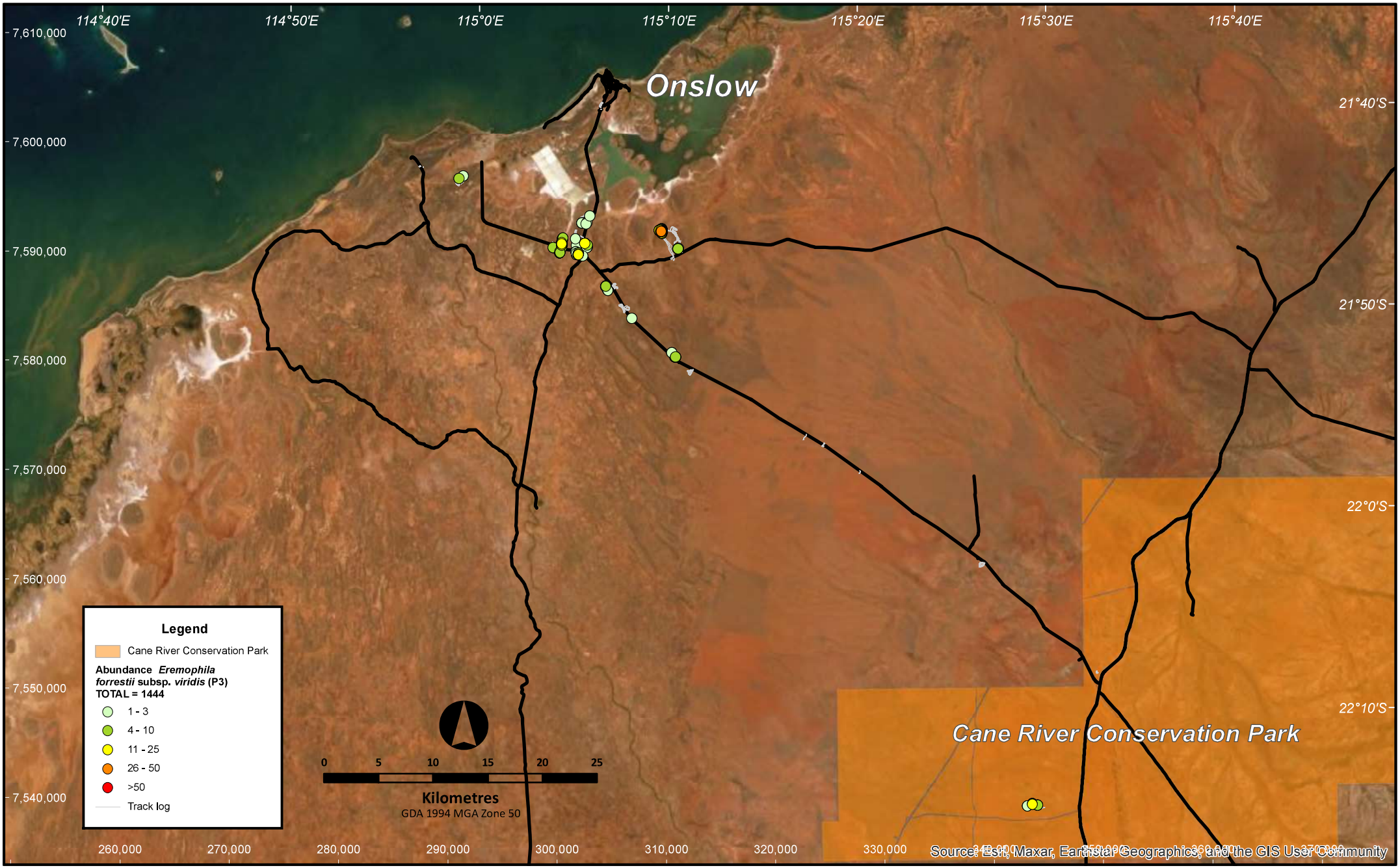
Plate 3 ***Eremophila forrestii* subsp. *viridis***

E. forrestii subsp. *viridis* was recorded within a variety of habitats. It generally occurred on red-brown sandy dunes and mainly at the base of dunes tending to favour the eastern side of dunes (Plate 4). It was also recorded within swales and dune basins (Plate 5) and on cliffs and steep hills (Plate 6) within the Cane River Conservation Park.

