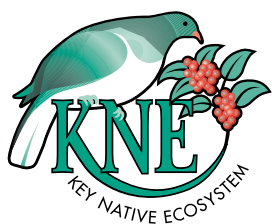




Key Native Ecosystem Plan for Trentham Memorial Park

2015-18



greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao



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1. Key Native Ecosystem plans

New Zealand's indigenous biodiversity continues to decline nationally, and in the Wellington region. Major reasons for the decline are that native species are preyed on or outcompeted by invasive species and ecosystems and habitats are lost or degraded through human resource use and development. Active management to control threats is required to protect indigenous biodiversity. Regional councils have responsibility to maintain indigenous biodiversity, as well as to protect significant vegetation and habitats of threatened species, under the Resource Management Act 1991 (RMA).

Greater Wellington Regional Council's (GWRC's) vision for biodiversity is:

"The Wellington region contains a full range of naturally occurring habitats and ecosystems that are in a healthy functioning state and supporting indigenous biodiversity"

GWRC's Biodiversity Strategy 2011-21¹ provides a common focus across the council's departments, and guides activities relating to biodiversity. One of its goals is: High value biodiversity areas are protected.

In order to achieve this vision and goal, the Key Native Ecosystem (KNE) programme seeks to protect some of the best examples of ecosystem types in the Wellington region by managing, reducing, or removing threats to their values. Sites with the highest biodiversity values have been identified and then prioritised for management. Active management of KNE sites can involve control of ecological weeds and pest animals, fencing to exclude stock, restoration planting and helping landowners to legally protect these areas.

KNE sites are managed in accordance with three-year KNE plans, such as this one, prepared for each area by the GWRC's Biodiversity department in collaboration with the landowners and other stakeholders. These plans outline the ecological values and threats specific to each KNE site, set out objectives for biodiversity management, and prescribe the operational actions and budget required to work towards achieving the objectives.

Much of the work planned in KNE sites will be carried out by GWRC staff or contractors engaged by GWRC. For example, the Biosecurity department carries out ecological weed and pest animal control to achieve the objectives set out in KNE plans.

GWRC also recognizes that working relationships between the management partners are critical for achieving the objectives for the KNE site. Under the KNE programme, GWRC staff also work with landowners and volunteer community groups involved in protection or restoration work within KNE sites.

KNE plans are reviewed regularly to ensure the activities undertaken to protect and restore the KNE site are informed by experience and improved knowledge about the site.

2. Trentham Memorial Park Key Native Ecosystem

The Trentham Memorial Park KNE site (13 hectares) is located within the larger Trentham Memorial Park Recreation Reserve, Upper Hutt (see Appendix 1, Map 1). The KNE site comprises two areas of lowland podocarp/broadleaf forest, known as Barton's Bush and Domain Bush, and a section of the Moehau Stream, adjacent to Barton's Bush, where a restoration project is located.

Barton's Bush, the larger of the two forest remnants, was named after Richard Barton, an early settler who wished to see the native forest protected. The KNE site (both bush parcels) is surrounded by playing fields and recreational areas that comprise Trentham Memorial Park. Moehau Park is located adjacent to Barton's Bush and is bordered by residential properties on Holdsworth Avenue at its northern end. The KNE site is not contiguous with other native bush, but is part of a series of bush reserves within the Hutt Valley that are considered important foraging and breeding sites for native forest bird species.

Landowner and stakeholders

GWRC works in collaboration with landowners and other interested parties (management partners and stakeholders) where appropriate to achieve shared objectives for the site. In preparing this plan GWRC has sought input from landowners and relevant stakeholders, and will continue to involve them as the plan is implemented.

Landowner

Trentham Memorial Park KNE site is located on land owned and administered as a Recreation Reserve by Upper Hutt City Council (UHCC) in keeping with the Council's Long Term Plan 2012-2022². This plan aims to provide high quality parks and reserves that provide a range of passive and active leisure opportunities for the city's residents, as well as providing areas and associated facilities that contribute to a fun leisure destination image for the city.

Management partners and key stakeholders

The management partners for the KNE site are GWRC, UHCC and the Upper Hutt branch of the Royal Forest and Bird Protection Society (UHF&B). Partners have undertaken restoration planting, ecological weed control and pest animal control within the forest remnants and along the Moehau Stream for several years. UHCC fenced off the forest remnants from public access in 1995 to prevent damage by recreational users.

Within GWRC, the Biodiversity and Biosecurity departments are actively involved with the management of the KNE site. The Biodiversity department plans and coordinates biodiversity management activities and provides biodiversity advice. The Biosecurity department carries out pest control activities.

Ecological values

Ecological values are a way to describe indigenous biodiversity found at a site, and what makes it special. These ecological values can be various components or attributes of ecosystems that determine an area's importance for the maintenance of regional biodiversity. Examples of values are the provision of important habitat for a threatened species, or particularly intact remnant vegetation typical of the ecosystem type. The ecological values of a site are used to prioritise allocation of resources to manage KNE sites within the region.

The KNE site is located in Wellington Ecological District³, and has a mild but windy climate with annual rainfall of 900-1400mm. The KNE site is representative of the forest that once dominated the lower terraces of the Hutt River valley, and Barton's Bush is the largest remaining area of lowland mixed podocarp/broadleaf forest on the Hutt Valley floor⁴. The largest kahikatea in the Wellington region can be found close to the northwest corner of Barton's Bush near the Hutt river^{5,6}.

