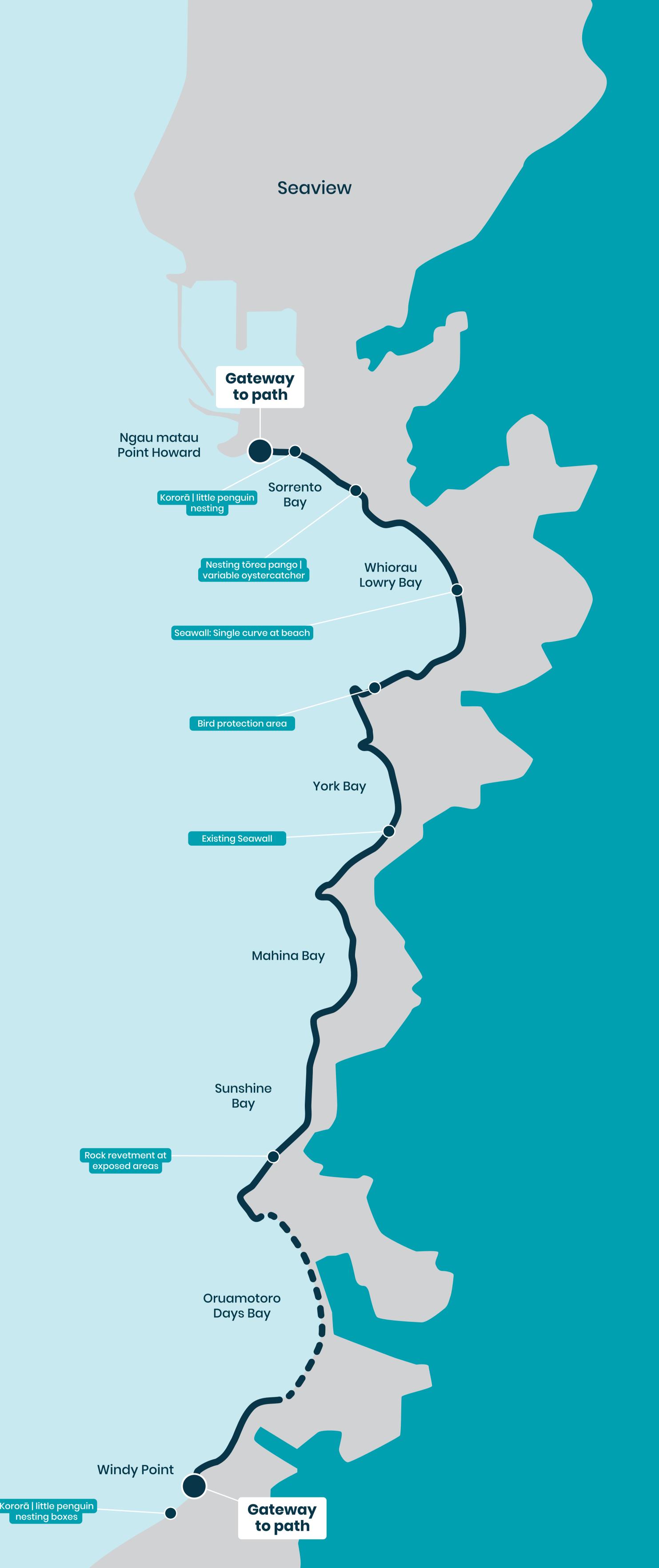
E te iti me te rahi, nau mai haere mai Welcome

The project is a 4.4 kilometre cycleway that will run along Marine Drive in two sections, between Ngau Matau | Point Howard and the northern end of Oruamatoro | Days Bay, and the southern end of Days Bay to Eastbourne.



It would also link to other paths such as the Remutaka Cycle Trail and a future network of paths around Te Whanganui-a-Tara | Wellington Harbour, including Te Ara Tupua.

The project will be delivered in stages, bay-by-bay. Each bay community will be involved in further developing certain bay-specific elements of the project, so that each bay has unique character.