Plate 4 ***E. forrestii* subsp. *viridis* occurring at the base of dunes**

Plate 5 ***E. forrestii*** **subsp.** ***viridis*** **occurring within dune basin**

Plate 6 ***E. forrestii*** **subsp.** ***viridis*** **occurring on cliffs**

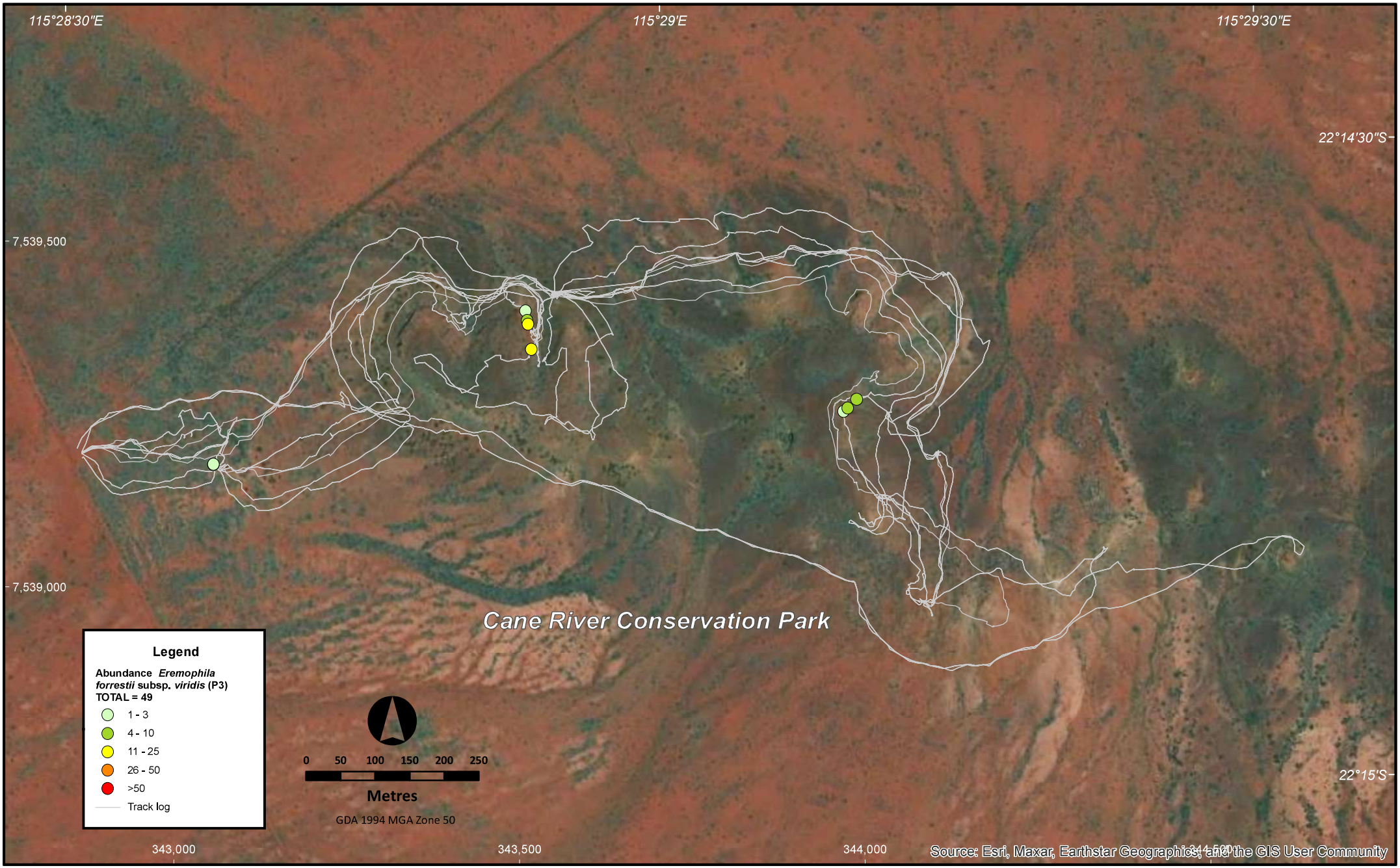


ONSLOW RARE EARTHS PLANT

Eremophila_Data_Survey_Sep2022.mxd
08 September 2022

HASTINGS Technology Metals Limited

Eremophila forrestii subsp. *viridis* (P3) September 2022 survey results (overall) Figure 2



