WAIROA WATERFRONT ENHANCEMENT
On still days the people of Wairoa remember stories of the ‘diamonds in the water.’

Wairoa is the northernmost town in Hawke’s Bay, located halfway between Napier and Gisborne. This project is undertaken in collaboration with Wairoa District Council and Hawke’s Bay Regional Council. Wairoa settlement has had a long history with water including a river port which dealt largely in flax. Once known as Clyde, the name Wairoa now refers to ‘long waters’ and reflects the community’s strong connection with the river.

Prior to European arrival Wairoa was a Māori settlement. It is said that the ancestral canoe of Tākitimu travelled the river and rests where the Tākitimu meeting house now sits. (WDC, A Strategy for North Clyde, 2013).

To this day the Wairoa awa is still an important food source for the people of Wairoa. In season, clusters of whitebaiters can be seen eagerly awaiting their catch on the rivers banks, and fishing is an important pursuit annually along the river. In the past other mahinga kai pursuits included fibre collection, from reeds and harakeke and a navigational link to the moana.

In early settlement the Wairoa awa was the life blood of Wairoa, connecting the community to other towns and allowing them to profit from their agricultural and commercial ventures.

Over time invasive species, deforestation, and people accessing the river edge has caused erosion along many sections of this awa which in some cases has increased sediment deposition in some areas.

Now is the time to take action and reinvigorate Wairoa, to reinforce the aroha for this awa, and strengthen its banks, protecting them from further erosion, and teaching new generations of the importance of bank stabilisations in order to safeguard this awa.

This document looks at the opportunities for Wairoa awa and township, and develops concepts and planting applications to allow these opportunities to become a reality...
Community

- Council engage public
- Community consultation / Engagement
- Shared vision / goals
- Concept document
- Continued engagement

Ecology

- Invasive species removal
- Articulating ecological constraints with community
- Staged management plan for invasive plant removal
- Community planting days
- Telling stories of the past through native plants
- Continued management
Connecting up the dots

This strategy was initiated in order to undertake an in depth investigation of Wairoa.

Considering the bigger picture allowed us to see relationships in land uses and how they interact with one another, contributing to the character of Wairoa waterfront.

After looking at the identity of Wairoa waterfront, 10 nodes of social and ecological significance were identified. The potential to connect these nodes and allow them to interact will lead to a linear park with an outlook of the Wairoa river, acknowledging it as an important part of the town.

An existing concrete path as a shared pedestrian and cycle link provides access as far as Whakamahi. Creating visually aesthetic spaces and destinations along this pathway will draw people further from the town centre, and allow the public to experience Wairoa’s adapting landscape.

Pause spots along this pathway aim to tell a story of the histories of Wairoa adding layers of meaning from times gone by. Plants will be used as markers, connecting these stories to the ecology of place and creating a visual reminder that more stories are to come.

Enhancing and invigorating community spaces and urban environments also play an important part in reinvigorating Wairoa.

The following pages investigate each node and illustrate planting recommendations, design strategies and specific long term goals for the Wairoa River.
Critical to ensure Wairoa River does not erode further

Provide Habitat - Mahinga Kāi

Reduce public making their own tracks, eroding edge further - safety

Create legible access points through jetties and viewing platforms to reduce erosion and connect the public to the river

Visually appealing community and urban spaces

Define space and promote native flora

Tell a story of the histories of Wairoa

Draw people further down the linear waterfront park

Make the awa more accessible for the community

Typologies

Bank stabilisations

- primary (0 - 15 yrs)
- Critical to ensure Wairoa River does not erode further
- Provide Habitat - Mahinga Kāi
- Reduce public making their own tracks, eroding edge further - safety
- Create legible access points through jetties and viewing platforms to reduce erosion and connect the public to the river

Amenity plantings

- secondary (0-50 yrs)
- Visually appealing community and urban spaces
- Define space and promote native flora
- Tell a story of the histories of Wairoa
- Draw people further down the linear waterfront park
Create a thriving habitat and draw native bird and insect life back to Wairoa
Cleansing water on its way out to sea
Mahinga Kai - Food and fibre production source
Engage with public, initiate community planting days, and teach younger generations about ecology and looking after your environment
Create an access way so people can experience the wetland
Invasive species removal will be needed as part of this restoration process

After analysis of Wairoa planting recommendations (plant typologies) and indicative plant lists have been developed which reflect the unique and varying contours of Wairoa river bank. Critical areas for bank stabilisation have also been identified, as well as a time frame which considers primary and secondary planting layers.