The project aim is to: **Develop a safe and integrated walking and cycling facility on Marine Drive to connect comunities along Hutt City's**

Eastern Bays.

Provide links to other parts of the network (current and future) for recreation and tourism purposes.

The project is being funded by Hutt City Council, Waka Kotahi NZ Transport Agency and the New Zealand Government, from the COVID-19 Response and Recovery Fund.

Hutt City Council and Waka Kotahi are working in partnership with iwi mana whenua, Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira. This partnership works through the Mana Whenua Steering Group.



Ahuatanga hoahoa Design features

Shared walking and cycling path

The project aims to provide a safer walking and cycling route and encourage more people to walk or bike to get around the Eastern Bays. It includes 4.4km of shared path in total.

The shared path will be between 3.5m and 2.5m wide, varying depending on the environment in



each bay. The width changes to accommodate natural habitats, beaches, existing trees, and the Skerrett Boatshed which is a heritage building.

A visualisation of the shared path, 2.5m wide, at Sunshine Bay

Seawalls

For 3.1km of the 4.4km shared path, the existing seawalls will need to be replaced as they don't provide enough space for the shared path to be added alongside the road.

The remaining 1.9km of the shared path will be built without reconstruction of the seawalls, retaining existing features. This includes the newly built seawall in York Bay.

There are 300m of relatively new seawall in York Bay, which provide an example of what the future seawall replacements will look like. The York Bay seawall, with its vertical curved design, has been effective in reducing wave overtopping – instances when waves wash over the road.



Indicative shape of curved seawall design



Vertical curved seawalls will be used for most of the project length to deflect waves, and have a smaller footprint (preserving more of the beach and foreshore) compared to alternative seawall designs.

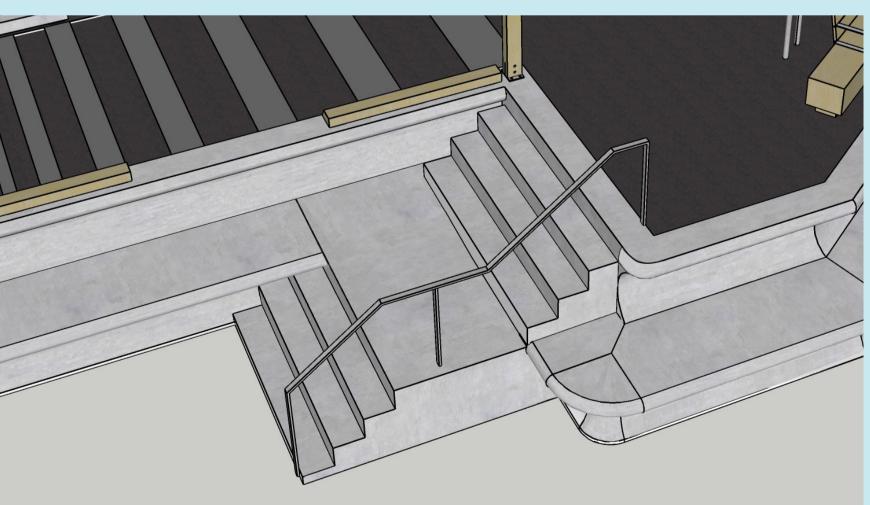
The seawalls will include textures in the concrete surface that encourage marine plants and shellfish to grow.

Rock revetment

Revetments are coastal protection structures made of sloping stacked rock (or other material). In some places along the shared path, new rock revetments will be built (mostly) replacing existing revetments) where greater protection from waves and swells is required.

These are located at Ngau Matau | Point Howard, York Bay, Mahina Bay, and Sunshine Bay. Revetments have a bigger 'footprint' than seawalls, so we don't use them where there are more sensitive habitats and higher biodiversity values.

Beach access



An indicative example of a beach access point with stairs

Beach nourishment

Beach nourishment is a technical term for topping up existing beaches with additional sand and other beach material. This will be done at Ngau Matau | Point Howard, Whiorau | Lowry Bay, and York Bay.