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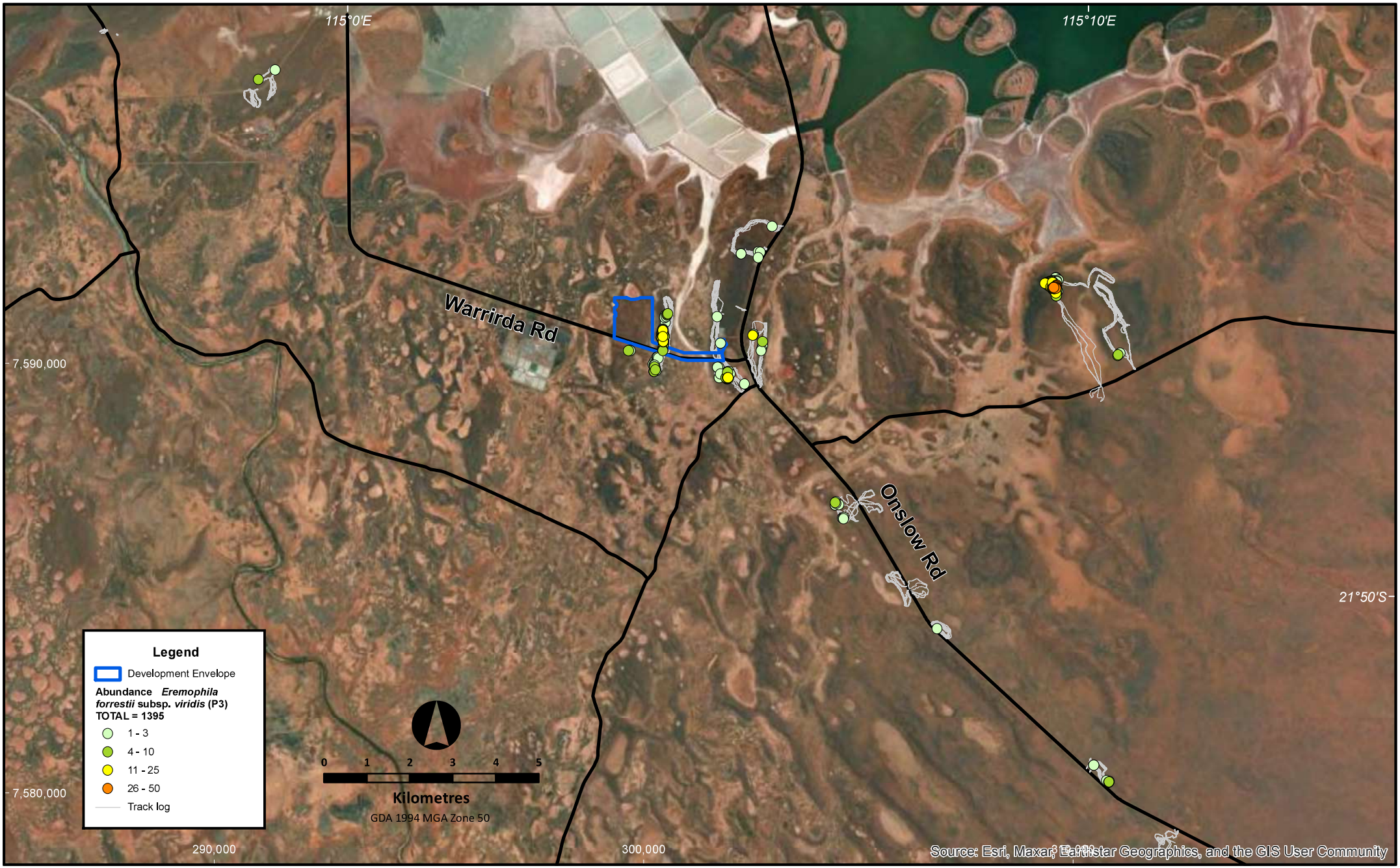
ONSLOW RARE EARTHS PLANT

Eremophila forrestii subsp. *viridis* (P3) September 2022 survey results in the Cane River Conservation Park

Eremophila_CRCP_Sep2022.mxd
08 September 2022

Figure 3



ONSLOW RARE EARTHS PLANT

Eremophila_Onslow_Area_Sep2022.mxd
09 September 2022

HASTINGS Technology Metals Limited

Eremophila forrestii subsp. *viridis* (P3) September 2022 survey results in the Onslow Region

