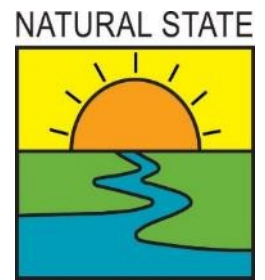


Natural values assessment

Venture Minerals Limited

Proposed drill site within Mining Lease 3M/2012

Cruncher1 site



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Cover photo: View of the native vegetation within the proposed pad clearing site. Facing NE, M.Rose, 29/08/22.

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Summary

Natural State was engaged by Venture Minerals Limited to conduct a flora and fauna assessment for a proposed drill site near Pieman Road, within the Meredith Range Regional Reserve, to assist with planning requirements with Mineral Resources Tasmania.

The proponent is seeking to clear a small patch of native vegetation to enable machinery access for exploration drilling. The Cruncher1 site is within Mining Lease 3M/2012. .

The proposed clearing extent for the Cruncher site, is expected to include a small track approximately 10m x up to 3m wide, and a circular cleared pad up to 40m in diameter. The total area of native vegetation proposed to be cleared at this site is expected to be approximately 0.13 hectares.

Vegetation communities

Two native vegetation communities were observed surrounding the proposed drill site:

- WNL - *Eucalyptus nitida* forest over *Leptospermum*
- RMS - *Nothofagus* – *Phyllocladus* short rainforest

Threatened vegetation communities

No threatened native vegetation communities (TNVC) listed under the *Tasmanian Nature Conservation Act 2002* (NC Act) or the *Commonwealth Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) were observed near the proposed drill site.

Threatened flora

No threatened flora species listed under the *Tasmanian Threatened Species Protection Act 1995* (TSP Act) or the EPBC Act were observed during the survey, or have previously been recorded within 5Km of the site.

Threatened fauna

No burrows, nests or den sites were observed during the survey within, or immediately surrounding, the proposed clearing area.

Three threatened fauna species have been recorded within 5Km of the site:

- *Accipiter novaehollandiae* - Grey Goshawk
- *Dasyurus maculatus* - Spotted-tailed Quoll
- *Sarcophilus harrisii* - Tasmanian Devil

Suitable habitat exists nearby for a number of listed threatened fauna species.

Weeds

One declared weed species has been recorded nearby on Pieman Road:

- *Cirsium vulgare* - Spanish Heath

Waterways

The site is located within the Pieman catchment area. The proposed clearing has been sited approximately 20m away from the nearby small creek which is classified as being of low conservation value.

1. Introduction

1.1 Background

Natural State was engaged by Venture Minerals Limited to conduct a flora and fauna assessment for a proposed drill site near Pieman Road, within the Meredith Range Regional Reserve, to assist with planning requirements with Mineral Resources Tasmania.

1.2 Description of the study area

The project site is located within Mining Lease 3M/2012, near Tullah in the West Coast Council region. Access is off Pieman Road.

The GPS coordinates for the centre of the proposed pad clearing are: 356876, 5383235.

The topography of the study area is gently sloping from 285-290m above sea level. The site is nestled at the base of a ridge with the nearby hillslope rising to 600m ASL to the West.

The annual average rainfall in Tullah is approximately 2,410mm.

This site is located within the Tasmanian West IBRA bioregion (Interim Biogeographical Regionalisation for Australia), in the Pieman catchment area.

The surrounding area is covered in native vegetation.



Photo 1: Drone aerial view of the proposed clearing footprint within the marked red area. M.Rose, 29/08/22.