These typologies include: Bank stabilisation (primary) and Amenity plantings (secondary) as overarching themes, which are then filtered down to consider different elevations and plants which would be most suitable in these environments.

Along with these typologies specific removals of invasive species and time frames for both removals and rehabilitation have been identified for each node.
Alexandra Park Community Centre

Camping grounds

Rowing / Wakaama club

Existing amenity specimens

Wairoa Ski club

1

Key
Existing Amenity
Specimen (exotic)
Low level bank stabilisation
Recommended Native species
Water Sports
Node 1

Existing:
Ski Club, Whakaama, Rowing Camping ground. Sporadically placed exotic specimens

Recommendations:
- Manage as a ‘parkland’
- Open space, amenity trees - providing shade, however also open enough to watch boat races
- Open space to accommodate gathered crowds
- Lower riverside planting (Banks stabilisation flat edges)
- Beach for launching waka
- BBQ areas, tables, shaded areas (simple design, local materials and artists engaged for public space furniture)

Plant schedule

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Grade</th>
<th>Centres</th>
<th>Plant %</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank stabilisation - low level</td>
<td>Juncus planifolius</td>
<td>1.5</td>
<td>0.5</td>
<td>15%</td>
<td>Planted as swathes of single species</td>
</tr>
<tr>
<td></td>
<td>Eleocharis sphacelata</td>
<td>1.5</td>
<td>0.5</td>
<td>15%</td>
<td>Traditional weaving species (soft hats, mats, kete. To be planted in low-lying wetland, separate from estuary. Planted as swathes of single species</td>
</tr>
<tr>
<td></td>
<td>Carex spp. Pukio, Purei Harakeke</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Bank stabilisation Various harakeke species, planted in swathes of single species</td>
</tr>
<tr>
<td></td>
<td>Juncus Kraussii var. australiensis Oroi</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Swathes of single species (as these species would have occurred historically)</td>
</tr>
<tr>
<td>Total</td>
<td>Juncus australis Wiwi</td>
<td>1.5</td>
<td>0.5</td>
<td>10%</td>
<td>100% Swathes of single species</td>
</tr>
</tbody>
</table>

Amenity species

<table>
<thead>
<tr>
<th>Botanical name</th>
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<tbody>
<tr>
<td>Phormium spp. Harakeke</td>
<td>1.5</td>
<td>0.5</td>
<td>30%</td>
<td></td>
<td>Secondary planting set back from edge (poor for stabilisation on elevations)</td>
</tr>
<tr>
<td>Plagianthus divaricatus Mākaka (Salt Marsh Ribbonwood)</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td>Important for bank stabilisation</td>
<td></td>
</tr>
<tr>
<td>Cordyline australis Ti kouka</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td></td>
<td>Linking to the linear prevalence of Cabbage trees in Hawke’s Bay</td>
</tr>
<tr>
<td>Metrosideros excelsa Pohutukawa</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td></td>
<td>Add to existing pohutukawa specimens</td>
</tr>
</tbody>
</table>

Recommended clusters of native species to complement existing exotic species. This will also ensure a food source for native wildlife throughout the year.
Recommended Interactive Play Zone

To include water-play, mounds to climb, and structures made of natural materials to climb. This interactive play is tactile and relates to the identity of Wairoa and the affinity Wairoa community has with water. For tourists in the summer months sculptural seating is recommended under shaded trees as parents watch there kids play and interact with the land. Set back from the waters edge, along with safety planted buffers this site draws people under the bridge and allows the appreciation of both sides of the road.

Heart of Wairoa - public space

Designed space which draws people out over the river and connect with Wairoa river at a sensory level. Sculptural components on one side reflects the creativity of the community, as well as the possibility to reflect the Māori dimension to landscape. Platform nearest the river draws people out of the street and allows them to connect with place, this connects to the lower level of the river as a board-walk continues and connects back with the existing concrete pathway. The shape of this design reflects Takitimu's canoe as it travelled down the river and was laid to rest. This arrangement also draws the eye to the other side of the river and Sir James Carroll Historic Walkway.