Figure 4

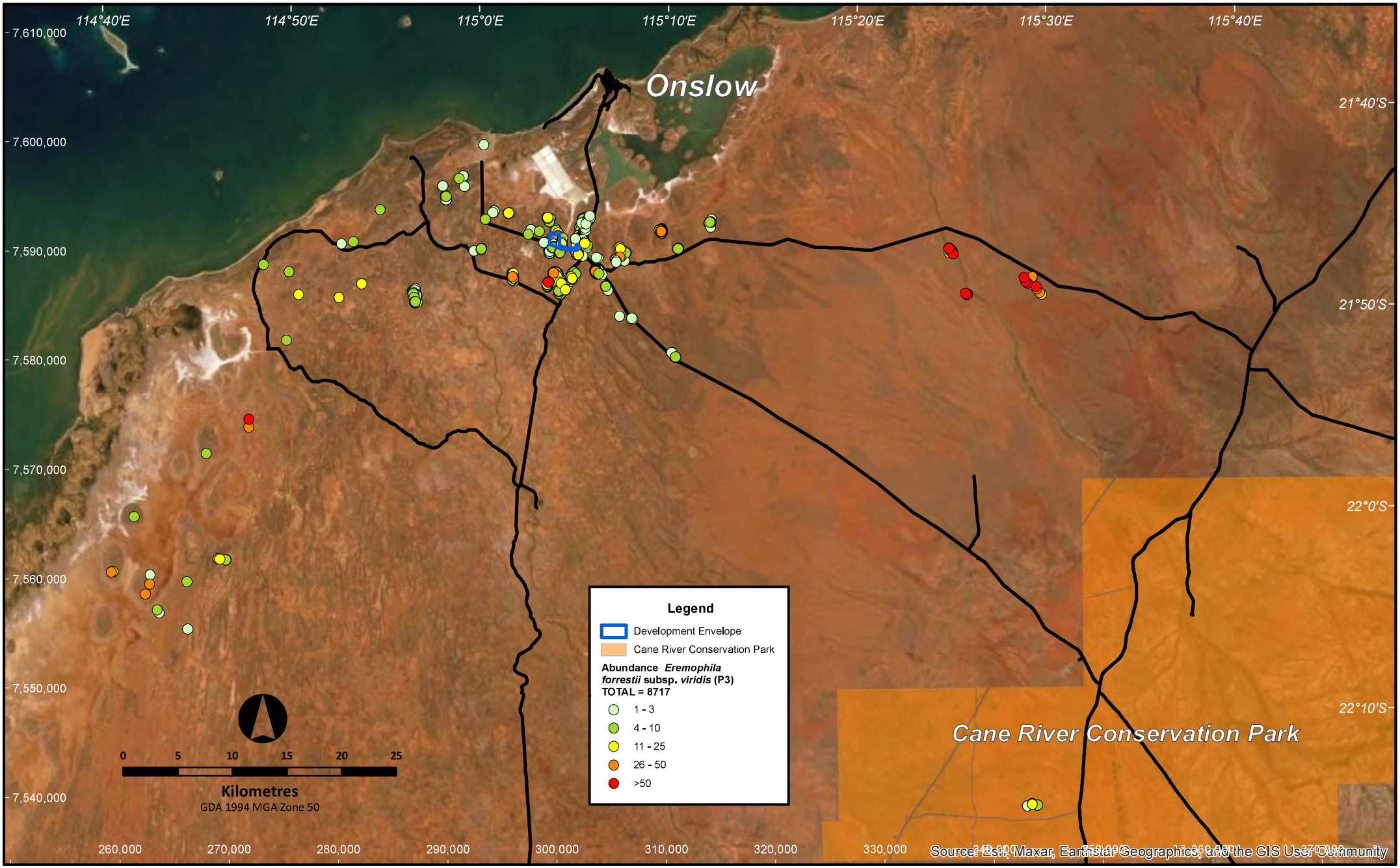
5.0 DISCUSSION

The objective of the September 2022 survey was to undertake a regional *E. forrestii* subsp. *viridis* survey to find populations within the 70 km radius of OREP development envelope. A species specific DBCA database search identified a record within the Cane River Conservation Park located over 60 km from the OREP development envelope. This record was verified during this survey with 78 individuals recorded in the vicinity of the DBCA record.

DBCA Karratha office also provided data in August 2022 from a previous survey conducted by Biota in 2018 - 2019 which represents a 20 km extension to the southwest of previous known records (Biota 2020). Potential for extensions to these populations were unable to be further explored during the survey due to road closures.

Previous targeted surveys of the area indicated that *E. forrestii* subsp. *viridis* is most likely to occur on linear red-dune sands in the Onslow area (RPS 2019; ELA 2021). However, *E. forrestii* subsp. *viridis* was recorded in a wider variety of habitats during the September 2022 survey: including cliffs, steep hills, dune tops, basins, and swales. It appeared to occur where water availability was high with greatest densities occurring where water may be accumulating such as below the drip line of cliffs, where dunes converged and at the base of dunes. A correlation was found with *E. forrestii* subsp. *viridis* frequently recorded within forest scrub units mapped by Geoscience Australia as shown in Figure 6.

During the survey, many of the unsealed roads were closed, and several areas were unable to be accessed including several ELA discreet modelled search areas along Ulara Road, Onslow-Peedamula Road and Twitchen Roads. However, as all discreet modelled search areas surveyed have contained at least one population of *E. forrestii* subsp. *viridis*, it is expected that the remaining five un-surveyed discreet search areas will contain additional populations of *E. forrestii* subsp. *viridis (*Figure 6*).*