Location of proposed exploration drill site - landscape context map

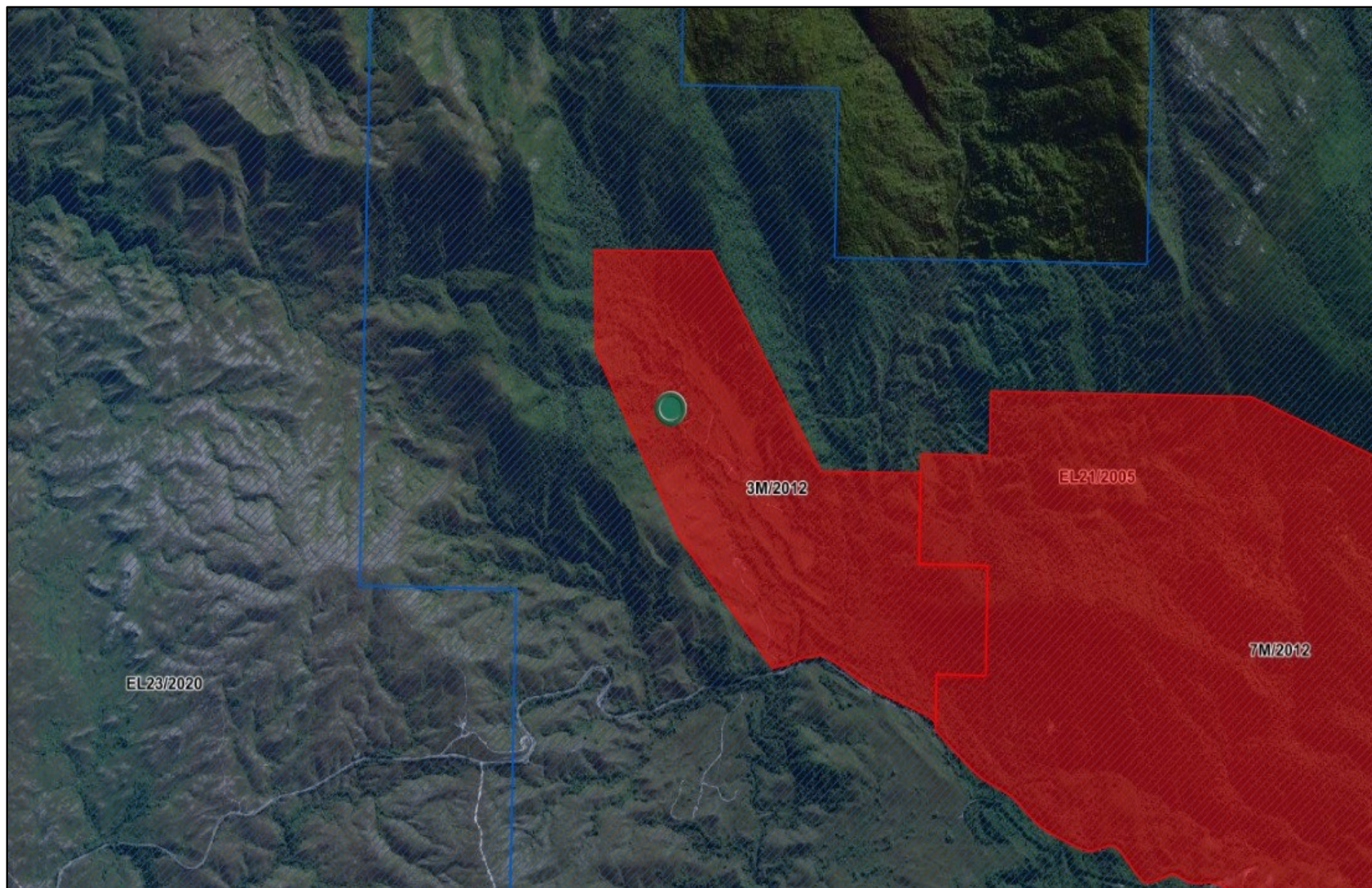


Figure 1: Landscape context map showing the location of the proposed drill site in green. Map data: LISTmap, approximate scale 1:25,000.

2. Methodology

2.1 Background research

This report uses a simplified format of the Guidelines for Natural Values Surveys - Terrestrial Development Proposals (DPIPWE, 2015).

The initial desktop analysis involved, searching The Natural Values Atlas (NVA) to generate a Natural Values Report, searching The Land Information System Tasmania (LISTmap), the Forest Practices Authority Biodiversity Values database (BVD) and the Conservation of Freshwater Ecosystem Values database (CFEV).

Data was then exported from these databases to enable analysis and map production using ArcGIS v10.2 software, prior to the site assessment.

2.2 Natural values assessments

Field survey work was conducted by Matt Rose on 29th August 2022 with the report completed on 12th September 2022.

Natural State undertakes natural values assessments through the following permits:

- PERMIT TO TAKE THREATENED PLANTS FOR SCIENTIFIC PURPOSES – Permit No. TFL 22389 issued by the Department of Primary Industries, Parks, Water & Environment.
- TASVEG VEGETATION CONDITION ASSESSMENT ACCREDITATION – issued by the Department of Primary Industries, Parks, Water & Environment.
- HERPETOLOGY PERMIT – Permit No. 1901864 issued by the Department of Primary Industries, Parks, Water & Environment.
- RPA OPERATOR ACCREDITATION (Drone) – issued by the Civil Aviation Safety Authority.

The survey equipment consisted of: a GPS unit, drone, mobile phone, camera & smartphone mapping Apps. The survey methodologies included:

- a.) using the random meander technique with opportunistic recording & mapping of natural values observed during the site assessment.
- b.) ground-truthing data collated during the background research phase e.g. threatened species, native vegetation communities, waterway values and weeds.

Field data was collected using a handheld GPS units (Garmin GPSMAP64) in the UTM UPS position format and GDA1994 MGA Zone 55 map datum. The GPS accuracy for this field survey work was 3m.

Data was then imported into GIS software to enable further analysis and map production.

2.3 Limitations

The flora and fauna assessment was limited in time. Please note that once-off ground-based surveys are unlikely to record all species present. Some flora species are likely to be dormant. Some fauna species may have migrated from the search area. Other species may utilise the search area, but may not have been recorded within any database. Targeted flora & fauna surveys conducted several times throughout the year are likely to record additional species. Night surveys are likely to record additional nocturnal species. Night surveys were not conducted by Natural State for this project, but can be by request.

Bryophytes, fungi & lichens were not included in this survey as the preliminary NVA Report and BVD search did not highlight any threatened species nearby.

The mapping in this report uses a combination of data collected onsite and exported from TheLIST, NVA & BVD. This data is displayed to assist with analysis and decision making and is a subjective interpretation based on experience, qualifications and knowledge to date.

3. Native vegetation communities

Two native vegetation communities were observed surrounding the proposed drill site.

Table 1: Native vegetation communities observed.

TASVEG code	Vegetation community description	Status
WNL	<i>Eucalyptus nitida</i> forest over <i>Leptospermum</i>	-
RMS	<i>Nothofagus</i> – <i>Phyllocladus</i> short rainforest	-

Source: Site survey.

The proposed clearing area is within a patch of *Eucalyptus nitida* forest over *Leptospermum*.

The dominant forest canopy tree species immediately surrounding the proposed clearing area are *Eucalyptus nitida* – Smithton Peppermint interspersed with the occasional *Eucalyptus obliqua* – Messmate Stringybark tree. The trees are of a mixed age class ranging in size from small saplings through to large hollow-bearing mature trees approximately 40m high with a diameter at breast height (DBH) of >100cm.

The larger canopy trees show signs of senescence with medium sized (up to 40cm diameter) fallen logs throughout the proposed clearing area.

The native species observed within the proposed clearing footprint include: *Acacia mucronata* – Catterpillar Wattle, *Balioskion tetraphyllum* – Tassel Cordrush, *Bauera rubioides* – Wiry Bauera, *Eucalyptus nitida* – Smithton Peppermint, *Gahnia grandis* – Cutting Grass, *Gleichenia dicarpa* – Pouched Coral Fern, *Leptospermum scoparium* – Manuka, *Melaleuca squarrosa* – Scented Honey Myrtle & *Telopea truncata* – Waratah.

