

8. Management Units

8.1 Overview

The project area contains a number of reserves within the Pourewa Valley, including the Pourewa stream and its tributaries that require restoration work including pest plant control, pest animal control and planting. These reserves have been identified as management units (MU's) in Figure 26, with required weed and pest animal control and planting options outlined.



Management Units

*Figure
26:*

8.7 Kepa Bush (Management Unit 9)

The land parcel is an Auckland Council Community Park with track network that provides access to the surrounding suburban area via entrances on Colenso Place, Kepa Road and Thatcher Street. It also provides access into adjacent land parcels into the Pourewa Valley, with tributaries to the Pourewa stream running through gullies to connect with the mid/lower parts of the Pourewa stream catchment and down to the coast. The Kepa Bush track network links to the track network following the course of the Pourewa Stream.

The forest area consists of remnant indigenous canopy trees; mainly pohutukawa, kanuka, and puriri which are dominant in the canopy with over 80% tree and shrub cover. A robust understory exists beneath these canopy species; however there are some discrete incursions of pest plants that are being managed as part of an Auckland Council Parks ecocontractor maintenance contract. Kepa Bush is a Significant Ecological Area (SEA) – Coastal Broadleaved Forest (WF4) terrestrial ecosystem. Kepa Bush Reserve is the largest remnant of indigenous forest on the Auckland Isthmus.

There are a number of pest plant incursions within the reserve as shown in figure 38. In addition, there are infestations of pest plants on adjoining private land (Thatcher Street). This includes a mix of Japanese honeysuckle, hawthorn, tree privet, woolley knightshade, pampas and moth plant and more concentrated incursions of single species including blue morning glory in the upper parts of the forest closer to where the forest adjoins Eastridge Mall and suburban properties on Colenso Place .

