

Analysis of the Protected Matters Search Tool indicated that there are 7 listed threatened ecological communities, 47 listed threatened species, and 14 listed migratory species previously recorded within 10 km of the subject site.

No World Heritage Properties, National Heritage Places, Protected Marine Areas, or Wetlands of international importance occur within 10km of the site.

The search identified two species of fish, *Macquaria australasica* (Macquarie Perch) and *Prototroctes maraena* (Australian Grayling) with the potential to be found within 10 km of the subject site. However, there is no suitable habitat on site for these species within the immediate subject site. Therefore, further assessment or a referral under the EPBC Act is not required with respect to impacts on threatened fish species.

4.4 NSW Bionet Atlas and NSW Seed Portal

A search of the NSW Bionet Atlas and NSW Seed Portal was conducted for records of threatened species using the NSW BioNet database. 1306 records of 67 species were found within 10 km of the subject site within the previous 10 years (Appendix A). Analysis of the results indicates that no threatened fish species have been previously recorded in close proximity to the subject site.

No threatened fish species and aquatic flora species are considered to have a high likelihood of occurrence within the subject site. This is largely due to a limited amount of potential habitat present, and the degraded nature of the subject site.





1:9,028 0.1 31/05/2024, 16:40:28 0.4 km 0.1

2018 Hydroline spatial data 1.0

Maxa

Water Management (General) Regulation NSW Department of Industry | Lands and Water | Water

Figure 4-1 Hydro line spatial data



5 FIELD ASSESSMENT

5.1 Methodology

An assessment of the site was undertaken on Tuesday 30th April and Friday 31 May 2024 by ecologist, Clayton Woods (BSc Hons, Ecology and Environmental Science, 1st Class, University of Edinburgh).

The site inspection was conducted to assess the condition of the mapped channels, determine key characteristics of the channels, including plant species presence, and identify areas of potential aquatic habitat in the areas to be retained. The survey comprised a walkthrough of all mapped channels within the site.





6 RESULTS

6.1 Riparian and Aquatic Condition

The declassified drainage lines present within the subject site, identified as J, K, M, N and O tend to be characterised by a poorly defined and very thin channel of approximately 2 - 15 m in all instances (Figure 6-2 - Figure 6-5).

Whilst these possess species characteristic of water-logged soils, they do not possess any permanent freshwater/wetland plant species. They also possess a higher abundance of introduced weedy grassland species that have spread down from drier ridgetops and grazing paddock areas. Species present within these drainage lines include *Paspalum dilatatum* (Dallis Grass) and weed species such as *Lantana camara* (Lantana), *Verbena bonariensis* (Purpletop), *Senecio madagascariensis* (Fireweed), *Plantago lanceolata* (Ribwort Plantain), *Conyza bonariensis* (Fleabane) and *Rumex crispus* (Curly Dock).

A previously declassified section of Stream O runs distinctly between Dam 3 and Dam 11 (Figure 6-1). Beyond Dam 11, Stream O transitions into a developed urban area which is part of the existing Redbank site, where it passes between Yabby Place and Belmont Grove. Here, previously classified Stream O is confined within a stabilised drainage channel that has been subject to revegetation works. It eventually flows into Redbank Creek. At the time of the survey, the entirety of the riparian channel was dry, except for within Dam 3 & 11, likely due to limited recent rain.

A spillway for overflowing water from Dam 3 was observed. From this point, the vegetation present was characterised by the following species; *Juncus effusus* (Soft Rush), *Plantago lanceolata* (Plantain ribwort), *Paspalum dilatatum* (Dallis Grass), *Persicaria decipiens* (Slender Knotweed), *Solanum sisymbriifolium* (Sticky Nightshade), *Senecio madagascariensis* (Fireweed), *Lantana camara* (Lantana), *Trifolium repens* (White Clover), *Dittrichia graveolens* (Stinkwort), *Erigeron sumatrensis* (Fleabane), *Sida rhombifolia* (Arrow-leaf Sida), *Verbena bonariensis* (Purpletop), *Sporobolus indicus* (Smut Grass), and *Rumex crispus* (Curly Dock). The area is dominated by introduced grasses and weed species. The existing corridor downstream of Dam 3 is thin, being approximately 30 m across at its thinnest point below Dam 3, and 100 m across at its widest extent, just above Dam 11.

Within Dam 3 and 11, the following aquatic species were noted: *Marsilea mutica* (Large-leaved Nardoo), *Eleocharis sphacelate* (Tall Spikerush), *Hydrocotyle ranunculoides* (Floating Pennywort), *Persicaria decipiens* (Slender Knotweed), *Juncus effusus* (Soft Rush), *Juncus usitatus* (Common Rush), *Schoenus calostachyus* (Bogrush), and *Nymphaea sp.* (Water Lily).





Figure 6-1 Declassified section of Stream O, between Dam 3 and 11



Figure 6-2 Declassified Stream N (running from right to left across the image)





Figure 6-3 Declassified Stream M



Figure 6-4 Declassified Stream J