The above species are well represented throughout the surrounding vegetation.

The most common species in the dryer Eastern half of the proposed clearing area are *Bauera rubioides* – Wiry Bauera & *Gahnia grandis* – Cutting Grass. The Western half of the proposed clearing area is wetter and transitions to more rainforest shrubs, *Melaleuca squarrosa* – Scented Honey Myrtle & larger *Eucalyptus nitida* trees.

Further West of the proposed pad clearing area the forest transitions to *Eucalyptus nitida* trees over rainforest and then dense rainforest with *Nothofagus cunninghamii* – Myrtle, *Atherosperma moschatum* – Sassafras & *Phyllocladus aspleniifolius* – Celery Top Pine.

The surrounding patch of native vegetation was impacted by a wildfire in the early 1980's.

3.1 Threatened native vegetation communities (TNVC 2014)

No threatened native vegetation communities (TNVC) were observed near the proposed drill site.



Photo 2: The *Eucalyptus nitida* forest over *Leptospermum* native vegetation community within the proposed clearing area starts off with dense *Bauera rubioides* – Wiry *Bauera* shrub understorey. Facing East, M.Rose, 29/08/22.



Photo 3: The Western half of the proposed clearing area transitions to more rainforest shrubs, *Meleuca squarrosa* – Scented Honey Myrtle & larger *Eucalyptus nitida* trees. Facing West, M.Rose, 29/08/22.

Native vegetation communities TASVEG

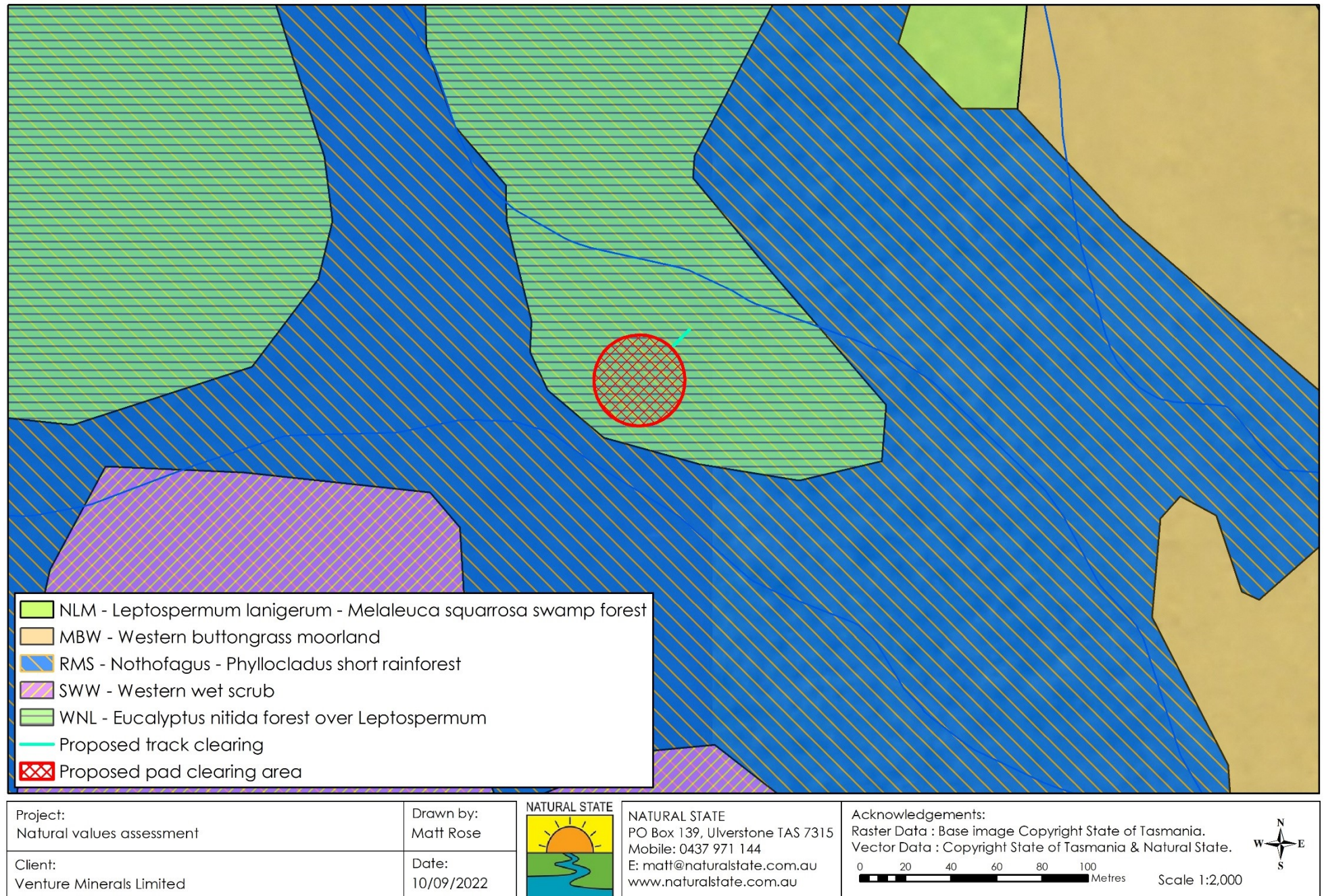


Figure 2: Native vegetation community observations map.

4. Threatened flora

No threatened flora species listed under the *TSP Act* or *EPBC Act* was observed within the proposed clearing footprint during the survey.

Table 2: Threatened flora species recorded within 5Km of the site

Scientific Name	Common Name	TSP Act status	EPBC Act status
<i>Epacris curtisiae</i>	Northwest Heath	Rare	-
<i>Hypolepis muelleri</i> x <i>rugosula</i>	Harsh Groundfern hybrid	-	-

Source: The NVA.