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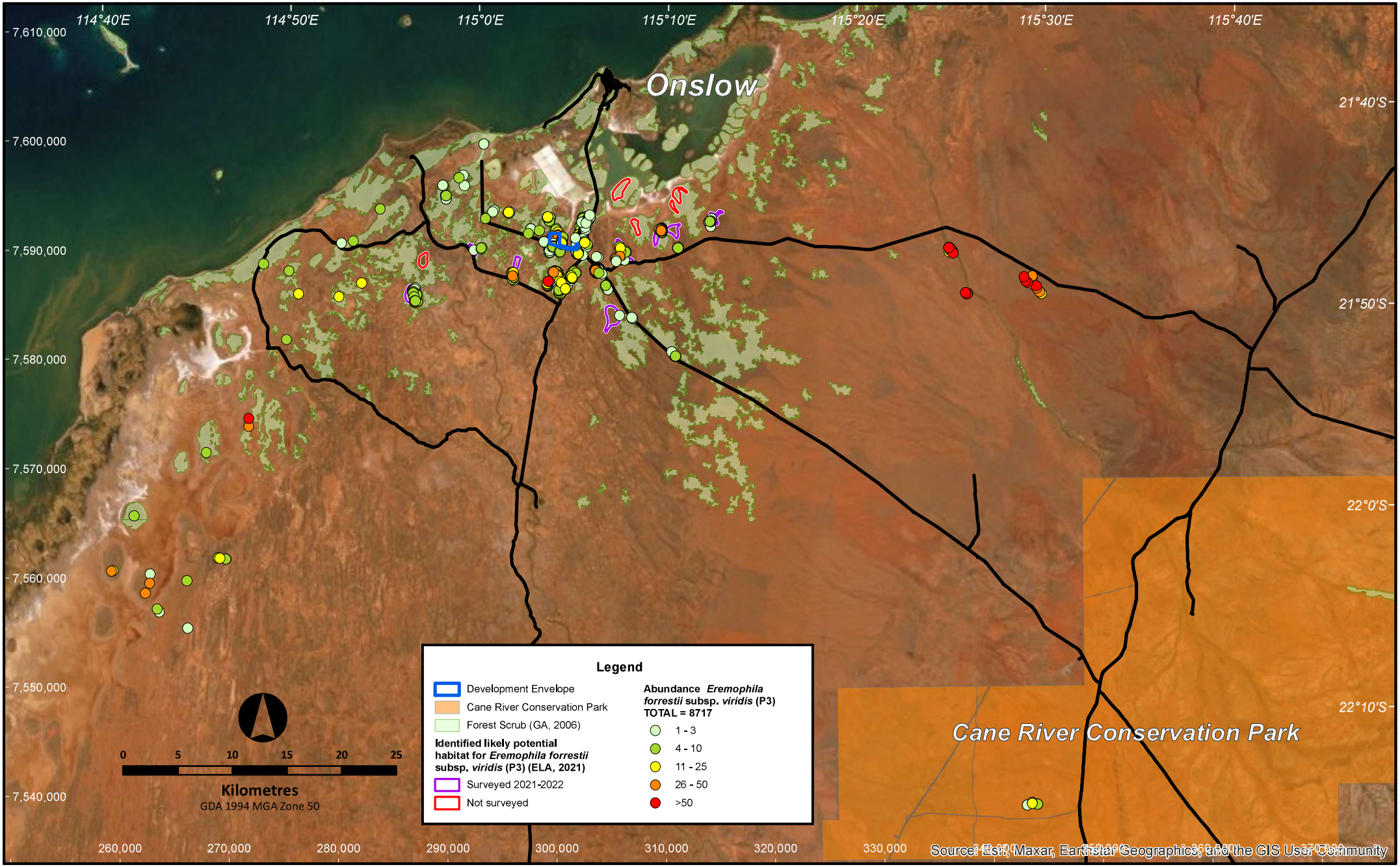
ONSLOW RARE EARTHS PLANT

Eremophila_Data_All_Surveys_Sep2022.mxd
08 September 2022

Eremophila forrestii subsp. *viridis* (P3) all survey results

Figure 5



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ONSLOW RARE EARTHS PLANT

Eremophila forrestii subsp. *viridis* (P3)
all database survey results with other potential sites

Eremophila_Data_All_Surveys_Potential_Sep2022.mxd
14 September 2022

Figure 6

6.0 CONCLUSION AND RECOMMENDATIONS

The targeted survey identified 1,444 individual plants of *E. forrestii* subsp. *viridis*. Populations of *E. forrestii* subsp. *viridis* were recorded from a wide variety of habitats within a 70 km radius of the OREP development envelope. A revised total of 8,717 *E. forrestii* subsp. *viridis* plants have now been recorded within the Onslow region (Figure 5).

The ongoing success of each targeted survey indicates the high potential for *E. forrestii* subsp. *viridis* to occur in un-surveyed areas. As an example, all discreet modelled search areas (ELA 2021) surveyed have contained at least one population of *E. forrestii* subsp. *viridis*. Therefore, it is expected that the remaining un-surveyed discreet search areas would contain additional populations of *E. forrestii* subsp. *viridis* in addition to un-surveyed forest scrub units.

Furthermore, this study has demonstrated that the species occurs in a wide variety of habitat types and is likely to occur in the greater un-surveyed Onslow region. The total record of plants is expected to be underestimated as is limited to targeted survey areas.

