

# 10. DESIGNING COASTAL INFRASTRUCTURE

## HE WAIHANGA AHOAHO PŪNAHA TAKUTAI

*Tungia te ururua, kia tupu*

Burn the overgrowth to allow the flax shoots to grow through

Coastal infrastructure connects us to the water. It spans our major international port, local wharves and marinas, small jetties and boat ramps. All of these require associated land-based infrastructure such as roads, car parks and utilities. They all have an impact on the Hauraki Gulf Marine Park.

Coastal infrastructure occupies space that may be used for other purposes. It is often large scale and can be intrusive and unattractive. But we need it for our marine industries and to provide people with access to the marine space. It is therefore important that the Park's infrastructure is wisely planned, designed and constructed to maximise effectiveness while minimising environmental impacts. Boat ramps are a good example. As the population increases so will the demand for boat ramps. Managing this demand will require innovation when planning and designing required infrastructure.

Poorly designed and located infrastructure can create more problems than it solves. For example, a poorly built sea wall or groyne can create erosion problems elsewhere, or simply create an eyesore. On the other hand, well planned infrastructure can be enormously beneficial - it can provide multi-faceted benefits for the community and the economy, while

also contributing to the restoration of the mauri of the Hauraki Gulf Marine Park. As the population surrounding the Park grows, so will demand for coastal infrastructure. It is therefore important that we have a clear strategy for future infrastructure that minimises adverse effects to the environment, community, and customary activities.

This plan is not prescriptive about where infrastructure should or should not be located. Infrastructure can be very controversial, as we have seen with the debate over proposed extensions to the Auckland Port, and the Mātiatia marina proposal. These are difficult problems that communities have struggled to solve.

The key mechanism for determining the location of infrastructure should be through consultation with mana whenua and communities, and strategic planning under the Local Government Act and Resource Management Act. This plan has concentrated on identifying mechanisms to ensure good design for all infrastructure constructed within the Hauraki Gulf Marine Park, the application of Blue Design Principles and the establishment of a Hauraki Gulf Marine Park Design Panel.

## A selection of quotes from members of the public at listening posts



### Mana whenua

*Minimise business and charter operations to certain times of the year to ensure sustainability for the marine, ecosystems, biodiversity life to restore.*

*Engage in actual conversation and genuine consultation with mana whenua; not paper based, not project based, but genuine conversations.*

### St Marys Bay

*We need to think about design – water is so integral and important – we need to look at slowing down its passage and use of treatment techniques before it leaves a structure or enters a waterway.*

### Whangamata

*Councils should think 100 year plans NOT short term plans – think future sustainability*

*Welcome all the people and not put brakes on innovative ideas that can make a living here. We don't have to have rules about everything without some foresight – be progressive.*

*The parking is inadequate, launching is OK, but getting back in is worse. There is a line of boats out to sea waiting to come back in.*

### Hamilton

*Fuel, fresh water and rubbish disposal are problems on the Gulf. There used to be a floating rubbish barge system.*

### Mahurangi

*There's an awful lot of land around the coast that we need to keep in the regional park domain. Everyone wants a place with a view, on the ridges, on the edges.*

*Ramp rage – pressure on ramps at Omaha*

*Are there enough boat ramps to meet demand?*

*Parking is one of the biggest problems.*

## Point England

*There are more and more launches and power vessels. They are quicker and don't want to learn about the sea. They don't need to learn to sail. It's like being in a washing machine sometimes.*

*Lack of appreciation of how serious the sea level rise is going to be – particularly the public piece.*

*We need to release the pressure on the local parks by linking the regional parks better.*

## The Summary and Outcomes of Sea Change – Tai Timu Tai Pari Community Engagement (January 2014 – February 2015) included the following feedback:

- Develop recreational and commercial infrastructure that will enhance the environment and support connection between people and communities.
- Erosion, natural and human, is an issue.
- Upgrade existing infrastructure 'at place' where practicable, to cope with ever growing demands.
- There needs to be balance between different users between over-use, use and the needs of the natural environment.
- Connect the Hauraki Gulf Marine Park by building a network of places linked by a 'blue highway' of water transport options.
- There is a willingness to accept pay-per-use at boat ramps and marinas but more research options are required before general consensus is reached.
- There is a need for more/improved/ more rational use of boat access and moorings.