No suitable growing conditions exist for these species within the proposed clearing area or the surrounding forest area.

5. Threatened fauna

No threatened fauna species were observed during the survey. No burrows, den sites or scats were observed during the survey either. **Please note:** This does not mean that they are not present, rather that none were found during this once-off survey.

Suitable habitat exists onsite for a number of listed threatened fauna species amongst the forest vegetation and nearby waterways.

The large mature trees surrounding the proposed clearing area are senescing and do possess very small circular and crack hollows with no visible evidence of previous use. The hollow entrances are +/- 5cm and very unlikely to support threatened species such as the Masked Owl.

According to the Wedge-tailed Eagle Nesting Habitat – Low Elevation Model the mature trees surrounding the proposed site are highly likely to provide suitable nesting habitat in the local landscape. Although no nests were observed, or have been recorded nearby, the surrounding forest does provide nesting opportunities and roosting and hunting perches for birds of prey.

A previous observation of a Spotted-tailed Quoll has been recorded approximately 900m away.

Many Tasmanian Devil observations have been recorded in the local area. The closest observation recorded was approximately 2Km to the SW.

The large continuous patch of native vegetation surrounding this site provides important habitat refuge. The small patch of vegetation proposed to be cleared as part of this development is well represented elsewhere amongst the surrounding native forest.

Several threatened fauna species listed under the *EPBC Act* and the *TSP Act* have been recorded within 5km of the proposed development.



Photo 4: The large hollow-bearing mature trees surrounding the proposed clearing area should be retained as habitat trees. M.Rose, 29/08/22.

Table 3: Threatened fauna species recorded within 5Km of the site or within potential range boundaries

Scientific Name	Common Name	TSP Act status	EPBC Act status	Range class	Habitat suitability within the development footprint
<i>Accipiter novaehollandiae</i>	Grey Goshawk	Endangered	-	Core range	Suitable hunting and foraging habitat present. Suitable nesting habitat available nearby. Species previously observed within 5Km of the site.
<i>Aquila audax subsp. fleayi</i>	Wedge-tailed Eagle	Endangered	Endangered	Potential range	Suitable hunting and foraging habitat present. Suitable nesting habitat available nearby.
<i>Beddomeia bowryensis</i>	Hydrobiid Snail (Bowry Creek)	Rare	-	Known range	The nearby creek may possess suitable habitat, aquatic species. A 20m riparian vegetation buffer will be retained.
<i>Ceyx azureus subsp. diemenensis</i>	Tasmanian Azure Kingfisher	Endangered	Endangered	Core range	Unlikely to forage amongst the riparian vegetation nearby. A 20m riparian vegetation buffer will be retained.
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	Rare	Vulnerable	Potential range	Suitable hunting & foraging habitat present. Limited denning habitat available in the immediate area. Species previously observed within 1Km of the site.
<i>Haliaeetus leucogaster</i>	White-bellied Sea-eagle	Vulnerable	-	Potential range	Suitable hunting and foraging habitat present. Suitable nesting habitat available nearby.
<i>Prototroctes maraena</i>	Australian Grayling	Vulnerable	Vulnerable	Potential range	The nearby creek is unlikely to possess suitable habitat, aquatic species. A 20m riparian vegetation buffer will be retained.
<i>Pseudemoia pagenstecheri</i>	Tussock Skink	Vulnerable	-	Potential range	No suitable habitat available within the proposed clearing area.
<i>Sarcophilus harrisii</i>	Tasmanian Devil	Endangered	Endangered	Known range	Suitable hunting and foraging habitat present. Limited denning habitat available in the immediate area. Species previously observed in the local area within 2Km of the site.
<i>Tyto novaehollandiae</i>	Masked Owl	Endangered	Vulnerable	Core range	Suitable hunting & foraging habitat present. Hollow bearing nesting trees available nearby.

Source: the NVA, BVD & site survey.