Of note in recognising the ecological values at the Trentham Memorial Park KNE site are the following:

Threatened environments: The entire Trentham Memorial Park KNE site is classified as Acutely Threatened having less than 10% of the original cover of indigenous vegetation remaining⁷.

Threatened species: One nationally At Risk plant species, white mistletoe (*Tupeia antarctica*), and one regionally uncommon plant species, green mistletoe (*Ileostylus micranthus*) have been recorded within the KNE site. Nationally threatened species are listed in Appendix 2 and regionally threatened species in Appendix 3.

The Singers and Rogers (2014)⁸ classification of pre-human vegetation indicates the area would have comprised predominately tawa, kamahi, podocarp forest (MF7). Trentham Memorial Park KNE site is still representative of this original forest type which is estimated to have only 22% of its original extent remaining in the Wellington region⁹. The KNE site is the only remaining significant remnant of lowland forest in the Hutt Valley, representing 0.14% of the original Hutt Valley vegetation cover¹⁰.

Barton's Bush (8.5ha) contains emergent matai (*Prumnopitys taxifolia*), tōtara (*Podocarpus totara*) and pukatea (*Laurelia novae-zelandiae*), over a canopy of tītoki (*Alectryon excelsus*), ribbonwood (*Plagianthus regius*), kahikatea (*Dacrycarpus dacrydioides*) and tawa (*Beilschmiedia tawa*)¹¹. White mistletoe and green mistletoe are present in Barton's Bush¹².

Domain Bush (2.9ha) comprises emergent ribbonwood, tōtara, and kahikatea over a canopy of tawa, lemonwood (*Pittosporum eugenioides*), kaikōmako (*Pennantia corymbosa*), and tītoki¹³. A species of *Wainui* snail (*Wainui* sp.) has been recorded here¹⁴. A tributary of Māwaihākona Stream flows through Domain Bush.

The KNE site is thought to be an important bush reserve for native birds within a network of other reserves (e.g. Trentham Scenic Reserve, Keith George Memorial Park KNE site and Wi Tako Ngatata KNE site) within the Hutt Valley. Combined, these sites are likely to form an important network for bird species to disperse and forage

throughout the Hutt Valley. Native bird species recorded at Trentham Memorial Park include kererū (*Hemiphaga novaeseelandiae*), fantail (*Rhipidura fuliginosa placabilis*), tūī (*Prosthemadera novaeseelandiae novaeseelandiae*), silvereye (*Zosterops lateralis*), grey warbler (*Gerygone igata*), kingfisher (*Todiramphus sanctus*) and shining cuckoo (*Chrysococcyx lucidus*)¹⁵.

Key threats to ecological values at the site

Ecological values can be threatened by human activities, and by introduced animals and plants, that change the natural balance of native ecosystems. The key to protecting and restoring biodiversity as part of the KNE programme is to manage the threats to the ecological values at the site.

The main threats to the ecological values present at Trentham Memorial Park KNE site are ecological weeds and pest animals. However the KNE's small size and the high public use are also considered threats.

Ecological weed species have the ability to outcompete and smother indigenous species preventing natural regeneration, altering the structure of the forest and reducing the diversity of food sources available. Both bush remnants within the KNE site have well documented weed infestations that have been targeted through active weed control over many years by UHF&B. However, with the sites' small size and large edge, ecological weed reinvasion will always be an issue at this site. At the Moehau Stream Restoration Project site there are a number of weed species that, if left uncontrolled, will prevent the establishment of the restoration planting.

Pest animals affect forest habitat by over-browsing native foliage, out-competing native species for food and nesting resources, and through direct predation. Possums (*Trichosurus vulpecula*) and rats (*Rattus* sp.) are the biggest threat at the KNE site. These species are known to compete for food resources such as seed, to consume large quantities of canopy foliage and to eat birds, bird eggs and invertebrates. Other known animal pests such as stoats (*Mustela erminea*), cats (*Felis catus*), rabbits (*Oryctolagus cuniculus*) and hedgehogs (*Erinaceus europaeus*) are also thought to be present.

Both forest remnants are vulnerable to the impacts of edge effects due to their small size and relatively large forest edge. Some studies suggest that forest fragments less than 9ha are strongly influenced by edge patterns and processes¹⁶.

Whilst the key threats discussed in this section are recognised as the most significant, a number of other threats to the KNE site have also been identified. Table 1 presents a summary of all known threats to the KNE site (including those discussed above), detailing which operational areas they affect, how the threat impacts on ecological values, and whether they will be addressed by the proposed management activities.

Table 1: Threats to ecological values present at the Trentham Memorial Park KNE site. The codes alongside each threat correspond to activities listed in the operational plan (Table 2), and are used to ensure that actions taken are targeted to specific threats. A map of Operational Areas can be found in Appendix 1 (see Map 2).