Pedestrian crossings to slow vehicles and connect to retail, located at intervals along Marine Parade.

Pulling planting to other side of the road to link both sides. Possible native specimens.

Opportunity for information centre / eateries.

Museum.

Existing skate park

Recommended interactive play zone

Bank stabilisation
Safety - buffer edge

Potentially relocate lighthouse, refer to node 4, p.16

Alexandra Park Community Centre

Pool

State Highway

Marine Parade

State Highway

Potential site for existing skate park

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**Existing**: Pohutukawa’s, small amount of low level amenity plants, playground (to be removed). Phoenix plants self-seeding in many locations. Removal has begun. Willows also to be removed at a later stage. Skate park and community facilities

**Recommended**:  
- Focus on native amenity planting  
- Open views, remove seeding phoenix palms  
- Playground - non-prescribed, tactile  
- Spatial definitions, paths, accessible, connect to river. Cycle and pedestrian  
- Integrate or relocated Lighthouse

<table>
<thead>
<tr>
<th>Plant Schedule</th>
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<th>Grade (L)</th>
<th>Centres</th>
<th>Plant %</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>Juncus planifolius</td>
<td>Giant Rush</td>
<td>1.5</td>
<td>0.5</td>
<td>10%</td>
<td>Planted as swathes of single species</td>
</tr>
<tr>
<td>stabilisation</td>
<td>Eleocharis sphacelata</td>
<td>Kuta</td>
<td>1.5</td>
<td>0.5</td>
<td>10%</td>
<td>Traditional weaving species (soft hats, mats, kete). To be planted in</td>
</tr>
<tr>
<td>- low level</td>
<td>Carex spp., Phormium spp.</td>
<td>Pukio, Purei</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>low-lying wetland, separate from estuary. Planted as swathes of</td>
</tr>
<tr>
<td></td>
<td>Juncus Kraussii var. australis</td>
<td>Ooi</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>single species (as these species would have occurred historically)</td>
</tr>
<tr>
<td>Total</td>
<td>Juncus australis</td>
<td>Wiwi</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Swathes of single species</td>
</tr>
</tbody>
</table>

| Amenity        | Phormium spp.                   | Harakeke    | 1.5       | 0.5     | 30%     | Secondary planting set back from edge (poor for stabilisation on      |
| specimens      | Plagianthus divaricatus          | Mākara      | 1.5       | 1       | -       | elevations)                                                          |
|                | Cordyline australis              | Ti kouka    | 1.5       | 1       | -       | Important for bank stabilisation                                     |
|                | Metrosideros excelsa             | Pohutukawa  | 60        | 1       | -       | Add to existing pohutukawa specimens                                 |

**Note**: Existing exotic amenity species along promenade to be retained (unless they are invasive i.e. Phoenix palm). Retain Norfolk Pine
Existing:
Rows of Phoenix Palms and Norfolk Pines. Retain specified rows, however remove seeding Phoenix. Removal of seeding phoenix and some willow will open outward views. Views especially to Cinema (historic building), cafe and other well used shops.

Recommended:
- Manage views outwards
- Areas of open space
- Promenade
- Connect to notable buildings on other side of the street
- Remove seeding phoenix
- Occasional steps / viewing platforms to the river
- Dense riparian vegetation (bank stabilisation, elevated)
- Pause / wayfinding points (storytelling)
- Occasional seating

Key
- Existing Pohutukawa species to retain
- Existing Phoenix Palm to retain - remove those seeding on banks
- Existing Norfolk Pines to retain
- Recommended low level planting - Bank stabilisation
- Platforms / Jetty connecting people with the river. Providing accessibility for fishing, outward views
- Pedestrian crossings to slow traffic and connect both sides of the street
- Swathes of flax. Framing outward views and directing spatial arrangements. This single species is also remnant of how harakeke used to grow prior to settlement in Aotearoa, New Zealand
- Existing concrete path - promenade along water front. Remove invasive species for outward views