Threatened species observations

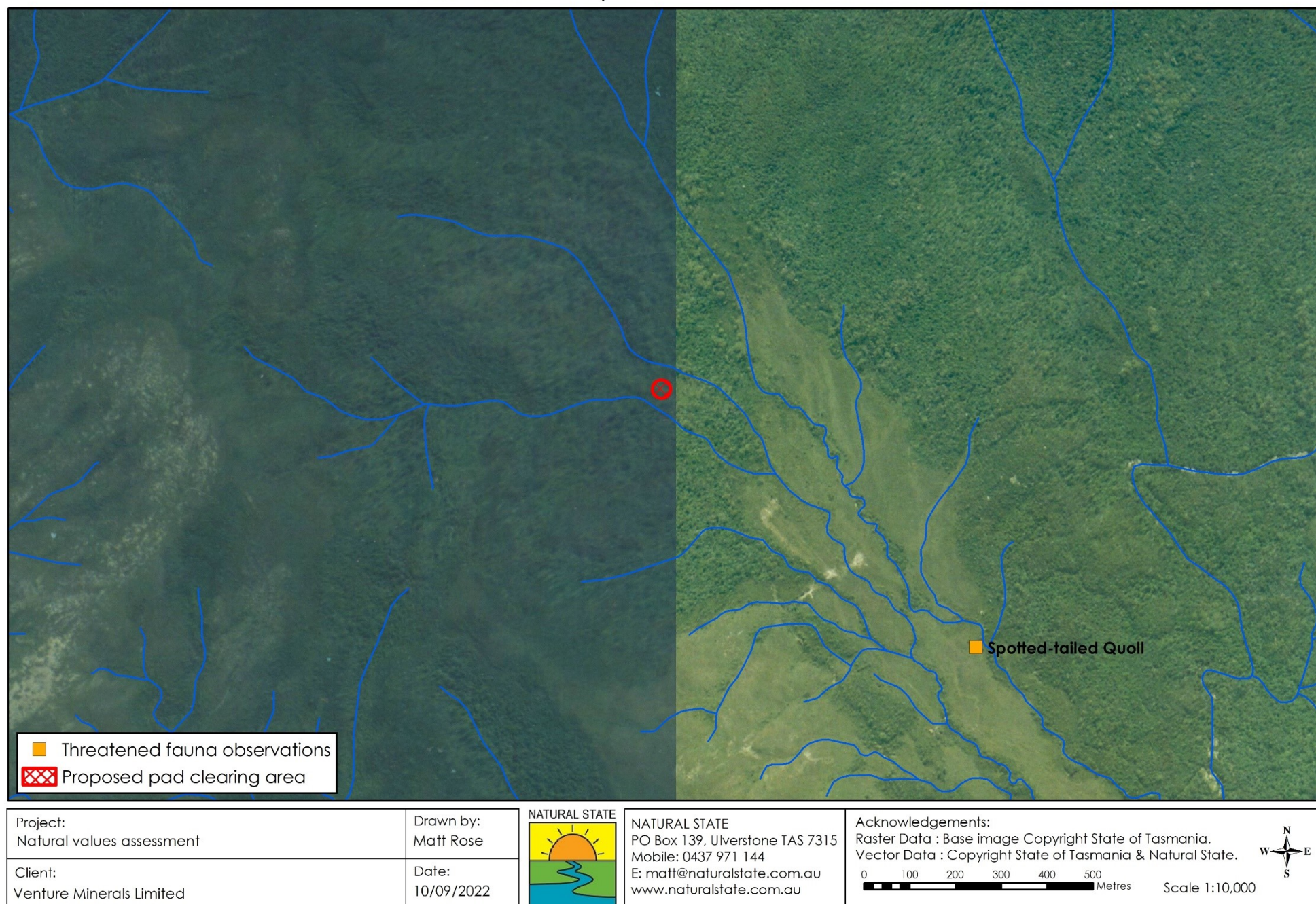


Figure 3: Threatened species observations map.

6. Weeds

One declared weed species was observed nearby and previously mapped by the author along Pieman Road.

Table 4: Declared & environmental weed observations

Scientific Name	Common Name	Declared weed in TAS	Weed of National Significance (WoNS)
<i>Erica lusitanica</i>	Spanish Heath	YES - Zone B	-

Source: Site survey.

Spanish Heath is a declared weed in the West Coast Council area and as such should be controlled ASAP to prevent seed set and further spread.

Pieman Road is currently owned and managed by Hydro Tasmania.

The current Venture Minerals Limited core shed depot in Tullah is surrounded by Spanish Heath. Every effort should be made to control these patches around infrastructure ASAP to prevent seed spread from Tullah on machinery and vehicles potentially forming infestations in these natural areas. Weed and disease hygiene procedures must be followed to prevent weed incursion into weed free patches of the Meredith Range Regional Reserve.

Spanish Heath should be carefully controlled using a combination of hand pull, cut / paint & spot spraying with broadleaf selective herbicides only, if herbicide treatment is the preferred method of control.

Please note: This invasive weed species is very resilient and can quickly colonise any disturbed ground from seed distributed by dirty machinery.



Photo 5: A patch of treated Spanish Heath growing on Pieman Road west of Reece Dam. Facing West, M.Rose, 20/11/20.