An example of rock revetment used on the New Plymouth coastal walkway

When we build the shared path, it's important that we maintain public access to the beaches in each of our bays. We have designed the beach access points along the path so that they will work for people on foot, as well as to take small boats and kayaks onto the beach.

Some access points will be ramps and others will be stairs. Each beach will have at least two access points, and larger ones will have three (e.g. Whiorau | Lowry Bay).

Oriental Bay is an example of a beach which has been re-nourished over several years

Building on the seaward side

Why build on the seaward side?

The new shared path will be built on the seaward side of Marine Drive – alongside Te Whanganui-a-Tara Wellington Harbour. We considered the alternatives in detail, but the seaward side:

- Avoids the need for major
 earthworks and cuts into
- Doesn't require property purchases and has smaller



the headlands

Aligns with the vision for coastal walking and cycling paths around Te Whanganui-a-Tara

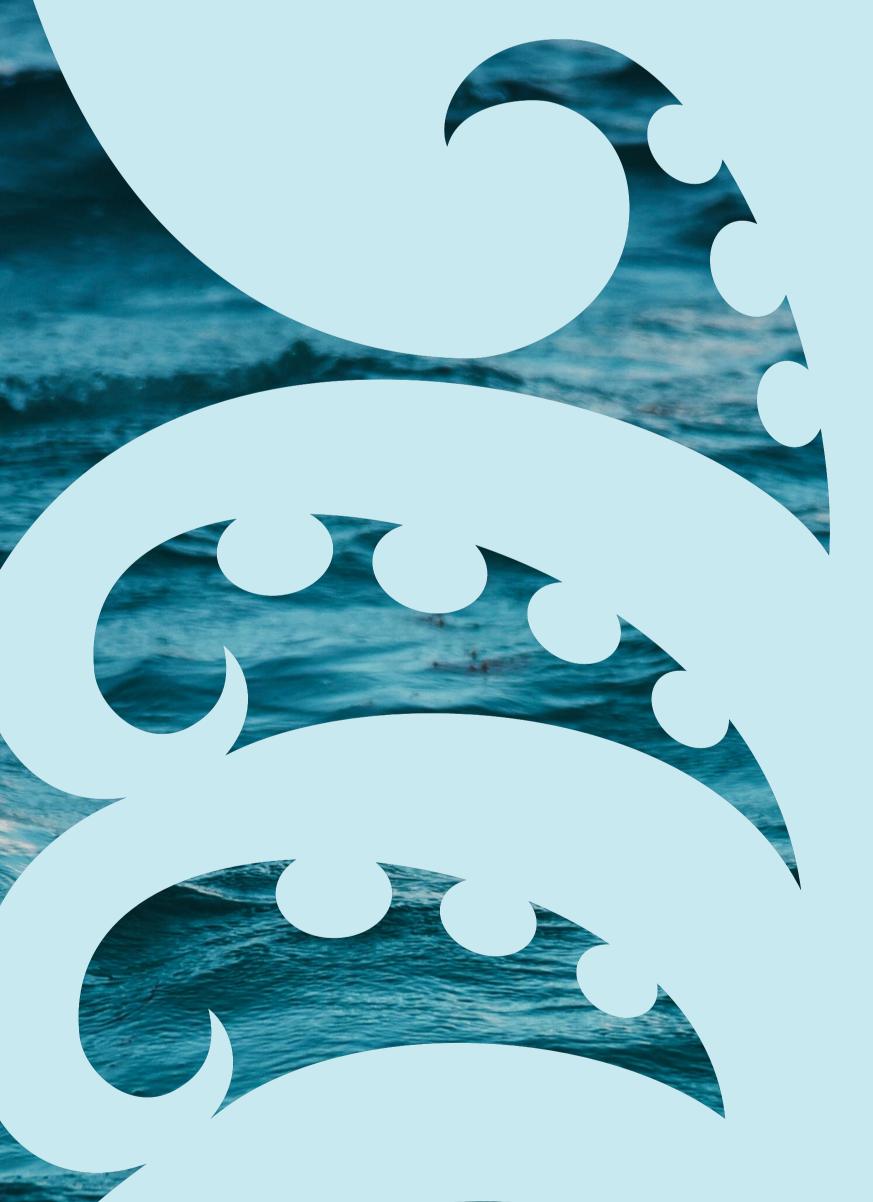
effects on peoples' homes

- Includes replacing the seawalls which contributes to the resilience of Marine Drive
- Enables environmental outcomes through a modern seawall and features that respond to fish passage, fish breeding, and natural character.
- Reduces the number of driveways crossing the shared path, making it safer for everyone
- Improves the connection to the coast and access to beaches

Sea level rise

We all know that Marine Drive, like many coastal areas, needs additional work to meet future challenges associated with climate change and sea level rise. It is already vulnerable to being overtopped by waves, which can Our existing seawall has less than five years of life left in some places and it has been built in an ad hoc way over the years. While the new seawalls provided as part of the shared path are not a solution to sea level rise, they





close the road or limit access.

As well as being a crucial transport link for Ōkiwinui | Eastbourne and the Bays, Marine Drive is home to key underground infrastructure, including a major wastewater pipeline that carries wastewater from the Seaview Wastewater Treatment Plant to an outfall point near Pencarrow Head. will provide the first step enabling future adaptation through later upgrades.

This approach means that sea level rise can be monitored and the seawall can be modified to meet future needs.

Tūnga pahi Bus stops

We will need to make some changes and move some bus stops as part of constructing the new shared path on the seaward side of Marine Drive. At most bus stops, the shared path will be diverted behind the bus shelter to help manage potential conflict between people using the path and people waiting for the bus.