Cross Section

Existing Norfolk Pines to be retained
Low level amenity planting under specimens. Grasses and flax including Carex spp.
Swathes of Harakeke which define space
Bank stabilisation - low level. Species such as Purei, Pukio (Carex spp.) and Kuta
## Plant schedule

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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Juncus australis</td>
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<table>
<thead>
<tr>
<th>Amenity specimens</th>
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<td>-</td>
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<tr>
<td>Cordyline australis</td>
<td>Ti kouka</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td>Linking to the linear prevalence of Cabbage trees in Hawke's Bay</td>
</tr>
<tr>
<td>Metrosideros excelsa</td>
<td>Pohutukawa</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td>Add to existing pohutukawa specimens</td>
</tr>
</tbody>
</table>

**Note:** Existing exotic amenity species along promenade to be retained (unless they are invasive i.e. Phoenix palm) Retain Norfolk Pine
Passive Space Node 4

Existing:
Open, views to maunga. Concrete slab, possible lighthouse location. Sporadically planted deciduous specimens. Concrete path which runs through all nodes. Adjacent open space.

Recommended:
- Recognise Pā site
- Native vegetation to help tell these stories
- Riparian planting (Bank stabilisation, flat)
- Opportunity for sculpture park - exhibit space
- Relocate lighthouse to concrete slab?
- Board-walks in some locations to rivers edge only
- Connect to wider open space network

Existing exotic amenity specimens to retain, providing colour and offering food to birds and insects through winter months when most native species don’t produce enough food for birds.

Suggested alternative lighthouse location. Flooding / siltation potential, therefore raised platform for lighthouse to avoid flooding.

Potential locations for Piers

Existing Concrete platform as the recommended location for the lighthouse. This site is prime, offering views towards the ocean and beyond.

Swathes of flax. Framing outward views and directing spatial arrangements this single species is also remnant of how harakeke used to grow prior to settlement in Aotearoa, New Zealand.

Existing concrete path - promenade along waterfront through parkland landscape.

Key
- Existing
- Recommended
- Recommended low level planting - Bank stabilisation
- Recommended Ti kouka (Cabbage) this plant linking to its long history in Hawkes Bay
- Existing Concrete platform as the recommended location for the lighthouse. This site is prime, offering views towards the ocean and beyond
- Swathes of flax. Framing outward views and directing spatial arrangements this single species is also remnant of how harakeke used to grow prior to settlement in Aotearoa, New Zealand
- Existing concrete path - promenade along waterfront through parkland landscape
### Plant Schedule

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<tr>
<td><strong>Bank stabilisation - low level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juncus planifolius</td>
<td>Giant Rush</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Wetland zone - planted as swathes of single species</td>
</tr>
<tr>
<td>Eleocharis sphacelata</td>
<td>Kuta</td>
<td>1.5</td>
<td>0.5</td>
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<td>Juncus australis</td>
<td>Wiwi</td>
<td>1.5</td>
<td>0.5</td>
<td>15%</td>
<td>Swathes of single species</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
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<td><strong>Amenity specimens</strong></td>
<td></td>
<td></td>
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<tr>
<td>Hebe stricta var. stricta</td>
<td>Koromiko</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Pittosporum crassifolium</td>
<td>Karo</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Myoporum laetum</td>
<td>Ngaio</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
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</tr>
<tr>
<td>Myrsine australis</td>
<td>Matipo</td>
<td>1.5</td>
<td>1</td>
<td>-</td>
<td>Native spp. Sporadically clustered with existing exotic spp.</td>
</tr>
<tr>
<td>Cordyline australis</td>
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<td>1.5</td>
<td>1</td>
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</tr>
<tr>
<td>Metrosideros excelsa</td>
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<td>60</td>
<td>1</td>
<td>-</td>
<td>Specimen tree along parkland</td>
</tr>
</tbody>
</table>