Declared & environmental weed observations

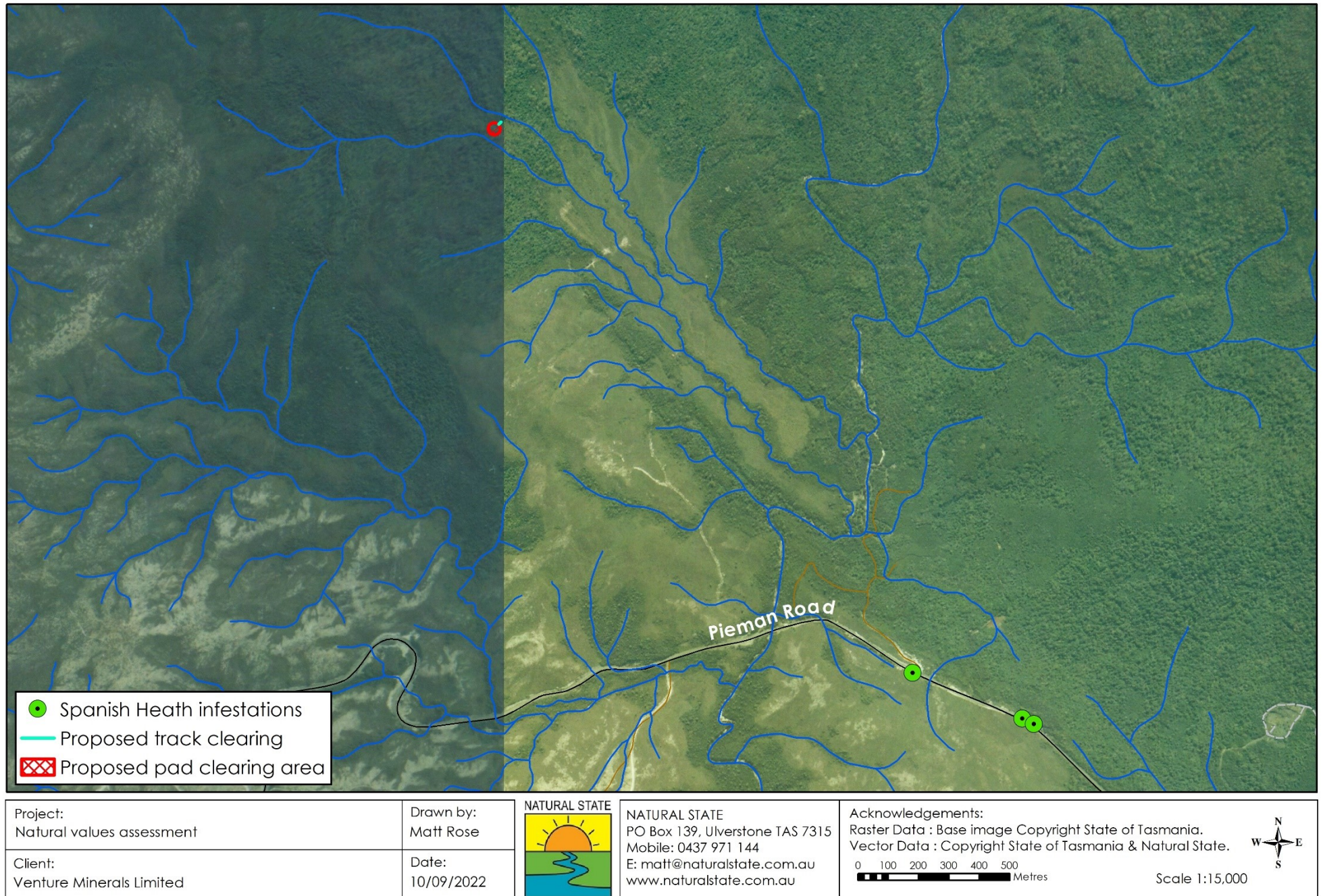


Figure 4: Declared and environmental weed observations map.

7. Freshwater ecosystem values

The study area is located within the Pieman catchment area.

Freshwater ecosystems in Tasmania have been evaluated to assess a range of characteristics such as: naturalness, special values diversity, land tenure security, stream order & representativeness to come up with an overall Integrated Conservation Value (ICV) rating of Low, Medium, High & Very High.

According to the Conservation of Freshwater Ecosystem Values (CFEV) modelling available from TheLIST database the nearby waterway reaches are classified as being of Low Integrated Conservation Value.

At the time of the survey the creek was flowing at approximately 200mm deep closest to the proposed drill site. The bed is made up of bedrock boulders with varying sizes of gravels. The creek bank is well vegetated with rainforest species and moss. Woody debris and fallen trees up to 30cm in diameter are abundant throughout the riparian zone.

Although the nearby creek is classified as being of low conservation value it does provide very important habitat for local native fauna, most notably the local species of Burrowing Crayfish - *Engaeus cisternarius*.

A 20m riparian vegetation buffer will be retained with minimal impacts expected to the waterway as a result of the proposed clearing activities.



Photo 6: The nearby creek with riparian rainforest vegetation. Facing NW, M.Rose, 29/08/22.

Freshwater ecosystem values

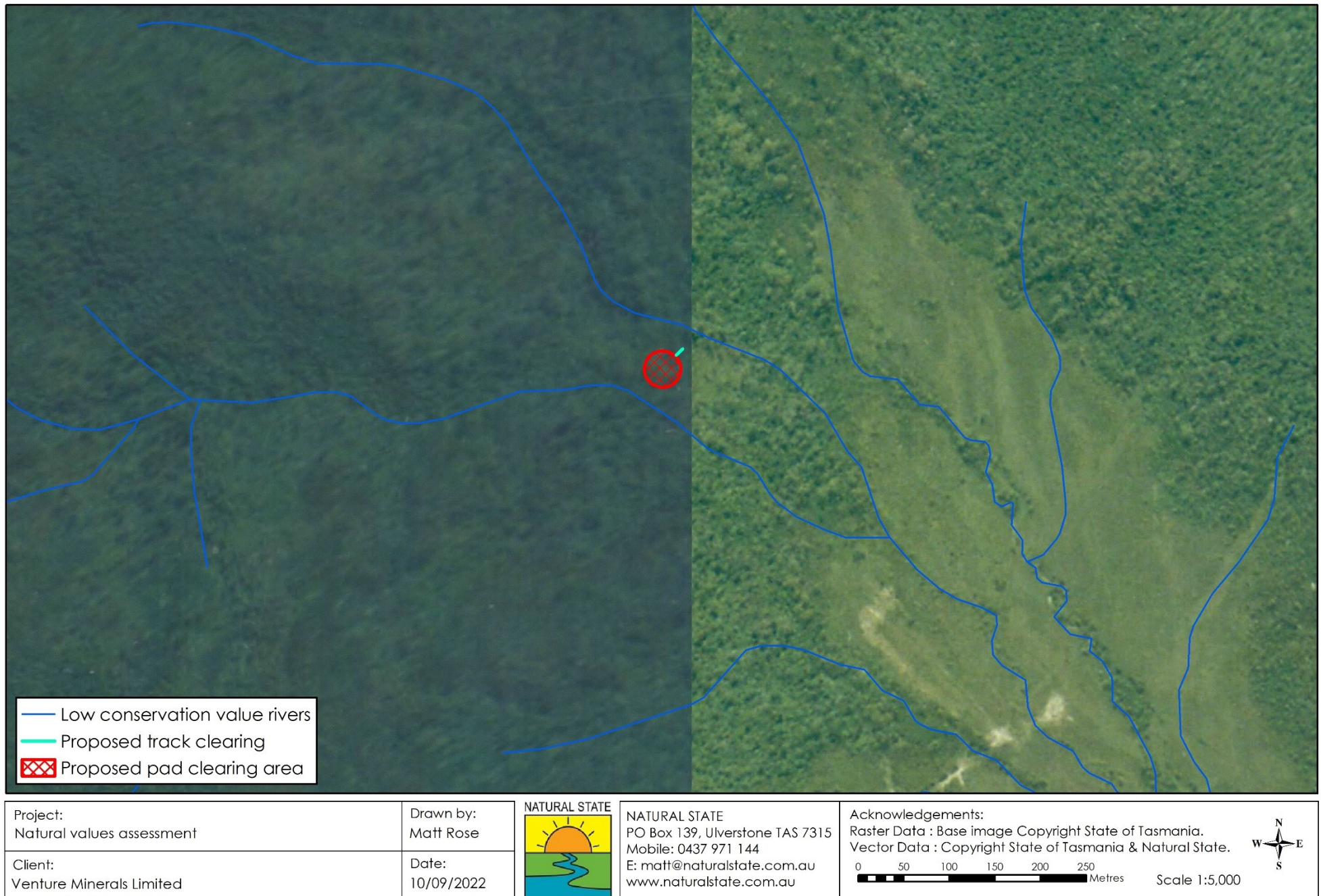


Figure 5: Freshwater ecosystem value observations map.