Threat code	Threat and impact on biodiversity in the KNE site	Operational area/location
Ecological weeds		
EW-1	Ground-covering ecological weeds such as tradescantia (<i>Tradescantia fluminensis</i>), ivy (<i>Hedera helix subsp. helix</i>) and convolvulus (<i>Convolvulus</i> sp.) smother and inhibit regeneration of indigenous species.	A, B & C
EW-2	Climbing and rambling ecological weed species, particularly old man's beard (<i>Clematis vitalba</i>) and blackberry (<i>Rubus fruticosus</i> agg.) smother and out-compete native forest, preventing regeneration.	A, B & C
EW-3	Woody tree and shrub weed species, such as Jerusalem cherry (<i>Solanum pseudocapsicum</i>), cherry (<i>Prunus</i> spp.), sycamore (<i>Acer pseudoplatanus</i>) and the non-local native karaka (<i>Corynocarpus laevigatus</i>) establish under a forest canopy and outcompete indigenous vegetation.	A, B & C
Pest animals		
PA-1	Possoms browse preferred species continuously until they can no longer recover, then move on to their next favoured species. They also prey on native bird eggs.	A, B & C
PA-2	Rats eat seeds and prey on native invertebrates and native bird eggs and young.	A, B & C
PA-3*	Mice (<i>Mus musculus</i>) eat seeds, slowing regeneration of native plant species, and also prey on native invertebrates.	A, B & C
PA-4*	Rabbits eat young native plants and ring bark small trees. In high numbers, they can completely denude the understory and prevent natural regeneration.	A, B & C
PA-5*	Stoats prey on native birds, lizards and invertebrates, reducing breeding success and potentially causing local extinctions.	A, B & C
PA-6*	Hedgehogs prey on native invertebrates, lizards ¹⁷ , and the eggs and chicks of ground-nesting birds ¹⁸ .	A, B & C
PA-7*	Feral and domestic cats prey on native birds, lizards and invertebrates, reducing native fauna breeding success and potentially causing local extinctions.	A, B & C
Human activities		
HA-1	Garden waste dumping causes reinvasion and competition from ecological weed species.	A & C
HA-2*	A lowered water table through flood protection works (e.g. stop banks) and domestic water take from the Hutt River poses a threat to the forest composition, particularly affecting tawa, podocarps and kahikatea.	A, B & C

Threat code	Threat and impact on biodiversity in the KNE site	Operational area/location
HA-3*	Recreational activities such as horse riding, dog walking and off-road driving can adversely affect the succession of the forests understory, disturb native wildlife and inhibit the establishment of restoration planting.	A, B & C
Other threats		
OT-1*	Edge effects affect forest remnants by changing environmental conditions (e.g. soil moisture or temperature levels), changing physical environment (e.g. different plant assemblages compared to the interior) and changing species interactions (e.g. increased predation by invasive species).	A & B

*Threats marked with an asterisk are not addressed by actions in the Operational Plan.

3. Objectives and management activities

Objectives help to ensure that management activities carried out are actually contributing to improving the ecological condition of the site.

Objectives

The following objectives will guide the management activities at the Trentham Memorial Park KNE site.

1. **To improve the structure* and function† of native plant communities**
2. **To improve the habitat for native birds**
3. **To raise community awareness of the ecological values of the KNE site**

* The living and non-living physical features of an ecosystem. This includes the size, shape, complexity, and condition of plant communities, and the diversity of species and habitats within them.

† The biological processes that occur in an ecosystem. This includes seed dispersal, natural regeneration, and the provisioning of food and habitat for animal species.

Management activities

Management activities are targeted to work towards the objectives above by responding to the threats outlined in Section 2. The broad approach to management activities is described briefly below, and specific actions, with budget figures attached, are set out in the Operational Plan (Table 2).

It is important to note that not all threats identified in Section 2 can be adequately addressed. This can be for a number of reasons including financial, legal, or capacity restrictions. This is discussed in the broad management approach.

GWRCs management activities at Trentham Memorial Park KNE site will primarily focus on ecological weed control and pest animal control in Barton's Bush and Domain Bush. GWRC will also continue to support UHF&B at the Moehau Stream Restoration Project primarily with ecological weed control. These management activities have been undertaken since 1998 and have proved successful with clear improvement of the

canopy and understory within Barton's Bush and Domain Bush. Additional benefits have included providing better foraging and nesting opportunities for native birds and the success of the restoration project along the Moehau Stream.

UHCC will continue to support the management activities within the KNE site as set out in this plan, and wider Memorial Park where separately funded restoration planting exists. UHCC will be the primary contact for UHF&B supporting their restoration planting and undertaking ecological weed control.

UHF&B undertake restoration planting and ecological weed control and service the pest animal bait stations throughout the KNE site and wider Memorial Park. UHF&B are the coordinators of the Moehau Stream Restoration Project management activities having previously secured funding from the Department of Conservation for extensive willow (*Salix* sp.) control.

Ecological weed control

Ecological weed control will be undertaken in Operational Areas A-C to maintain native plant dominance whilst increasing natural forest regeneration within the KNE site.

An annual ecological weed sweep regime targeting a range of ecological weed species will be undertaken by GWRC in Operational Areas A and B using a broad-spectrum herbicide. An annual weed sweep through Operational Area C (the Moehau Stream Restoration Project) will be conducted by GWRC targeting ecological weeds that are preventing the plantings from establishing, such as blackberry, convulvulus and tradescantia. Old man's beard and Japanese honeysuckle (*Lonicera japonica*) will be controlled along the edge of Barton's Bush that borders the Moehau Stream (still within Operational Area C). Records will be kept of what has been controlled each year and will inform the identified priorities for the following season's ecological weed control.