**Note:** Existing exotic amenity species in parkland to be retained (unless they are invasive)
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<td>1.5</td>
<td>0.5</td>
<td>10%</td>
<td>Wetland zone - planted as swathes of single species</td>
</tr>
<tr>
<td>Eleocharis sphacelata</td>
<td>Kuta</td>
<td>1.5</td>
<td>0.5</td>
<td>10%</td>
<td>Traditional weaving species (soft hats, mats, kete. To be planted in low-lying wetland, separate from estuary. Planted as swathes of single species)</td>
</tr>
<tr>
<td>Carex spp.</td>
<td>Pukio, Purei</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Various harakeke species, planted in swathes of single species</td>
</tr>
<tr>
<td>Phormium spp.</td>
<td>Oioi</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Swathes of single species (as these species would have occurred historically)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juncus australis</td>
<td>Wiwi</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td>Swathes of single species</td>
</tr>
<tr>
<td>Phormium spp.</td>
<td>Harakeke</td>
<td>1.5</td>
<td>0.5</td>
<td>30%</td>
<td>Secondary planting set back from edge (poor for stabilisation on elevations)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Grade (L)</th>
<th>Centres</th>
<th>Plant %</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amenity specimens</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plagianthus divaricatus</td>
<td>Mākaka (Salt Marsh Ribbonwood)</td>
<td>1.5</td>
<td>1</td>
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<td>Hebe stricta var. stricta</td>
<td>Koromiko</td>
<td>1.5</td>
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<td>15%</td>
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</tr>
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<td>Pittosporum crassifolium</td>
<td>Karo</td>
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<td></td>
</tr>
<tr>
<td>Myoporum laetum</td>
<td>Ngaio</td>
<td>1.5</td>
<td>1</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Myrsine australis</td>
<td>Matipo</td>
<td>1.5</td>
<td>1</td>
<td>15%</td>
<td>Native spp. Sporadically clustered with existing exotic spp.</td>
</tr>
<tr>
<td>Cordyline australis</td>
<td>Ti kouka</td>
<td>1.5</td>
<td>1</td>
<td>20%</td>
<td>Linking to the linear prevalence of Cabbage trees in Hawkes Bay</td>
</tr>
<tr>
<td>Total</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

### Key
- **Existing exotic amenity specimens to retain**, providing colour and offering food to birds and insects through winter months when most native species don’t produce enough food for birds
- **Recommended low level planting - Bank stabilisation**
- **Recommended Ti kouka (Cabbage) this plant linking to its long history in Hawke’s Bay**
- **Swathes of flax. Framing outward views and directing spatial arrangements this single species is also remnant of how harakeke used to grow prior to settlement in Aotearoa, New Zealand**
- **Existing concrete path - promenade along water front through parkland landscape**

### Note:
Existing exotic amenity species in parkland to be retained (unless they are invasive)
Leisure / Parkland

Node 5

Existing:
Occasionally clustered exotic species (well developed). Willows close to the edge, causing erosion. Parkland landscape.

Recommended:
- Protect outward views towards maunga
- Promenade, parkland
- Plant natives amongst exotic specimens, i.e. cabbage (prominent in Hawke’s Bay)
- Riparian planting (bank stabilisation, flat) some rocks may be needed to ensure erosion control in some locations

Cross Section

- Recommended clustered planting of native species amongst existing amenity
- Existing concrete footpath promenade through parkland, providing outward views to maunga
- Recommended Pohutukawa specimens amongst existing exotics
- Open space
- Low level native species. Primary implementation for bank stabilisation

Existing
**Existing:**

Parkland environment, runoff points, opportunity to plant these to filter before moving into river. Yacht club. Open space, turn around on the grass. Open outlook towards maunga.

**Recommended:**

- Riparian planting (bank stabilisation, flat)
- Add native to exotic specimens to create a parkland
- Planting swales (runoff) ditches to filter runoff
- Beginning of dense wetland (node 7)

**Key**

- **Existing** exotic amenity specimens to retain, providing colour and offering food to birds and insects through winter months when most native species don’t produce enough food for birds
- **Recommended low level planting - Bank stabilisation**
- **Recommended Ti kouka (Cabbage)** this plant linking to its long history in Hawkes Bay
- **Existing concrete path - promenade along water front through parkland landscape**
- **Swale - residential runoff treatment before storm-water enters Wairoa River. Species same as low level mix**
- **Wetland beginning - low level at this stage, coastal**
### Botanical name