8. Conclusion

The proponent is seeking to clear an area of 0.13 hectares in total as part of this project. The flora species impacted are well represented throughout the surrounding forested areas. The two largest trees within the proposed clearing area should be retained.

In consultation with the proponent, the proposed pad clearing area has been sited to avoid and minimise potential impacts to the nearby waterway and some larger hollow-bearing trees. A 20m riparian vegetation buffer will be retained parallel with the creek to protect these natural values.

The large continuous patch of native vegetation and the many waterways surrounding this site provide important habitat refuge for a wide range of local wildlife including threatened fauna species. Whilst no nests, burrows or tree hollows potentially used by threatened fauna were located within or surrounding the proposed clearing area during the site survey, this does not mean that they are not present.

Any disturbed ground will need ongoing weed monitoring, and if necessary control, for at least 5 years to prevent invasive weeds, particularly Spanish Heath, from potentially establishing and infesting the surrounding bushland.

9. Recommendations

The following recommendations should be considered as permit conditions:

- The largest *Eucalyptus* trees surrounding the proposed clearing area should be avoided and retained as habitat trees. The largest mature hollow-bearing tree has a DBH >100cm and is situated just outside of the proposed pad clearing area. The GSP coordinates for this tree are: 356860, 5383220.
- Manage all declared and environmental weeds (Spanish Heath & Pampas Grass) within the Venture Minerals Limited core shed depot in Tullah ASAP to prevent further seed set and potential spread via machinery into natural areas.
- To prevent the spread of weeds, Myrtle Wilt, freshwater pests and pathogens such as *Phytophthora cinnamomi* and Chytrid fungus, the proponent should ensure that all contractors / earthworks machinery adhere to the following minimum standards:
 1. [Weed and Disease Planning and Hygiene Guidelines](#) (DPIPWE, 2015)
 2. [Keeping it Clean - A Tasmanian field hygiene manual](#) (DPIPWE, 2010)
 3. [Waterways & Wetlands Works Manual](#) (DPIWE, 2003)

Mineral Resources Tasmania should consider communicating directly with Hydro Tasmania on the need to control the declared and environmental weeds along Pieman Road between Reece Dam and the Murchison Highway.

10. References

- Australian Government (2022). Department of the Environment and Energy. Matters of National Environmental Significance - Significant impact guidelines 1.1
Environment Protection and Biodiversity Conservation Act 1999
- Department of Primary Industries, Parks, Water and Environment (2015) Conservation, Development Planning & Conservation Assessment, Guidelines for Natural Values Surveys - Terrestrial Development Proposals.
<http://dpiipwe.tas.gov.au/Documents/Guidelines%20for%20Natural%20Values%20Surveys%20related%20to%20Development%20Proposals.pdf>
- DPIPWE (2010). Keeping it clean - A Tasmanian field hygiene manual to prevent the spread of freshwater pests and pathogens.
http://dpiipwe.tas.gov.au/Documents/15130802_52keepingitcleanspreadswe.pdf
- DPIPWE (2015). Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania. (Eds.) Karen Stewart and Michael Askey-Doran. Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania.
- DPIPWE (2016). Washdown Guidelines for Weed and Disease Control - Edition 1.
<http://dpiipwe.tas.gov.au/invasive-species/weeds/weed-hygiene/washdown-guidelines>
- Forest Practices Authority (2022). Threatened Fauna - Grey Goshawk
https://www.fpa.tas.gov.au/_data/assets/pdf_file/0019/110917/Grey_goshawk_2011.pdf
- Forest Practices Authority (2016), *Tree Hollows in Tasmania: A guide*
http://www.fpa.tas.gov.au/_data/assets/pdf_file/0008/111113/Tree_hollows_in_Tasmania_-_a_guide.pdf
- Kitchener, A. and Harris, S. (2013). *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation*, 2nd edn, Department of Primary Industries, Parks, Water and Environment, Tasmania
- Tasmanian Vegetation Monitoring and Mapping Program (2022). TASVEG Version 3 Vegetation Community Benchmarks – WNL *Eucalyptus nitida* forest over *Leptospermum*
<https://nre.tas.gov.au/Documents/VCA-WNL.pdf>
- Threatened Species Section (2022). Earthworks.
<https://www.threatenedspecieslink.tas.gov.au/Pages/Earthworks.aspx>
- Threatened Species Section (2022). *Accipiter novaehollandiae* (Grey Goshawk): Species Management Profile for Tasmania's Threatened Species Link,
<http://www.threatenedspecieslink.tas.gov.au/Pages/Grey-Goshawk.aspx>
- Threatened Species Section (2022). *Aquila audax subsp. fleayi* (Tasmanian Wedge-tailed Eagle): Species Management Profile for Tasmania's Threatened Species Link,
<http://www.threatenedspecieslink.tas.gov.au/Pages/Wedge-tailed-Eagle.aspx>
- Threatened Species Section (2022). *Beddomeia bowryensis* (Hydrobiid Snail Bowry Creek): Species Management Profile for Tasmania's Threatened Species Link.
[https://www.threatenedspecieslink.tas.gov.au/Pages/Hydrobiid-Snail-\(Bowry-Creek\).aspx](https://www.threatenedspecieslink.tas.gov.au/Pages/Hydrobiid-Snail-(Bowry-Creek).aspx)
- Threatened Species Section (2022). Northwest Heath (*Epacris curtisiae*): Species Management Profile for Tasmania's Threatened Species Link.
<https://www.threatenedspecieslink.tas.gov.au/Pages/Epacris-curtisiae.aspx>
- Threatened Species Section (2022). *Dasyurus maculatus* (Spotted-tailed Quoll): Species Management Profile for Tasmania's Threatened Species Link,
<http://www.threatenedspecieslink.tas.gov.au/Pages/Spotted-tailed-Quoll.aspx>