UHCC and UHF&B will continue undertaking ecological weed control throughout the KNE site. This includes monthly working bees in the summer months in Operational Area C to control weeds affecting plantings associated with the restoration project and removing karaka seedlings and other invasive species encountered when servicing the bait stations in Operational Areas A and B.

Pest animal control

Pest animal control is targeted at controlling possums and rats within the KNE site. A network of 32 Pelifeed bait stations were installed in 1998 in Operational Areas A and B (see Appendix 1, Map 3) and have been serviced by UHF&B volunteers on a three-monthly basis with brodifacoum bait supplied by GWRC. This control method is known to keep possums and rats to low densities aiding native forest regeneration and providing a safer habitat for foraging and nesting native birds.

While other predators have been identified as potential threats within the KNE (e.g. mustelids and hedgehogs) the regeneration of the bush reserves and bird species present indicate that installing kill-traps specifically targeting predators is not required at this stage.

Revegetation

Restoration planting has been undertaken by UHF&B at the KNE site since 1994. Plants are grown by UHF&B's local nursery (using locally sourced seed) and are planted by volunteers. Planting originally focused on Barton's Bush, Domain Bush and buffer areas between the two bush blocks but, has since focused on the Moehau Stream Restoration Project area (Operational Area C). Operational Area C remains the focus of the restoration planting within this three-year plan.

Planting is coordinated and undertaken by UHF&B throughout the winter months with volunteer working bees. The exact location, species and numbers of plantings are dependent on plant availability and volunteer assistance. As a result no detailed planting plan can be provided at this stage however, it will be contiguous with previous year's plantings using wetland sedges (*Carex* sp.), harakeke (*Phormium tenax*) and cabbage tree (*Cordyline australis*).

The planting within Barton's Bush focused on developing a forest understory and providing canopy and emergent species for forest succession. While this operational area is no longer the primary focus of revegetation plans within the KNE site, in-fill planting is likely to be undertaken in Operational Area A by UHF&B within the three-year cycle of this plan.

Community engagement

GWRC will raise community awareness of the threat to the KNE values posed by the dumping of garden waste and litter. A letter drop to local residents will be undertaken alerting residents to the risks and asking them to be vigilant and report any sightings of these activities.

Bird Monitoring

UHCC funds bird monitoring in a number of reserves in Upper Hutt, including at Trentham Memorial Park KNE, to monitor the success of the biodiversity management activities undertaken at these sites. UHCC will continue to fund this monitoring.

Fence monitoring and repair

The high recreational use by walkers, dog-walkers, runners and horse riders has previously contributed to damaging both forest remnants and affecting the values of the KNE. UHCC fenced off Barton's Bush and Domain Bush to prevent trampling of the understory and accidental disturbance of the fauna. UHCC will continue to monitor the fences condition and repair as necessary.

Other restoration activities

UHCC and UHF&B will continue to undertake restoration planting within the wider Memorial Park with the aim of creating more native cover and connecting the remnant forest bush reserves. This is undertaken separately from the KNE programme and is separately funded. The additional planting areas are indicated in Planting Area B (see Appendix 5, Map 4).

4. Operational plan

The operational plan shows the actions planned to achieve the stated objectives for the Trentham Memorial Park KNE site, and their timing and cost over the three-year period from 1 July 2015 to 30 June 2018. The budget for the 2016/17 and 2017/18 years are indicative only. A map of Operational Areas can be found in Appendix 1, Map 2.

Table 2: Three-year operational plan for the Trentham Memorial Park KNE site.

Objective	Threat	Activity	Operational area	Delivery	Description/detail	Target	Timetable and resourcing		
							2015/16	2016/17	2017/18
1,2	PA-1&2	Pest animal control	A & B	UHF&B	GWRC provision of brodifacoum bait to UHF&B volunteers who service bait stations quarterly to control possums and rats	Bait stations serviced quarterly Possums <5% RTC * Rats < 10% TTI**	\$550	\$550	\$550
1,2	EW-1,2 & 3	Ecological weed control	A & B	Biosecurity department	Weed sweep targeting a range of species using a broad-spectrum herbicide (see Appendix 4)	Reduction in the distribution and abundance of ecological weed species	\$1,400	\$1,400	\$1,400
1,2	EW-1,2 & 3	Ecological weed control	C	Biosecurity department	Weed sweep targeting blackberry, convolvulus, tradescantia, old man's beard and Japanese honeysuckle to aid release of plantings	Reduction in the distribution and abundance of ecological weed species	\$600	\$600	\$600
1,2	OT-1	Restoration planting	A & C	UHF&B	Annual programme of in-fill planting in winter months	>75% planting survival success rate	***	***	***
3	HA-1	Community engagement	A, B & C	Biodiversity department	Letter drop to local residents regarding dumping of trash and garden waste	Letter sent in 2015/16	Nil	Nil	Nil
Total							\$2,550	\$2,550	\$2,550

*RTC = Residual Trap Catch. The control regime has been created to control possums to this level but monitoring will not be undertaken. Experience in the use of this control method indicates this target will be met.