- **Juncus planifolius**
  - Common name: Giant Rush
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 20%
  - Notes: Wetland zone - planted as swathes of single species

- **Eleocharis sphacelata**
  - Common name: Kuta
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 20%
  - Notes: Traditional weaving species (soft hats, mats, kete. To be planted in low-lying wetland, separate from estuary. Planted as swathes of single species)

- **Typha orientalis**
  - Common name: Raupō
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 20%
  - Notes: Plant in swathes as single species

- **Carex spp.**
  - Common name: Pukio, Purei
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 20%
  - Notes: Various harakeke species, planted in swathes of single species

- **Phormium spp.**
  - Common name: Harakeke
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 20%
  - Notes: Various harakeke species, planted in swathes of single species

### Total

- Plant %: 100%

### Coastal edge

- **Juncus Kraussii var. australiensis**
  - Common name: Oioi
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 35%
  - Notes: Swathes of single species (as these species would have occurred historically)

- **Juncus australis**
  - Common name: Wiwi
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 30%
  - Notes: Swathes of single species

- **Phormium spp.**
  - Common name: Harakeke
  - Grade (L): 1.5
  - Centres: 0.5
  - Plant %: 35%
  - Notes: Swathes of single species

### Total

- Plant %: 100%

### Amenity specimens

- **Plagianthus divaricatus**
  - Common name: Mākaka (Salt Marsh Ribbonwood)
  - Grade (L): 1.5
  - Centres: 1
  - Plant %: -
  - Notes: Linking to the linear prevalence of Cabbage trees in Hawkes Bay

- **Hebe stricta var. stricta**
  - Common name: Koromiko
  - Grade (L): 1.5
  - Centres: 1
  - Plant %: -

- **Pittosporum crassifolium**
  - Common name: Karo
  - Grade (L): 1.5
  - Centres: 1
  - Plant %: -

- **Myoporum laetum**
  - Common name: Ngaio
  - Grade (L): 1.5
  - Centres: 1
  - Plant %: -

- **Cordyline australis**
  - Common name: Ti kouka
  - Grade (L): 1.5
  - Centres: 1
  - Plant %: -
  - Notes: Specimen tree (parklands adjacent to wetland)

- **Metrosideros excelsa**
  - Common name: Pohutukawa
  - Grade (L): 60
  - Centres: 1
  - Plant %: -
  - Notes: Specimen tree (parklands adjacent to wetland)
Existing:
Lowland environment, opportunity to restore as a valuable wetland which connects to whakamahi saltmarsh / wetland. Progressively estuarine environment. Phoenix palms profusely self seeded. Variety of other vegetation including Raupō, Cabbage and Harakeke. Historic pā site.

Recommended:
- Long term wetland / saltmarsh
- Existing vegetation as nurse crops
- Plant for saline saturated soils ie. Ribbonwood
- Occasional access points or views outwards over the river
- Boardwalks
- Staged planting
- Engage community - planting days, connecting people to place
- Ngaio planted along road edge nearer to coastline
- Pohutukawa planting

Cross Section

Key
Existing exotic amenity specimens to retain, providing colour and offering food to birds and insects through winter months when most native species don’t produce enough food for birds

Recommended low level coastal edge planting, species such as oioi, wiwi and harakeke

Recommended Ti kouka (Cabbage) this plant linking to its long history in Hawkes Bay

Existing concrete path - promenade along water front through parkland landscape

Low, medium wetland planting. Native species providing habitat for native wildlife. Species include Rāupo, Kuta and Giant Rush

Native amenity species through wetland provide shelter for lower species, as well as habitat and food for native wildlife. As saline levels increase, more species which can withstand saline such as Mākara (Salt Marsh Ribbon Wood) are added

Native specimens such as Ngaio and Pohutukawa are also recommended in parkland between wetland and road

Parkland. Native species such as Pohutukawa recommended to complement existing exotic species

Wetland mix - low level and specimens planted in single species swathes reminiscent of historical wetlands

Coastal edge. Species that can withstand saline environments such as Wiwi and Oioi
## Long Term Wetland