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APPENDIX A LOCATIONS OF *EREMOPHILA FORRESTII* SUBSP. *VIRIDIS*

SPECIES	ABUNDANCE	DATE	LATITUDE	LONGITUDE
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-21.779678	115.062551
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-21.759716	115.087923
Eremophila forrestii subsp. *viridis*	3	31/08/2022	-21.759416	115.09227
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-21.759693	115.087949
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-21.779785	115.062683
Eremophila forrestii subsp. *viridis*	2	31/08/2022	-21.77848	115.08295
Eremophila forrestii subsp. *viridis*	5	31/08/2022	-21.779752	115.062228
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-21.759277	115.091782
Eremophila forrestii subsp. *viridis*	11	31/08/2022	-22.244551	115.481614
Eremophila forrestii subsp. *viridis*	1	31/08/2022	-22.245803	115.477037
Eremophila forrestii subsp. *viridis*	11	31/08/2022	-22.244006	115.481477
Eremophila forrestii subsp. *viridis*	9	31/08/2022	-22.243954	115.481464
Eremophila forrestii subsp. *viridis*	3	31/08/2022	-22.243831	115.481442
Eremophila forrestii subsp. *viridis*	5	31/08/2022	-22.245143	115.48595
Eremophila forrestii subsp. *viridis*	2	31/08/2022	-22.24519	115.485892
Eremophila forrestii subsp. *viridis*	4	31/08/2022	-21.721734	114.979765
Eremophila forrestii subsp. *viridis*	13	1/09/2022	-22.244334	115.481519
Eremophila forrestii subsp. *viridis*	4	1/09/2022	-22.245032	115.486071
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-22.245797	115.477041
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.719764	114.98354
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.781678	115.172819
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.87151	115.168861
Eremophila forrestii subsp. *viridis*	2	1/09/2022	-21.766009	115.159228
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.765556	115.158764
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.765452	115.158659
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.765541	115.158569
Eremophila forrestii subsp. *viridis*	2	1/09/2022	-21.766114	115.158004
Eremophila forrestii subsp. *viridis*	5	1/09/2022	-21.766287	115.157699
Eremophila forrestii subsp. *viridis*	6	1/09/2022	-21.766386	115.157668
Eremophila forrestii subsp. *viridis*	8	1/09/2022	-21.766437	115.15769
Eremophila forrestii subsp. *viridis*	7	1/09/2022	-21.766356	115.157581
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.766408	115.157501
Eremophila forrestii subsp. *viridis*	5	1/09/2022	-21.766404	115.157382
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.766287	115.15736
Eremophila forrestii subsp. *viridis*	2	1/09/2022	-21.766447	115.157244
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.76655	115.157184
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.76666	115.15693
Eremophila forrestii subsp. *viridis*	2	1/09/2022	-21.766519	115.156601

SPECIES	ABUNDANCE	DATE	LATITUDE	LONGITUDE
Eremophila forrestii subsp. *viridis*	10	1/09/2022	-21.766569	115.156489
Eremophila forrestii subsp. *viridis*	5	1/09/2022	-21.766679	115.156476
Eremophila forrestii subsp. *viridis*	4	1/09/2022	-21.766668	115.156388
Eremophila forrestii subsp. *viridis*	12	1/09/2022	-21.766735	115.156431
Eremophila forrestii subsp. *viridis*	13	1/09/2022	-21.766672	115.156226
Eremophila forrestii subsp. *viridis*	6	1/09/2022	-21.766854	115.156622
Eremophila forrestii subsp. *viridis*	9	1/09/2022	-21.766986	115.156645
Eremophila forrestii subsp. *viridis*	3	1/09/2022	-21.767117	115.156971
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.767192	115.157128
Eremophila forrestii subsp. *viridis*	4	1/09/2022	-21.767324	115.157218
Eremophila forrestii subsp. *viridis*	5	1/09/2022	-21.767339	115.157422
Eremophila forrestii subsp. *viridis*	20	1/09/2022	-21.767464	115.157481
Eremophila forrestii subsp. *viridis*	6	1/09/2022	-21.76753	115.15757
Eremophila forrestii subsp. *viridis*	4	1/09/2022	-21.767523	115.15768
Eremophila forrestii subsp. *viridis*	25	1/09/2022	-21.767626	115.157762
Eremophila forrestii subsp. *viridis*	13	1/09/2022	-21.767709	115.1578
Eremophila forrestii subsp. *viridis*	7	1/09/2022	-21.767784	115.157829
Eremophila forrestii subsp. *viridis*	22	1/09/2022	-21.767723	115.157899
Eremophila forrestii subsp. *viridis*	8	1/09/2022	-21.767875	115.15796
Eremophila forrestii subsp. *viridis*	17	1/09/2022	-21.767971	115.157946
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.768184	115.158175
Eremophila forrestii subsp. *viridis*	3	1/09/2022	-21.768242	115.158343
Eremophila forrestii subsp. *viridis*	3	1/09/2022	-21.768584	115.158501
Eremophila forrestii subsp. *viridis*	19	1/09/2022	-21.768719	115.158586
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.769315	115.158685
Eremophila forrestii subsp. *viridis*	6	1/09/2022	-21.769377	115.15872
Eremophila forrestii subsp. *viridis*	5	1/09/2022	-21.871721	115.169357
Eremophila forrestii subsp. *viridis*	1	1/09/2022	-21.871609	115.169384
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.766259	115.158718
Eremophila forrestii subsp. *viridis*	3	2/09/2022	-21.76633	115.158829
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.766229	115.158856
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.766565	115.158528
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.76637	115.15827
Eremophila forrestii subsp. *viridis*	4	2/09/2022	-21.766635	115.158089
Eremophila forrestii subsp. *viridis*	3	2/09/2022	-21.766711	115.158228
Eremophila forrestii subsp. *viridis*	3	2/09/2022	-21.766891	115.158244
Eremophila forrestii subsp. *viridis*	50	2/09/2022	-21.767091	115.15887
Eremophila forrestii subsp. *viridis*	50	2/09/2022	-21.767253	115.158745
Eremophila forrestii subsp. *viridis*	50	2/09/2022	-21.767422	115.158685
Eremophila forrestii subsp. *viridis*	50	2/09/2022	-21.767583	115.158606
Eremophila forrestii subsp. *viridis*	50	2/09/2022	-21.767775	115.158602
Eremophila forrestii subsp. *viridis*	8	2/09/2022	-21.768046	115.158806