**TTI = Tracking Tunnel Index. The control regime has been created to control rats to this level but monitoring will not be undertaken. Experience in the use of this control method indicates this target will be met.

***Variable costs determined annually that cannot be detailed at this time.

5. Funding summary

GWRC budget

The budget for the 2016/17 and 2017/18 years are indicative only.

Table 3: GWRC allocated budget for the Trentham Memorial Park KNE site.

Management activity	Timetable and resourcing		
	2015/16	2016/17	2017/18
Ecological weed control	\$1,000	\$1,000	\$1,000
Pest animal control	\$300	\$300	\$300
Total	\$1,300	\$1,300	\$1,300

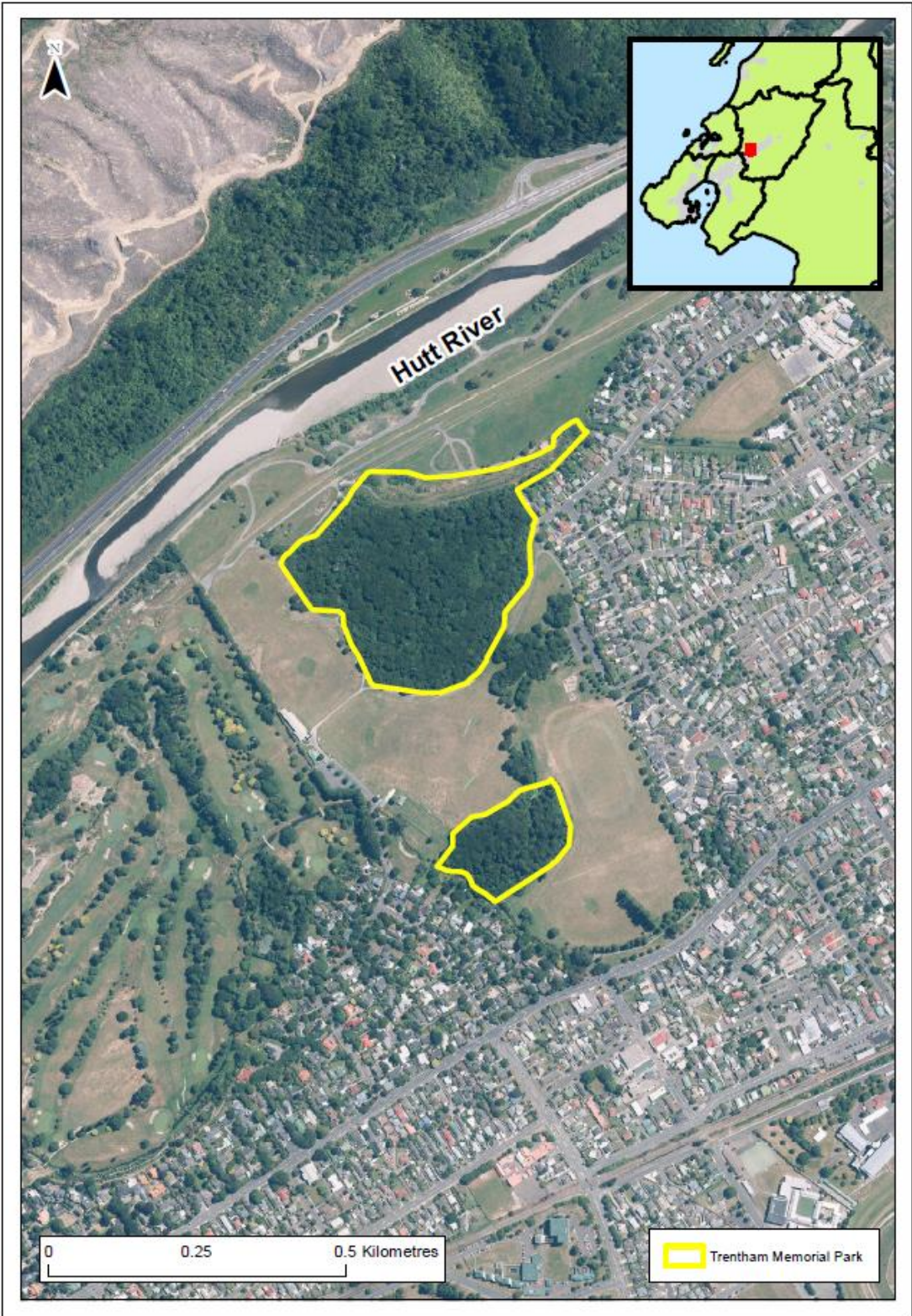
Other contributions

Table 4: Additional allocated budget for the Trentham Memorial Park KNE site from other management partners (shown in brackets).