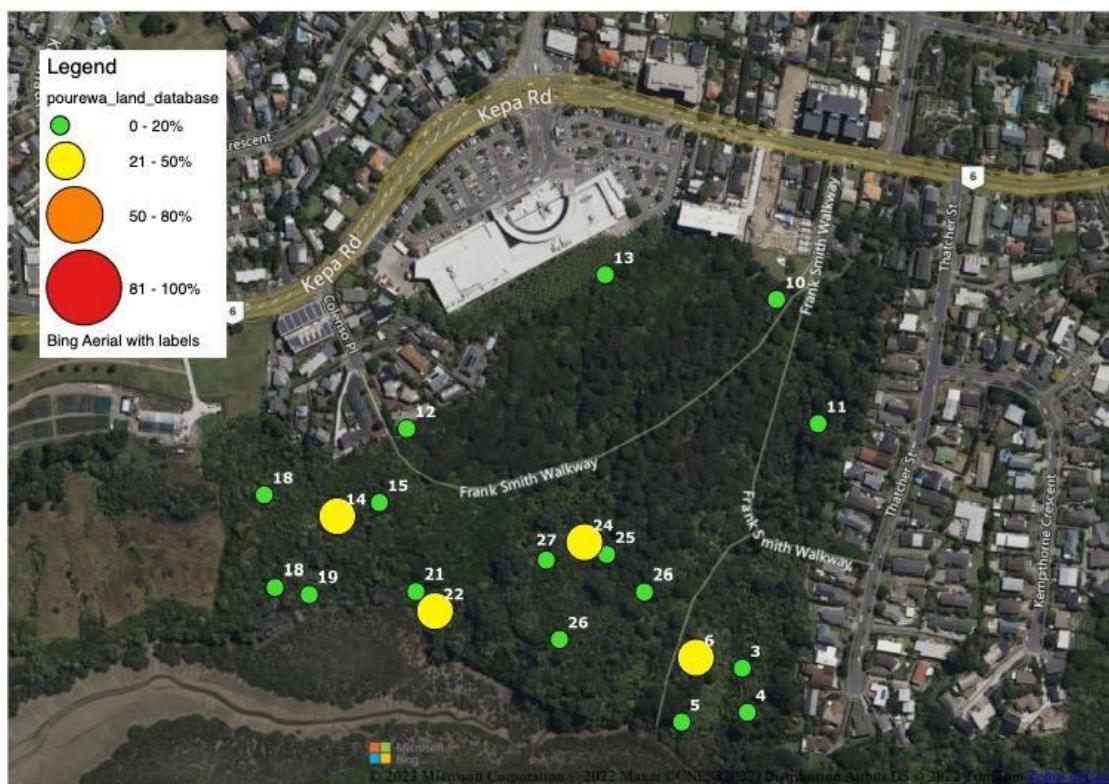


Figure 38: Pest plant abundance (density % of biomass)

8.7.1 Pest Plant Species & Control Method

| Common name | Threat | ID | Method (chem; non-chem) | Who |
|---|-------------------|---------------|-------------------------|----------------------------------|
| Blue Morning Glory* (<i>Ipomoea indica</i>) | Sustained Control | 12, 13 | CP;FS H | Eco-Contractor Volunteer |
| Cherry (<i>Prunus campanulata</i>) | Not listed | 27 | R; DF C; CM | Volunteer Eco-Contractor |
| Climbing asparagus* (<i>Asparagus scandens</i>) | Sustained Control | 5 | FS | Eco- Contractor |
| Gorse (<i>Ulexspp.</i>) | Sustained Control | 24,25 | CP; FS CM | Eco-Contractor Eco-Contractor |
| Hawthorn (<i>Crataegus monogyna</i>) | Sustained Control | 6,7,17,18,19 | ? | |
| Japanese Honeysuckle (<i>Lonicera japonica</i>) | Sustained Control | 7,15,18,25,26 | CP; FS H | Eco-Contractor Volunteer |
| Loquat (<i>Eryobotria japonica</i>) | Not Listed | 5 | CP;RB;FS;D F H | Eco-Contractor Volunteer |
| Madeira Vine (<i>Anredera cordifolia</i>) | Sustained Control | 11 | CP H | Eco-Contractor Volunteer |
| Moth Plant (<i>Araujia sericifera</i>) | Sustained Control | 17,18,21 | CP; FS H | Eco-Contractor Volunteer |
| Pampas (<i>Cortaderia jubata</i> and <i>C. selloana</i>) | Sustained Control | 6,10,18,19 | FS H | Eco-Contractor Eco-Contractor |

| | | | | |
|---|-------------------|--------------------------------|--------------------------------|--|
| Phoenix Palm (<i>Phoenix canariensis</i>) | Sustained Control | 21,22 | FS (seedlings); DF; CP H | Eco-Contractor Volunteer |
| Privet – Chinese (<i>Ligustrum sinensis</i>) | Sustained Control | 7,8,15 | CP; R; DF H (seedlings); C; CM | Volunteer Volunteer (seedlings)/Eco-Contractor (Trees) |
| Privet – Tree* (<i>Ligustrum lucidum</i>) | Sustained Control | 4, 6,7,8,24,25 26;27 | CP; R; DF H (seedlings); C; CM | Volunteer Volunteer (seedlings)/Eco-Contractor (Trees) |
| Woolly Nightshade (<i>Solanum mauritianum</i>) | Sustained Control | 15,18,20,21,2 5 | CP; R H;C | Volunteer Volunteer |

Method code: Cut & Paste (CP) Cut – non chemical (C) Ringbark (R) Foliar spray (FS) Drill & Fill (DF) Hand (H) Chip & Mulch (CM)