Bus shelter designs

The design of the new bus shelters will ensure there is enough space for the shared path when the new seawall is constructed. Bus stop locations will be confirmed with Greater Wellington Regional Council, who operate the Metlink public transport network for our region. More detail on the



bus stop locations and designs will be addressed in the project's Landscape and Urban Design Plan, which is under development.

Line marking and signage will be used to highlight where conflict could occur and to help keep everyone safe.

The existing Mahina Bay bus stop

The bus shelters are an important part of our local identity and the changes will be designed in consultation with the community to ensure they meet the practical needs of each location. We'll also work together to explore opportunities for artwork and unique designs.

Te taiao The environment

Birds

Today the kororā population in the project area is around 60 - 70 penguins - comprising around 25 breeding pairs. Although there are no known breeding sites within the proposed shared path or seawall footprints, although there are a small number within the areas that revetments will be



Matuku moana Reef heron





upgraded.

Dogs also pose a threat to bird species, but especially kororā. This will be managed through responsible dog control under HCC by-laws. Those controls protect these threatened species and warnings and signage will be used along the new shared path to inform everyone using the area.



Little penguin

The main bird species in the project area Kawau tui Little black shag

Construction will be carefully managed to avoid breeding and nesting kororā and other shorebirds (variable oystercatcher/ tōrea pango) with measures set out in a Bird Protection Plan.



Tarāpunga Red-billed gull



White-fronted tern



Four areas have been earmarked for bird protection:

Sorrento Bay
Bishops Park
Whiorau Reserve
HW Shortt Park



Kawau paka Little shag These areas will be planted with local native coastal species that provide habitat for the birds, as well as features like penguin nesting boxes. Each area will be protected by barriers to discourage people and dogs from entering, and will have signage to explain how the birds are protected. We will work together with the community and local groups on this as part of our Bird Protection Plan.



Tōrea pango Variable oystercatcher

Between the tides

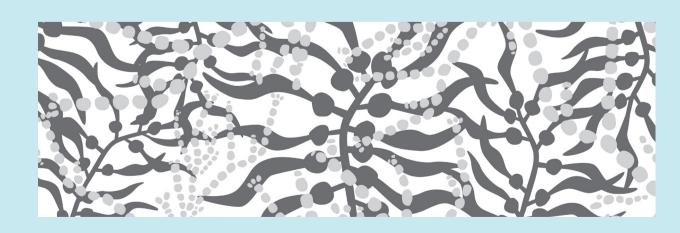
Seawalls and rockpools

When we build the new seawalls and rock revetments, we will include features that improve the habitat potential of these structures – supporting native plants and wildlife.