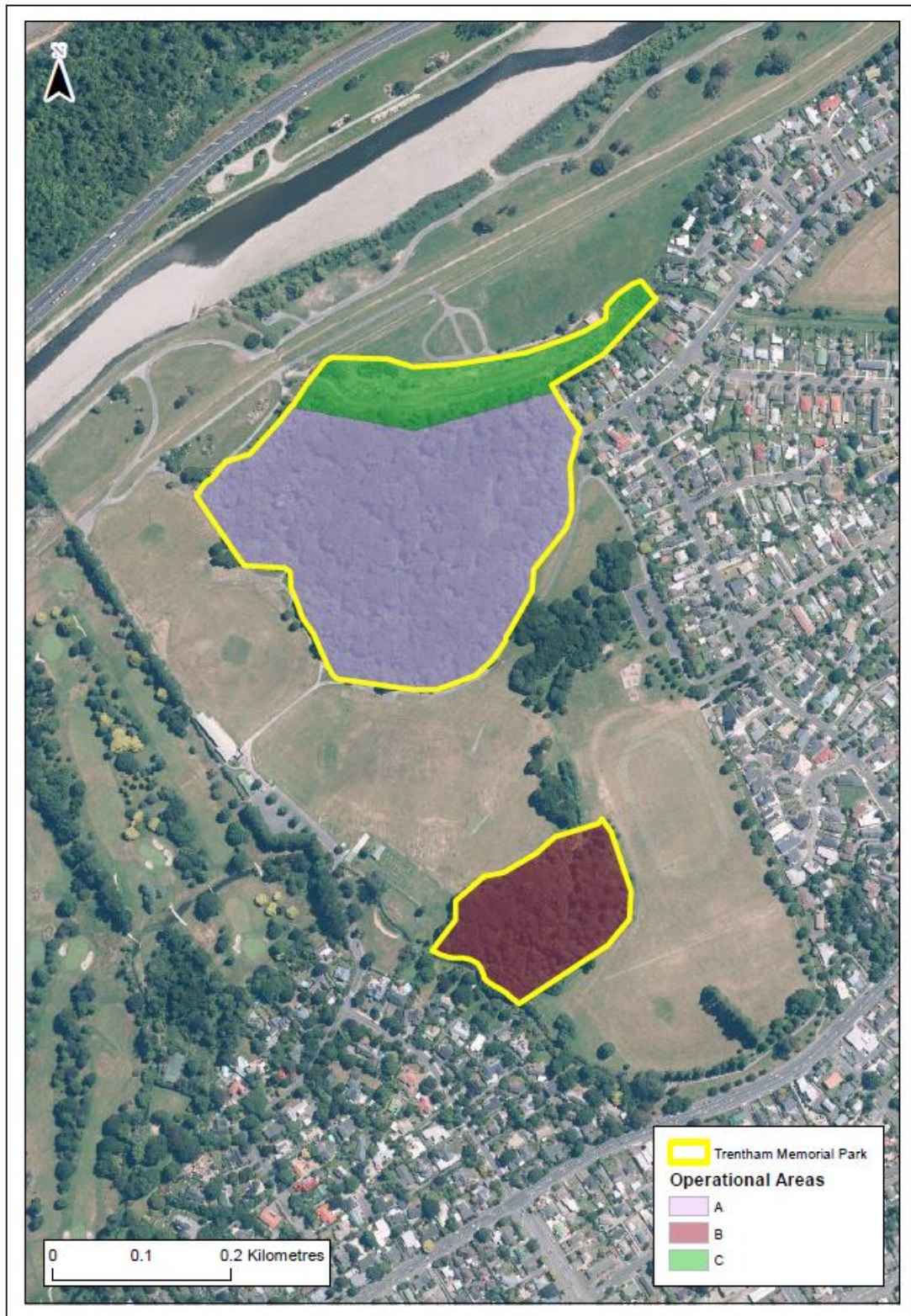
Management activity	Timetable and resourcing		
	2015/16	2016/17	2017/18
Ecological weed control (UHCC)	\$1,000	\$1,000	\$1,000
Pest animal control (UHCC)	\$250	\$250	\$250
Re-vegetation (UHF&B)	***	***	***
Total	\$1,250	\$1,250	\$1,250