Threatened Species Section (2022). *Haliaeetus leucogaster* (White-bellied Sea-Eagle): Species Management Profile for Tasmania's Threatened Species Link, <http://www.threatenedspecieslink.tas.gov.au/Pages/White-bellied-Sea-Eagle.aspx>

Threatened Species Section (2022). *Lathamus discolor* (Swift Parrot): Species Management Profile for Tasmania's Threatened Species Link, <http://www.threatenedspecieslink.tas.gov.au/Pages/Swift-Parrot.aspx>

Threatened Species Section (2022). *Litoria raniformis* (Green and Gold Frog): Species Management Profile for Tasmania's Threatened Species Link, <https://www.threatenedspecieslink.tas.gov.au/Pages/Green-and-Gold-Frog.aspx>

Threatened Species Section (2022). *Prototroctes maraena* (Australian Grayling): Species Management Profile for Tasmania's Threatened Species Link, <http://www.threatenedspecieslink.tas.gov.au/Pages/Australian-Grayling.aspx>

Threatened Species Section (2022). *Pseudemoia pagenstecheri* (Tussock Skink): Species Management Profile for Tasmania's Threatened Species Link, <https://www.threatenedspecieslink.tas.gov.au/Pages/Tussock-Skink.aspx>.

Threatened Species Section (2022). *Sarcophilus harrisii* (Tasmanian Devil): Species Management Profile for Tasmania's Threatened Species Link, <http://www.threatenedspecieslink.tas.gov.au/Pages/Tasmanian-Devil.aspx>

Threatened Species Section (2022). *Tyto novaehollandiae* subsp. *castanops* (Masked Owl (Tasmanian)): Species Management Profile for Tasmania's Threatened Species Link, [http://www.threatenedspecieslink.tas.gov.au/Pages/Masked-Owl-\(Tasmanian\).aspx](http://www.threatenedspecieslink.tas.gov.au/Pages/Masked-Owl-(Tasmanian).aspx)

Watts, D. (2002) *Field guide to Tasmanian birds*.

Watts, D. (2008) *Tasmanian Mammals. A field guide - Revised Edition*.

Wilson, S. and Swan, G. (2003) *A complete guide to reptiles of Australia*.

11. Appendices

Appendix 1. Flora assessment

Table 5: Indigenous flora species observed during survey

Scientific Name	Common Name	Endemic	TSP Act status	EPBC Act status
<i>Acacia mucronata</i>	Catterpillar Wattle	-	-	-
<i>Anodopetalum biglandulosum</i>	Horizontal	YES	-	-
<i>Anopterus glandulosus</i>	Tasmanian Laurel	YES	-	-
<i>Atherosperma moschatum</i>	Sassafras	-	-	-
<i>Baloskion tetraphyllum</i>	Tassel Cordrush	-	-	-
<i>Bauera rubioides</i>	Wiry Bauera	-	-	-
<i>Blechnum minus</i>	Soft Water Fern	-	-	-
<i>Coprosma quadrifida</i>	Native Currant	-	-	-
<i>Eucalyptus nitida</i>	Smithton Peppermint	YES	-	-
<i>Eucryphia lucida</i>	Leatherwood	YES	-	-
<i>Gahnia grandis</i>	Cutting Grass	-	-	-
<i>Gleichenia dicarpa</i>	Pouched Coral Fern	-	-	-
<i>Hakea epiglottis</i>	Beaked Hakea	YES	-	-
<i>Lepidosperma ensiforme</i>	Arching Sword Sedge	-	-	-
<i>Leptospermum nitidum</i>	Shiny Teatree	YES	-	-
<i>Leptospermum scoparium</i>	Manuka	-	-	-
<i>Melaleuca squarrosa</i>	Scented Honey Myrtle	-	-	-
<i>Nothofagus cunninghamii</i>	Myrtle	-	-	-
<i>hyllociadus asplenifolius</i>	Celery Top Pine	YES	-	-
<i>Richea pandanifolia</i>	Pandani	YES	-	-
<i>Telopea tuncata</i>	Waratah	YES	-	-
<i>Trochocarpa gunnii</i>	Fragrant Purpleberry	YES	-	-

Table 6: Introduced flora species observed during survey

Scientific Name	Common Name	Declared weed in TAS	Weed of National Significance (WoNS)
<i>Erica lusitanica</i>	Spanish Heath	YES - Zone B	-

Appendix 2. Fauna assessment

The fauna assessment was limited in sampling method and was based on opportunistic observations rather than targeted surveys.

Table 7: Fauna observed

Scientific Name	Common Name	Endemic	Evidence if not seen or heard
<i>Crinia tasmaniensis</i>	Tasmanian Froglet	YES	-
<i>Engaeus cisternarius</i>	Burrowing Crayfish	YES	Chimneys
<i>Lichenostomus flavicollis</i>	Yellow-throated Honeyeater	YES	-
<i>Malurus cyaneus</i>	Superb Fairy Wren	-	-
<i>Strepera versicolor</i>	Grey Currawong	-	-

Please note this species list is not a complete list of all fauna species that may be found within the potential development footprint.

Appendix 3. Additional photos



Photo 7: The WNL native vegetation community transitions from open shrubland with emergent trees to dense forest and then rainforest further West towards the creek. Facing West, M.Rose, 29/08/22.



Photo 8: Burrowing Crayfish chimney located in the riparian zone of the creek. M.Rose, 29/08/22.