# Eastern Bays Shared Path

#### Location

The Hutt City Council (HCC) proposes to construct a 4.4 km Shared Path (cycleway/walkway) along Marine Drive in two sections: between Point Howard and the northern end of Days Bay, and the southern end of Days Bay (Windy Point) to Eastbourne (Muritai Road / Marine Parade intersection).

### **The Project**

The Project aims to develop a safe and integrated walking and cycling facility along Marine Drive to connect communities along Hutt City's Eastern Bays, and to provide links to other parts of the network for recreation and tourism purposes (the Remutaka Cycle Trail in particular, as well as the Great Harbour Way (Te Aranui o Pōneke). Currently, pedestrians and cyclists connectivity and use along the Eastern Bays is low. This is due to a lack of dedicated cycling and walking facilities and the tightly constrained nature of Marine Drive. For the most part, cyclists and pedestrians must use the road shoulder, which is very narrow and even non-existent in sections.

The proposed Shared Path varies in width depending on the physical constraints of the bay environments, from 2.5m to 3.5m. Vertical curved seawalls to support the shared path have been chosen across the majority of the Project length because they deflect wave overtopping most effectively and create a reduced footprint on the foreshore compared to other non-vertical seawalls.

The Project also provides a basis for future opportunities for protecting the resilience of the road and underground services by upgrading the supporting seawalls. Approximately five thousand people live along the Eastern Bays, with Marine Drive providing the only road and infrastructure service connection. These services (including the main outfall sewer pipeline) are regionally significant infrastructure, and along with the road access are important lifeline utilities for the wider community.

The road is currently vulnerable to closure, and/or reduced operation, in part due to wave overtopping. The existing seawall in places has a residual life of less than 5 years, and as it has been built in an *ad hoc* nature over time, is vulnerable to failure and does not provide effective storm mitigation. Over time sea levels will rise, aggravating the situation. MfE (2017) projections forecast a 16cm sea level rise by between 2030 and 2040 (depending on global emissions trajectories). Further sea level rise will increase the frequency of all coastal inundation along the Eastern Bays, with sea level rise of 0.5m forecast to be reached sometime between ~2070 and ~2110 and sea level rise of 1.0m sometime after ~2115.

The Project recognises the series of ongoing processes of managing coastal values in the face of climate change, and sea level rise and the related pressures faced by Greater Wellington Regional Council and HCC. However, the Project is not a solution to the effects of sea level rise, and instead provides the first step in potentially incremental upgrades that would assist in providing protection to the road (and underground services) from the effects of sea level rise along this section of the coast. As an adaptation model, the seawalls do not preclude future options and have been designed to enable additional protection to be added in the future if considered by the Eastern Bays community to be appropriate.

# **Project Benefits**

#### Connectivity

The Project will provide a safe and connected walking and cycling route along Marine Drive, providing enhanced connections:

- Within the individual bays (for recreation and access);
- Between different bays (to shops, schools, recreation, etc.);
- To and from Lower Hutt and beyond (to work, school or for recreation etc. see the figure above); and
- To other regional cycle routes, including the Great Harbour Way/Te Aranui o Pōneke walking/cycling route (Leg 3 Burdan's Gate to Seaview) and the proposed extension of the Remutaka Cycle Trail (one of the New Zealand Great Rides) from the mouth of the Orongorongo River to Burdan's Gate.

This enhanced connectivity will result in significant social, economic and recreational benefits, including:

- Improved safety for pedestrians, cyclists and other road users;
- Recreation and tourism opportunities; and
- Positive benefits to health and wellbeing.

#### Resilience

In addition to increased connectivity, the Project will provide the first step in enabling the Marine Drive road corridor to respond to the challenges of sea level rise.

The proposal includes replacement seawalls to provide improved protection from storm events for Marine Drive and other infrastructure contained within the Marine Drive road corridor. The replacement seawalls will reduce overtopping and debris on the road and develop a consistent seawall design that can be added to in the future. The Shared Path will sit on top of the new seawall. The new seawall and associated features will provide enhanced environmental outcomes compared to the existing seawalls.

#### Alternatives

Throughout the development of the Project, alternatives and options associated with the design were investigated. The geography and terrain in the Eastern Bays area and the lack of any other alternative transport routes, means that the focus has been on alignments based on Marine Drive.

The Project has been developed on the seaward side of Marine Drive, due to the physical constraints on the landward side of Marine Drive.

# **Environmental effects**

There are a number of components in the environment that could potentially be impacted in either the short term or long term by the different elements of the Project. These components range from nearby coastal areas, to seabed life or sea life in the water column; to people living nearby, or who use the sea area for recreation, and on those who have particular cultural affinity and association with the area.

The preliminary design for the Project, as reflected in this application and supporting drawings and assessments by specialists, has sought to avoid or mitigate adverse effects through the alternatives assessment, development of Project design features and the proposed construction methods.

The design has gone through a series of iterations that were considered against the parameters of the natural environment (such as coastal processes, ecologically sensitive

areas – intertidal and subtidal areas), to achieve an optimum design. Where it has not been practicable to avoid adverse effects, measures are proposed to remedy or mitigate these adverse effects.

Some of these measures include:

- Limiting the widening on the shared path onto the beaches where possible.
- Incorporating textured vertical curved seawalls to provide improved habitat, resulting in an increased diversity of taxa colonising these new walls.
- Nourishing the beach at Point Howard, Lowry Bay and York Bay to enhance the amenity value and provide erosion protection.
- Translocating plants and gravels where necessary.
- Preparing a Penguin Management Plan to minimise the disturbance of habitat during shared path and seawall construction. A protected penguin breeding area is proposed at the Seaview Marina breakwater.
- Preparing a Construction and Environmental Management Plan to address construction methodology and sediment management.
- Managing fish passage by introducing spat ropes or ramps at stormwater outlets.
- Involving the community in the detailed design stage to provide input into the urban and landscape design, signage, storyboards, placement of bus shelters/stops, protection of penguins and birds, and other design elements of interest and concern to the community

# **Consents Required**

The RMA outlines a number of relevant considerations for the determination of applications for resource consent. The Project involves several components. These components trigger the need for resource consents from GWRC and HCC, as works will be undertaken in the coastal marine area and within the road corridor.

The statutory assessment that has been undertaken and reported in the application, has concluded that the Project is consistent with the relevant objectives and policies of the applicable national, regional and district level statutory provisions.

The Project will promote the sustainable management of natural and physical resources and is consistent with the purpose and principles of the RMA. Notwithstanding the above, the Project will result in some adverse effects, particularly in relation to intertidal ecology, landscape and visual amenity, and amenity and recreation values. On the other hand, the Project will result in significant positive effects, particularly in relation to traffic safety and resilience, but also in terms of social and economic wellbeing.

Throughout the consideration of options, and the subsequent design process, the approach has been to avoid potential adverse effects, or where avoidance is not possible, to remedy or mitigate actual or potential adverse effects associated both with the construction stage and the operation of the Project. To this end design features have been adopted and will be further developed during the detailed design stage. A suite of recommended consent conditions which set the framework and key environmental parameters in which management plans operate is also proposed. The overall conclusion is that in relation to 'adverse effects on the environment' the Project has effectively avoided, remedied and mitigated adverse effects. The consideration of the whole environment into an integrated solution is the approach taken for this project.

The Eastern Bays Shared Path is therefore a project that provides a much desired cycleway and walkway for the community, while being sensitive to the coastal environment and the beach recreational amenity for the people who live in the area. HCC will contribute to building community resilience in terms of managing the effects of natural hazards and will "buy" time to develop an iterative long-term management approach for the Eastern Bays to adapt to climate change.