***Variable costs determined annually that cannot be detailed at this time.

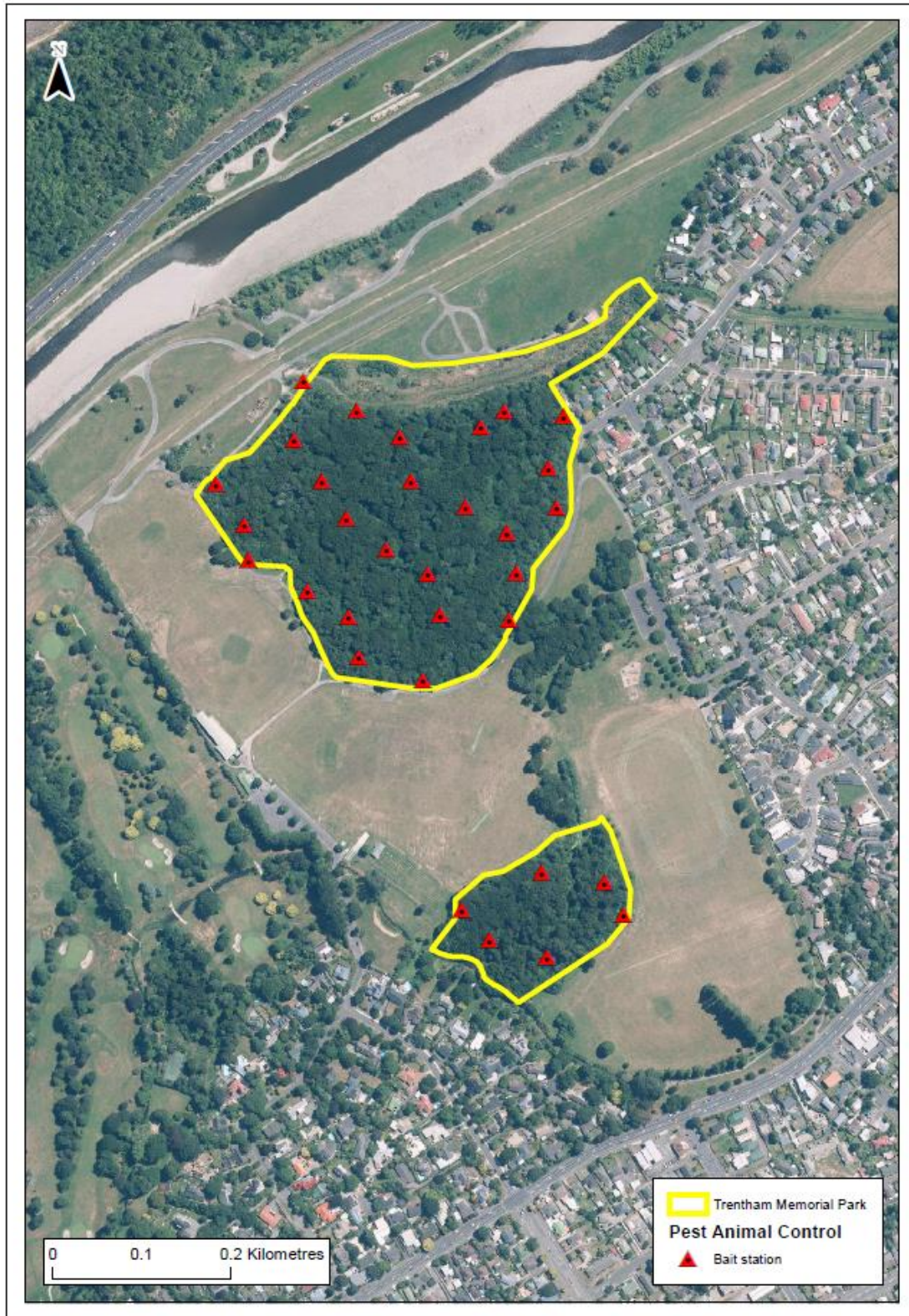
Appendix 1: Site maps



Map 1: The Trentham Memorial Park KNE site boundary.



Map 2: Operational areas in the Trentham Memorial Park KNE site.



Map 3: Pest animal control in the Trentham Memorial Park KNE site.

Appendix 2: Threatened species list

The New Zealand Threat Classification System lists extant species according to their threat of extinction. The status of each species group (plants, reptiles, etc.) is assessed over a three-year cycle¹⁹ with the exception of birds that are assessed on a five-year cycle²⁰. Species are regarded as Threatened if they are classified as Nationally Critical, Nationally Endangered or Nationally Vulnerable. They are regarded as At Risk if they are classified as Declining, Recovering, Relict or Naturally Uncommon. The following table lists Threatened and At Risk species that are resident in, or regular visitors to, the KNE site.

Table 5: Threatened and At Risk species recorded in the Trentham Memorial Park KNE site.

Scientific name	Common name	Threat status	Observation
Plants(vascular)²¹(lichens)²²(bryophytes)²³			
<i>Tupeia antarctica</i>	White mistletoe	At Risk-Declining	NZPCN 2015 ²⁴

Appendix 3: Regionally threatened plant species list

The following table lists regionally threatened plant species that have been recorded in the Trentham Memorial Park KNE site. The regional threat status of plant species is listed in the Plant Conservation Strategy for Wellington Conservancy 2004-2010²⁵.

Table 6: Regionally threatened plant species recorded in the Trentham Memorial Park KNE site.

Scientific name	Common name	Threat status	Observation
<i>Tupeia antarctica</i>	White mistletoe	Regionally critical	NZPCN 2015 ²⁶
<i>Ileostylus micranthus</i>	Green mistletoe, pirita	Gradual decline	NZPCN 2015 ²⁷

Appendix 4: Ecological weed species

Key ecological weeds for control within Trentham Memorial Park KNE site are listed in Table 7.

Table 7: Key ecological weed species for control in Trentham Memorial Park KNE site.

Scientific Name	Common Name
<i>Acer pseudoplatanus</i>	Sycamore
<i>Agapanthus praecox</i> subsp. <i>orientalis</i>	Agapanthus
<i>Allium triquetrum</i>	Onion weed
<i>Berberis glaucocarpa</i>	Darwin's barberry
<i>Clematis vitalba</i>	Old man's beard
<i>Conium maculatum</i>	Hemlock
<i>Convolvulus</i> sp.	Convolvulus
<i>Corynocarpus laevigatus</i>	Karaka
<i>Craetaegus monogyna</i>	Hawthorn
<i>Cytisus scoparius</i>	Broom
<i>Fatsia japonica</i>	Fatsia
<i>Hedera helix</i>	Ivy
<i>Ilex aquifolium</i>	Holly
<i>Leycesteria formosa</i>	Himalayan honeysuckle
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Parietaria judaica</i>	Pellitory of the wall
<i>Prunus</i> sp.	Cherry species
<i>Rubus fruticosus</i> agg.	Blackberry
<i>Salix</i> sp.	Willow species
<i>Sambucus nigra</i>	Elder
<i>Selaginella kraussiana</i>	African club moss
<i>Solanum pseudocapsicum</i>	Jerusalem cherry
<i>Syzygium australe</i>	Brush cherry
<i>Tradescantia fluminensis</i>	Tradescantia
<i>Vinca major</i>	Periwinkle
<i>Zantedeschia aethiopica</i>	Arum lily

Appendix 5: Planting plan

Below are the details of the revegetation work that will be undertaken in the Trentham Memorial Park KNE site. Map 4 (below) shows the planting areas.