### Node 7

<table>
<thead>
<tr>
<th>Plant schedule</th>
<th>Botanical name</th>
<th>Common name</th>
<th>Grade (L)</th>
<th>Centres</th>
<th>Plant %</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juncus planifolius</td>
<td>Giant Rush</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td></td>
<td>Wetland zone - planted as swathes of single species</td>
</tr>
<tr>
<td>Eleocharis sphacelata</td>
<td>Kuta</td>
<td>1.5</td>
<td>0.5</td>
<td>20%</td>
<td></td>
<td>Traditional weaving species* (soft hats, mats, kete). To be planted in low-lying wetland, separate from estuary. Planted as swathes of single species</td>
</tr>
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<td>Typha orientalis</td>
<td>Raupō</td>
<td>1.5</td>
<td>0.5</td>
<td>30%</td>
<td></td>
<td>Plant in swathes as single species</td>
</tr>
<tr>
<td>Phormium spp.</td>
<td>Harakeke</td>
<td>1.5</td>
<td>0.5</td>
<td>30%</td>
<td></td>
<td>Various harakeke species, planted in swathes of single species</td>
</tr>
<tr>
<td><strong>Coastal edge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juncus Kraussii var. australiensis</td>
<td>Oioi</td>
<td>1.5</td>
<td>0.5</td>
<td>35%</td>
<td></td>
<td>Swathes of single species (as these species would have grown historically)</td>
</tr>
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<td>Juncus australis</td>
<td>Wiwi</td>
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<td>0.5</td>
<td>35%</td>
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</tr>
<tr>
<td><strong>Amenity specimens</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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<td>1</td>
<td>25%</td>
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<td></td>
</tr>
<tr>
<td>Cordyline australis</td>
<td>Ti kouka</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
<td></td>
<td>Linking to the linear prevalence of Cabbage trees in Hawkes Bay</td>
</tr>
<tr>
<td>Hebe stricta var. stricta</td>
<td>Keromiko</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittosporum crassifolium</td>
<td>Karo</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myoporum laetum</td>
<td>Ngaio</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metrosideros excelsa</td>
<td>Pohutukawa</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td></td>
<td>Specimen tree (parkland adjacent to wetland)</td>
</tr>
</tbody>
</table>

*Note: Existing exotic amenity species in parkland to be retained (unless they are invasive). A limited number of species have changed as historically single species generally occurred in many wetlands through Hawke’s Bay; therefore, this design decision is in keeping with historical context of place.*
Node 8 - Sir James Carroll Walkway

Existing:

Recommended:
- Connect to the stories of Sir James Carroll and narrate these through wayfinding, storytelling in the landscape
- Cabbage tree memorial at the end of the walk. Plant Cabbages along the walk to illustrate the species importance
- Cluster native vegetation in amongst existing plants. Specimen, medium and low species
- Riparian planting. Bank stabilisation (varying terrain).
- Enhance Waiatere Stream (Whitebait habitat)
- Interpretive signage
- Control vehicle access (2 points) to prevent through vehicle access

Node 9 - Recreation, Passive Space (WW2 Memorial)

Existing:
Open space which includes sporadically placed exotic specimen trees. Recreational fields, facilities. Passive space (WW2 memorial, stand of jacarandas which represent the number of people who lost there lives in battle)

Recommended:
- Tell the story of the WW2 memorial. Design seating / resting spots to be reflective in the memorial space
- Enhance amenity value of sports fields, connect with Affco
- Connect spatially to Sir James Carroll walkway
- Buffer / Screen Affco, however also create an obvious spatial connection, promoting workers to access open space at lunch time
- Clusters of native specimens amongst exotics
- Lower level amenity species near Affco (entranceway to open space) and to recreational facilities
Bank stabilisation - elevated surface. Species such as Kuta and Oioi. Recommended complementary re-vegetation planting alongside existing native species. Removal of invasive species will be needed before planting. For example Bamboo and Phoenix Palms.

Create pedestrian connections to Affco, allowing workers to utilise this space and appreciate the river.

Recommended complementary re-vegetation planting.

Parkland / Open space.