SPECIES	ABUNDANCE	DATE	LATITUDE	LONGITUDE
Eremophila forrestii subsp. *viridis*	2	2/09/2022	-21.768425	115.158975
Eremophila forrestii subsp. *viridis*	2	2/09/2022	-21.868128	115.165902
Eremophila forrestii subsp. *viridis*	7	2/09/2022	-21.871654	115.169304
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.766485	115.158033
Eremophila forrestii subsp. *viridis*	11	2/09/2022	-21.766523	115.157866
Eremophila forrestii subsp. *viridis*	9	2/09/2022	-21.767112	115.158267
Eremophila forrestii subsp. *viridis*	10	2/09/2022	-21.767159	115.158403
Eremophila forrestii subsp. *viridis*	15	2/09/2022	-21.767388	115.15833
Eremophila forrestii subsp. *viridis*	19	2/09/2022	-21.767468	115.158436
Eremophila forrestii subsp. *viridis*	23	2/09/2022	-21.767593	115.15846
Eremophila forrestii subsp. *viridis*	30	2/09/2022	-21.767616	115.15819
Eremophila forrestii subsp. *viridis*	25	2/09/2022	-21.76771	115.158081
Eremophila forrestii subsp. *viridis*	20	2/09/2022	-21.767645	115.157947
Eremophila forrestii subsp. *viridis*	23	2/09/2022	-21.767745	115.158241
Eremophila forrestii subsp. *viridis*	14	2/09/2022	-21.767843	115.158299
Eremophila forrestii subsp. *viridis*	3	2/09/2022	-21.767967	115.158283
Eremophila forrestii subsp. *viridis*	6	2/09/2022	-21.768114	115.158388
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.768187	115.158498
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.768731	115.15876
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.868121	115.165921
Eremophila forrestii subsp. *viridis*	2	2/09/2022	-21.8718	115.16923
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.839	115.130996
Eremophila forrestii subsp. *viridis*	8	2/09/2022	-21.781943	115.172498
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.781598	115.173023
Eremophila forrestii subsp. *viridis*	4	2/09/2022	-21.782079	115.17244
Eremophila forrestii subsp. *viridis*	1	2/09/2022	-21.871398	115.168726
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.777104	115.070306
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.777007	115.070322
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776922	115.070307
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.776892	115.070358
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.776787	115.070283
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.776674	115.070171
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.776548	115.070127
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776233	115.069854
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776184	115.06988
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.775725	115.070032
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.775678	115.070051
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.775573	115.070056
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.775342	115.070145
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.772502	115.070621
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.815555	115.109915
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.815502	115.110175
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.81545	115.110312

SPECIES	ABUNDANCE	DATE	LATITUDE	LONGITUDE
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.815685	115.110274
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.778473	115.070278
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.77759	115.070289
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.777264	115.070217
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.77727	115.070125
Eremophila forrestii subsp. *viridis*	7	3/09/2022	-21.777148	115.070162
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.777054	115.070164
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.776932	115.07015
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.776868	115.070166
Eremophila forrestii subsp. *viridis*	9	3/09/2022	-21.776862	115.070053
Eremophila forrestii subsp. *viridis*	13	3/09/2022	-21.776933	115.070049
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.777049	115.070043
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.7768	115.07003
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.776728	115.070033
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776344	115.07
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.776196	115.06997
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.776143	115.06999
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.775979	115.069973
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.775752	115.070067
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.775526	115.07011
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.772907	115.070493
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.812104	115.108636
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.81226	115.108418
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.812458	115.108598
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.812763	115.108421
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.812825	115.108365
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.812707	115.109237
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.779754	115.070078
Eremophila forrestii subsp. *viridis*	12	3/09/2022	-21.778017	115.070127
Eremophila forrestii subsp. *viridis*	14	3/09/2022	-21.777963	115.07012
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.777837	115.070104
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.777723	115.070132
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.777318	115.069962
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.777228	115.069946
Eremophila forrestii subsp. *viridis*	12	3/09/2022	-21.777164	115.069867
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.777138	115.069928
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.777079	115.069846
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.777087	115.069738
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.776945	115.069811
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.775692	115.069964
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.775494	115.070031
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.775333	115.070067