Planting plan for Planting Area A

Area size: 1.75 ha

Plants for this planting area will be planted annually in the winter months by UHF&B and will include:

Harakeke (*Phormium tenax*)

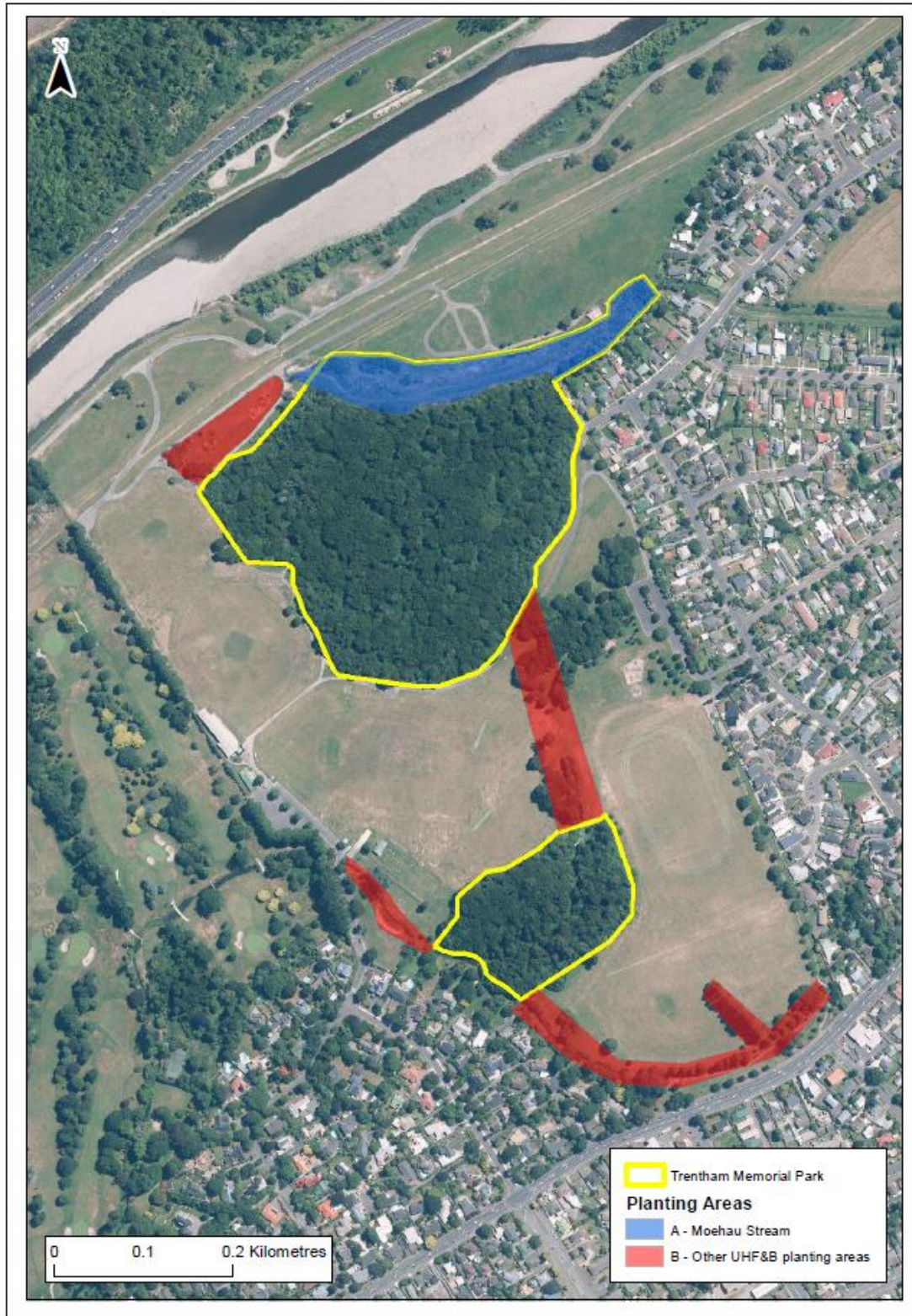
Cabbage tree (*Cordyline australis*)

Podocarp species (*eg, Totara, Matai and Kahikatea*)

Sedge species (*Carex sp.*)

Planting plan for Planting Area B

Planting Area B indicates UHF&B other planting areas, funded outside of the KNE programme.



Map 4: Planting areas in the Trentham Memorial Park KNE site.

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The Greater Wellington Regional Council's purpose is to enrich life in the Wellington Region by building resilient, connected and prosperous communities, protecting and enhancing our natural assets, and inspiring pride in what makes us unique

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