***Species where areas of incursion are one species only (ID numbers in bold)**

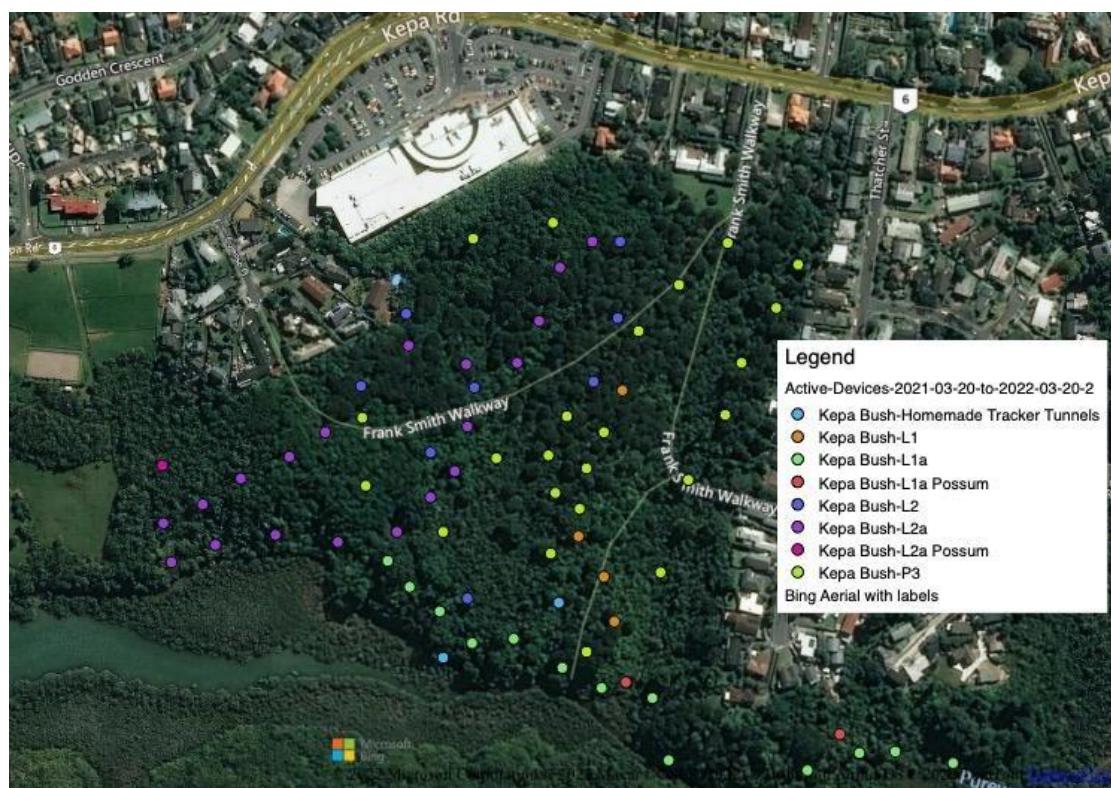


Figure 39: Pest animal control sites

8.7.2 Pest Animal Species & Control Method

| Species | Method | Trap Type | Who |
|----------|--------|----------------|---------------------------------|
| Rat | T | SnapE | Volunteer Eco- Contractor |
| Possum | T | Timms | Volunteer Eco- Contractor |
| Mice | T | SnapE | Volunteer Eco- Contractor |
| Hedgehog | T | SnapE Timms | Volunteer |
| Stoat | T | DOC200 | Volunteer |
| Wasp | S | Spray | Volunteer Volunteer |

Method code: Bait (B) Trap (T) types of trap Spray (S)



Figure 40: Water Quality Monitoring sites and In Stream values

8.7.3 Water Quality Results (Baseline)

| Site | Temp | Clarity | Turbidity | PH | D.O | Nitrate | Nitrite | Phosphorous | Phosphate |
|-----------|------|---------|-----------|----|-----|---------|---------|-------------|-----------|
| Kepa Bush | 18.8 | 56 | 9.3 | 6 | 9 | 2 | 0 | 0.05 | 0.153 |

8.7.4 Volunteer Groups

- Friends of Kepa Bush