This will include use of textures in the concrete which plants and shellfish can attach to, and rockpool habitats.



Neptune's Necklace – part of the inspiration for our planned seawall texture



Seagrass

In Lowry Bay, the only known area of seagrass in Te Whanganui-a-Tara | Wellington Harbour is found. Seagrass is the only flowering plant that grows in the sea and provides habitat for small invertebrates, which in turn provide food for other species. Seagrass also helps to stabilise soft shore areas.



Seagrass in Lowry Bay – exposed at low tide

The seagrass will be monitored and

Reusing existing material that already has marine life attached to it will also support habitat within the new revetments and seawalls.

Planned concrete texture for seawalls



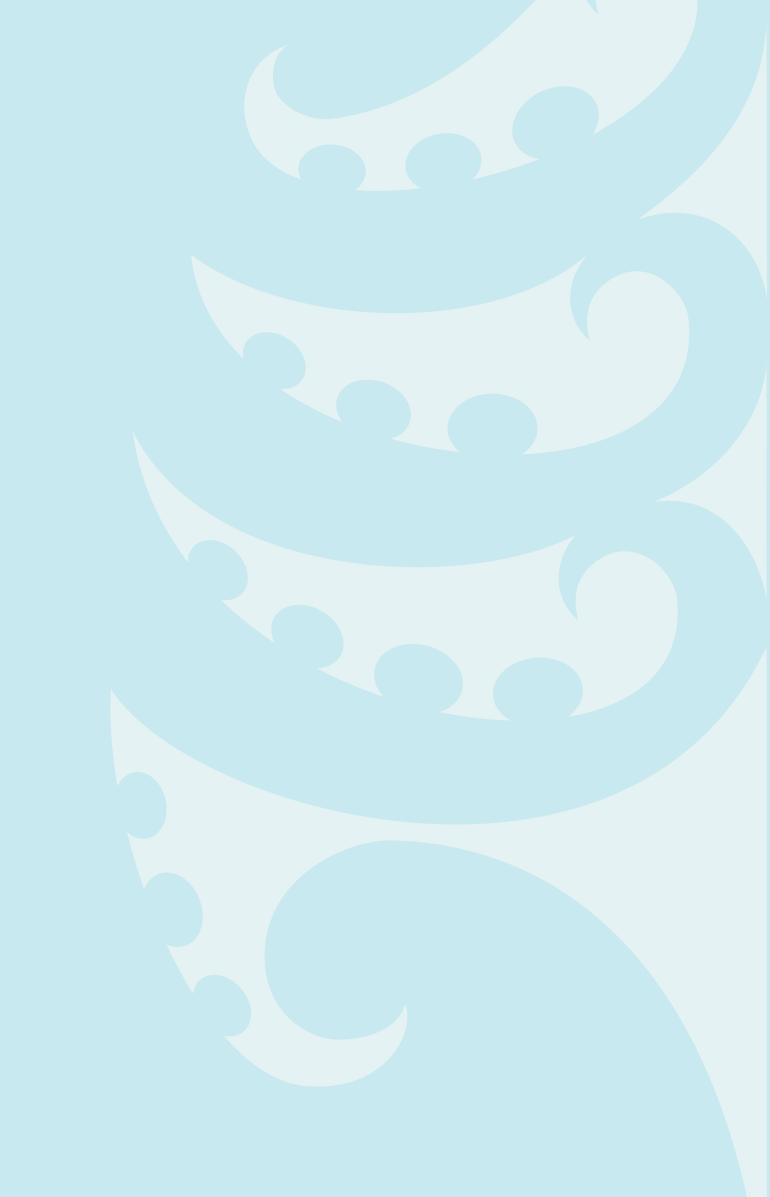
An example of a concrete tidal rockpool built into another coastal project, showing growth of plants and algae protected during construction by:

- Isolating the seagrass from the construction area when the new seawall is constructed.
- Only moving and shaping beach materials during low tide levels
- Carrying out beach nourishment during winter when seagrass growth is lower

Ngā patanga Benefits



- A safe, integrated walking and cycling route on Marine Drive
- Wider road shoulders



Better beach access



- A new, consistent seawall protecting Marine Drive
- Enabling future upgrades



Connectivity

- Easier to walk or bike within and between Eastbourne and the Bays
- Linked to the developing cycle network in Hutt City and the region



- Jobs created during project construction
- Expenditure with local businesses
- Support regional tourist walks and rides



Environmental

- Protecting birds during construction and leaving improved habitat in the future
- Protect and monitor seagrass
- Tidal pools and textured seawalls for marine life
- Beach nourishment and dune restoration



Cultural

 Opportunity to highlight cultural narrative in design through partnership with iwi mana whenua



 More people using active transport, and walking, biking and running for exercise and recreation

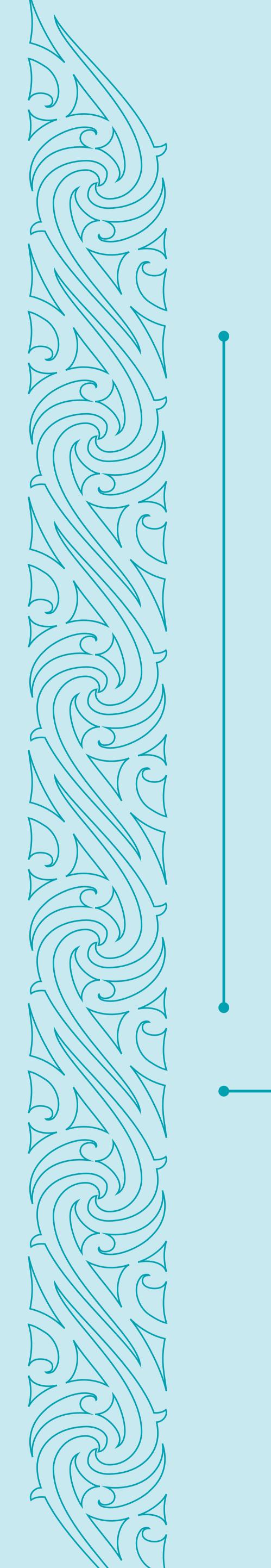


Wātaka Timeline

Business case phase

2016 Indicative business case

2017 Detailed business case



Consenting phase

Application for resource consent

October 2019

Resource consent notified

December 2020

Resource consent hearing

March 2021

Resource consent approved

June 2021

Resource consent details

The resource consent for the project was initially approved in March 2021 and finalised when an appeal was resolved, in June 2021.

The consent enables the project and sets out conditions that must be met during the delivery and operation. There are 90 conditions (36 pages in total) covering subjects from archaeology, to ecology, to landscape, urban and visual.

Appeal of resource consent decision resolved



Delivery phase

Late 2021

Detailed design and enabling works stage 1 (Windy Point and Sunshine Bay)

Early 2022

Main construction work begins

TBC Remaining stages

E whai ake nei Coming up

To deliver the project we need to complete a number of management plans. While these are technical plans we will be talking to community representatives, local groups, and residents' associations to develop some of these.

We are planning to begin construction of the first two stages (Windy Point and Sunshine Bay) in late 2021/early 2022.

- Construction
- Landscape and Urban Design Plan
- Bay Specific Urban Design Plans
- Beach Nourishment Plan
- Bird Protection Plan
- Seawall and Revetment Habitat Plan

Partnership with mana whenua

Eastern Bays Shared Path is a partnership between Hutt City Council, Waka Kotahi NZ Transport Agency, Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangatira. This partnership works through a project Mana Whenua Steering Group.