## Objective 10.

### Create and implement blue design principles

*Whakahoki mai te mana rangatiratanga o te moana nei ki te iwi.*

*Restore the chiefly authority over our ocean to the tribes/people*

Councils should collaborate with mana whenua and the community to develop a set of tikanga/values based principles that will apply to infrastructure within or relating to the coastal marine area. The principles need to encourage designs that work with nature, minimise environmental impacts, and avoid problems for future generations. The Blue Design Principles need not be prescriptive, and should be designed to foster innovation and creativity in achieving desired outcomes. They should encourage innovative design in the use of materials including:

- The use of environmentally-friendly materials.
- Alternatives to copper based antifoul.
- Alternatives to marine dumping of dredging spoil.
- Alternatives to materials contributing to marine debris issues
- Retrofitting stormwater systems to include pollutant traps and filters.

The principles should encourage the development of infrastructure that performs a wide range of functions. For example, in addition to its primary purpose - infrastructure can create new ecological habitat, provide access for the community, and improve the ability of mana whenua to interact with their moana.

There should be clear benefits provided for projects that embody the principles, such as a more streamlined consenting process.

Stormwater wetland treatment systems protect the coastal environment by filtering out heavy metals and sediments from road run off, provide habitat for fish and birds and provide the community with the opportunity to interact with natural systems.

#### Action:

- 14) By 2018, develop a set of 'Blue Design Principles' for infrastructure that impacts on the Hauraki Gulf Marine Park.



Figure 10.1 An Example of Blue Infrastructure

## Objective 11.

### Establish a Hauraki Gulf Marine Park Design Panel

The Hauraki Gulf Marine Park advisory panel will advise applicants for major infrastructure projects within the Park, for example marinas, boat ramps, ports, undersea cables, and the like. The advisory panel would inform applicants on the unique Hauraki Gulf environment and the physical and legal issues. It would also provide project-planning advice to ensure good outcomes for the applicant, the whole community and Gulf. The Urban Design Panel has been put forward as a model but the Hauraki Gulf Marine Park Design Panel will likely sit with the Hauraki Gulf Forum or its successor.

Taking lessons from the Auckland Urban Design Panel and Te Aranga Principles (see text box below) a streamlined consent process could incorporate Blue Design principles. The Hauraki Gulf Marine Park Design Panel would provide consistent advice to, and coordination of, agencies to ensure complex issues are dealt with in a timely manner.

At times, decisions regarding the location and design of coastal infrastructure have been made without the involvement of mana whenua, and have resulted in significant cultural impacts. A Hauraki Gulf Marine Park Design Panel would ensure the engagement of mana whenua in planning and decision-making, so that adverse effects on the mauri of the Park, wāhi tapu and culturally significant sites/places and customary activities can be avoided.

Identifying space that could be considered for the development of tauranga waka (waka mooring and storage places) is a good example. In the Tauranga harbour space was already set aside as tauranga waka but there is no similar facility in Tāmaki, despite the coastline having many significant tauranga waka prior to more than a century of reclamations. This is the type of situation where the design panel would lead applicants through a process, the mauri of the Gulf is improved and the result is a win-win for everyone.

**Action:**

15) By 2020, create a 'Hauraki Gulf Marine Park Design Panel', with mana whenua representation, to provide streamlined resource consent processes for large and medium scale projects that meet the Blue Design principles.



**Auckland Urban Design Panel**

Good urban design is critical in enabling Auckland to become the world's most liveable city. As part of meeting aspirations for a better built environment, an Auckland Urban Design Panel has been established. This Panel provides independent design review of significant projects, for both private and public developments across the region, and is informed by Te Aranga Principles. This means that developers can get an independent peer review and free advice from the Panel before applying for consent. Complex issues can be dealt with early on, meaning that time delays are reduced when resource consent applications are lodged. In addition it helps to ensure consistent advice during the consenting process and, where needed, co-ordination of council departments.

**Te Aranga Principles**

The key objective of Te Aranga Principles is to enhance the protection, reinstatement, and development of mana whenua cultural landscapes enabling all of us to connect to and deepen our 'sense of place'. The Principles seek to foster and guide both culturally appropriate design processes and design responses that enhance our appreciation of both the natural landscape and built environments. Te Aranga Principles also provide other stakeholders and the design community with a clearer picture as to how iwi/hapū are likely to view and wish to participate in the design and development of the built environment within their ancestral rohe.