SPECIES	ABUNDANCE	DATE	LATITUDE	LONGITUDE
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.779885	115.070075
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.77966	115.069992
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.779483	115.070074
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.776871	115.07046
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.776805	115.070449
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.776618	115.07027
Eremophila forrestii subsp. *viridis*	9	3/09/2022	-21.776531	115.070158
Eremophila forrestii subsp. *viridis*	7	3/09/2022	-21.776374	115.070169
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776307	115.070163
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.776146	115.070189
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.775613	115.070155
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.775566	115.070202
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.772707	115.07091
Eremophila forrestii subsp. *viridis*	7	3/09/2022	-21.772333	115.071058
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.772232	115.07113
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.772144	115.07124
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.772881	115.082276
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.778727	115.070121
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.778019	115.070214
Eremophila forrestii subsp. *viridis*	7	3/09/2022	-21.77793	115.070209
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.777767	115.070176
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.777362	115.07002
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.777268	115.070009
Eremophila forrestii subsp. *viridis*	11	3/09/2022	-21.777195	115.070032
Eremophila forrestii subsp. *viridis*	15	3/09/2022	-21.777146	115.070003
Eremophila forrestii subsp. *viridis*	19	3/09/2022	-21.777093	115.069955
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776605	115.069919
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.776553	115.069964
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.776483	115.070052
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.776196	115.070083
Eremophila forrestii subsp. *viridis*	10	3/09/2022	-21.776009	115.070029
Eremophila forrestii subsp. *viridis*	12	3/09/2022	-21.775617	115.070101
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.775422	115.070181
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.773986	115.070662
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.772935	115.070565
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.778207	115.092486
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.78454	115.084638
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.787071	115.08831
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.783917	115.068293
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.783737	115.068206
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.783471	115.068161
Eremophila forrestii subsp. *viridis*	4	3/09/2022	-21.7833	115.068127

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Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.782959	115.068055
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.781385	115.068907
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.779828	115.092235
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.779106	115.092405
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.776634	115.090533
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.77687	115.090381
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.784617	115.084336
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.784667	115.084481
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.786015	115.084425
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.785973	115.084364
Eremophila forrestii subsp. *viridis*	5	3/09/2022	-21.785909	115.08426
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.785874	115.084273
Eremophila forrestii subsp. *viridis*	7	3/09/2022	-21.785843	115.084431
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.785822	115.084354
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.785778	115.084378
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.78572	115.084257
Eremophila forrestii subsp. *viridis*	9	3/09/2022	-21.785697	115.084139
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.785505	115.082685
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.785745	115.082629
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.784032	115.068491
Eremophila forrestii subsp. *viridis*	6	3/09/2022	-21.784256	115.068027
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.784272	115.067889
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.78271	115.067729
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.78224	115.068016
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.780146	115.09214
Eremophila forrestii subsp. *viridis*	3	3/09/2022	-21.785669	115.084629
Eremophila forrestii subsp. *viridis*	8	3/09/2022	-21.785629	115.084465
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.785447	115.084486
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.783551	115.082288
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.783574	115.082371
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.783555	115.082523
Eremophila forrestii subsp. *viridis*	2	3/09/2022	-21.781293	115.068603
Eremophila forrestii subsp. *viridis*	1	3/09/2022	-21.76055	115.091718
Eremophila forrestii subsp. *viridis*	13	4/09/2022	-21.776859	115.090301
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.784406	115.084766
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.783696	115.068153
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.782875	115.068029
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.781309	115.06879
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.78128	115.068846
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.753984	115.0949
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.783695	115.068312
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.78339	115.068202

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Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.783255	115.068192
Eremophila forrestii subsp. *viridis*	2	4/09/2022	-21.783141	115.068168
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.78302	115.068166
Eremophila forrestii subsp. *viridis*	3	4/09/2022	-21.782922	115.068108
Eremophila forrestii subsp. *viridis*	2	4/09/2022	-21.781453	115.069029
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.784546	115.084374
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.784572	115.084424
Eremophila forrestii subsp. *viridis*	4	4/09/2022	-21.784618	115.084493
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.785	115.08504
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.785797	115.084645
Eremophila forrestii subsp. *viridis*	12	4/09/2022	-21.785785	115.084538
Eremophila forrestii subsp. *viridis*	3	4/09/2022	-21.785811	115.084477
Eremophila forrestii subsp. *viridis*	7	4/09/2022	-21.785713	115.084458
Eremophila forrestii subsp. *viridis*	1	4/09/2022	-21.785678	115.084386
Eremophila forrestii subsp. *viridis*	3	4/09/2022	-21.784918	115.082904