Recommended buffer planting, restricting views into Affco. Designed access way will encourage workers to come and appreciate the river and surrounding landscape.
<table>
<thead>
<tr>
<th>Plant schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Botanical name</strong></td>
</tr>
<tr>
<td>Bank Stabilisation (Elevated)</td>
</tr>
<tr>
<td>Juncus planifolius</td>
</tr>
<tr>
<td>Eleocharis sphacelata</td>
</tr>
<tr>
<td>Typha orientalis</td>
</tr>
<tr>
<td>Phormium spp.</td>
</tr>
<tr>
<td>Juncus Kraussii var. australiensis</td>
</tr>
<tr>
<td>Juncus australis</td>
</tr>
<tr>
<td>Phormium spp.</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Revegetation planting</td>
</tr>
<tr>
<td>Plagianthus divaricatus</td>
</tr>
<tr>
<td>Hebe stricta var. stricta</td>
</tr>
<tr>
<td>Pittosporum crassifolium</td>
</tr>
<tr>
<td>Myoporum laetum</td>
</tr>
<tr>
<td>Melicytus ramiflorus</td>
</tr>
<tr>
<td>Alectryon excelsus subsp. excelsus</td>
</tr>
<tr>
<td>Dacrycarpus dacridioides</td>
</tr>
<tr>
<td>Corynocarpus laevigatus</td>
</tr>
<tr>
<td>Cordyline australis</td>
</tr>
<tr>
<td>Vitex lucens</td>
</tr>
<tr>
<td>Myrsine australis</td>
</tr>
<tr>
<td>Coprosma grandifolia</td>
</tr>
<tr>
<td>Coprosma robusta</td>
</tr>
<tr>
<td>Pseudopanax arboreus</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Metrosideros excelsa</td>
</tr>
</tbody>
</table>

**Note:** Existing exotic amenity species in parklands to be retained (unless invasive)
Existing:


Recommended:

• Dense native planting
• Riparian restoration (bank stabilisation, elevated)
• Bank stability on focus, especially opposite node 1, where river flow is eroding bank
• Native specimens

Key

Existing exotic amenity specimens to retain, providing colour and offering food to birds and insects through winter months when most native species don’t produce enough food for birds

Recommended low level coastal edge planting, species such as oioi, wiwi and harakeke

Bank stabilisation - elevated landform species recommended include Oioi, Kuta and Wiwi

Native amenity species adjacent to bank stabilisation species. Recommended that this area has a re-vegetation focus. Re-vegetation species include Karo, Ngaio, Kahikatea and Karaka
<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Grade (L)</th>
<th>Centres</th>
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<tr>
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<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Primary**

**Revegetation planting**

<table>
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<tr>
<th>Botanical name</th>
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<td>Plagianthus divaricatus</td>
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<td>1</td>
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<td></td>
</tr>
<tr>
<td>Myoporum laetum</td>
<td>Maha</td>
<td>1.5</td>
<td>1</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Melicytus ramiflorus</td>
<td>Mahoe</td>
<td>1.5</td>
<td>1</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Cordyline australis</td>
<td>Ti kouka</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
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</tr>
<tr>
<td>Alectryon excelsus subsp. excelsus</td>
<td>Titoki</td>
<td>1.5</td>
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<tr>
<td>Dacrycarpus dacridoides</td>
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<td>Karaka</td>
<td>1.5</td>
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</tr>
<tr>
<td>Vitex lucens</td>
<td>Puriri</td>
<td>1.5</td>
<td>1</td>
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</tr>
<tr>
<td>Myrsine australis</td>
<td>Mapou</td>
<td>1.5</td>
<td>1</td>
<td>10%</td>
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<tr>
<td>Coprosma grandifolia</td>
<td>Kanono</td>
<td>1.5</td>
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</tr>
<tr>
<td>Coprosma robusta</td>
<td>Karamu</td>
<td>1.5</td>
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<td></td>
</tr>
<tr>
<td>Pseudopanax arboreus</td>
<td>Whauhaupaku</td>
<td>1.5</td>
<td>1</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Secondary**

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Grade (L)</th>
<th>Centres</th>
<th>Plant %</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrosideros excelsa</td>
<td>Pohutukawa</td>
<td>60</td>
<td>1</td>
<td>-</td>
<td>Specimen tree (parklands adjacent to wetland)</td>
</tr>
</tbody>
</table>
CONTACT

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