Recognising the significance of Te Whanganui-a-Tara | Wellington Harbour, we are working to ensure the project respects the mana and mouri of the Harbour and natural environment, and that it acknowledges the rich and unique history of this coastline.



Partnership with iwi mana whenua will be recognised at many levels including governance, operational delivery, kaitiakitanga, and the inclusion of cultural design.

Pūrakau whakaputa Cultural narrative in design

The project area encapsulates many wahi tapu (sites of significance) from Te Kongutu o Te Awa Kairangi (the mouth of the Hutt River) to Te Waha o te Ikanui (the Harbour mouth). Its beginnings emanate out of the power and mana of Tupua-horo-nuku (evolving mass of solid matter), known as the tupua, Ngake.

Instructed by the mountain clan people who were summoned to the head of the fish, gathering on Pukeatua where they were gifted appropriate incantations to prise open the mouth of the great catch of Maui Tikitiki a Taranga to enable it to breathe again where they summoned from the great depths of Rua Tupua and Rua Tawhito of the fresh water lake who brought forth Tupua-horo-nuku and Tupua-hororangi.

Tupua-horo-nuku, Tupua-horo-rangi, Tai kukume mai takiwā ia mouri e runga, Kia horo wawe mouri e raro koe ikaroa

The narrative of the Eastern Bays speaks of and highlights "te ihi, te wehi

Called upon by our ancestors Te Kahui Maunga Amass the power and energy Fashion upon the skin of papatuanuku The marks that lie before us today The spitting of the land masses The pounding of thunderous waves Unveil yourself before us Te Tupua Horo Nuku Ngake

me te mana nui o Tupua-horo-nuku".

The many small tributaries joining together growing larger forming the collective mass of Te Awa Kairangi, flowing every second of the day. The following whakatauaki encapsulates who the people of Te Āti Awa are and our responsibility for the water and the whenua.

Te Āti Awa tupua rau, he auripo i te manga iti, he auripo I te manga nui raanei, he kaitiaki ki te whenua.

Te Āti Awa of many phenomena, where there is a ripple in a small tributary or great river, there is a guardian and protector on the land.

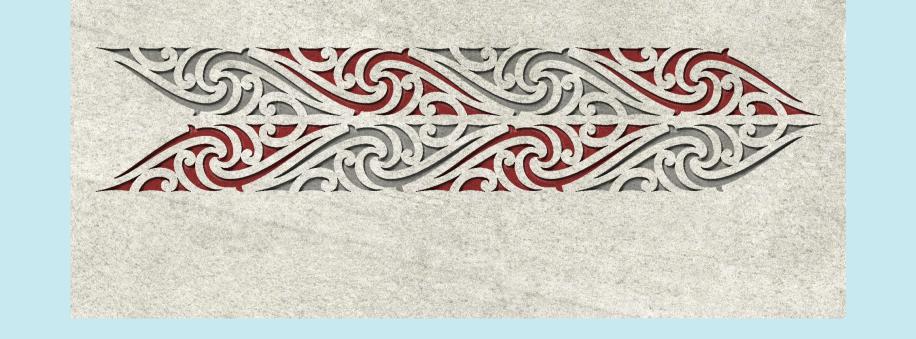
Over time the continuous flow of Te Awa Kairangi has shaped the landscape moving and wearing away rock, carving out a network of valleys eventually reaching the lower grounds, widening and reaching the point where the fresh water meets the salt water.

Whakapakarukaru puare te waha o te ika roa Te hononga o ngā wai e rua... The Eastern Bays commences at the meeting of the waters.

Āhuatanga hoahoa Design elements

The design elements will ensure there is consideration of matauranga Māori (Māori knowledge) and the history of the local area.

The design elements and artworks in time will become landmarks in their own right. They reflect the aesthetic approach to infusing te ao Māori into the project. Shown on this poster are potential design concepts created by Len Hetet, cultural design lead (Te Ati Awa, Ngāti Tuwharetoa, Ngāti Maniapoto, Ngāti Apa).





Sandblasted concrete

Mouri marker

