

Ngā mahere whakaurutau mō te takutai

Shoreline Adaptation Plan

Waiheke and the Inner Gulf Islands
Volume 2: Introduction to the SAP area

August 2025, Version 1.0



Shoreline Adaptation Plan

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Volume 2: Introduction to the SAP area

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As set out in *Volume 1: Understanding Shoreline Adaptation Plans*, adaptation planning is an ongoing process, with SAPs being a collective first step towards an adaptive approach for the future of our coast for current Aucklanders and the generations to come. Reflecting on this, SAPs operate as living documents, with a strong commitment to continue working in partnership with project partners to inform and guide the implementation of each SAP area plan and further adaptation planning actions. As a living document, future revisions can be made to include additional context as/ when requested (e.g. as per cultural context holding statements illustrated in section 3.0).

Mātauranga Protection Statement (Disclaimer)

Auckland Council acknowledges that all cultural information within this document is the intellectual property of iwi who have contributed to the development and co-authoring of this Shoreline Adaptation Plan (SAP). To ensure the protection of Mātauranga Māori, cultural information must not be recirculated to other workstreams without direct consultation with and approval by iwi, to whom this information belongs and how it can be used.

To ensure that cultural values and associations are recognised and provided for in any works programme, it is fundamental that this partnership and co-management approach with the iwi of Tāmaki Makaurau is applied to each specific coastal stretch when implementing the direction set out in this SAP. Failure to do so has the potential to result in significant adverse cultural impacts.

Early and meaningful engagement with the relevant iwi groups on projects under this SAP is an essential requirement. This will ensure that Auckland Council and Auckland Council-owned organisations meet their obligations to Ngā Mana Whenua o Tāmaki Makaurau and Te Tiriti o Waitangi. Iwi must be given the opportunity to act in their role as Kaitiaki when implementing projects under this SAP.

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Quick Reference

The Shoreline Adaptation Plan (SAP) programme is presented across three volumes of reporting:

- Volume 1: Understanding the Shoreline Adaptation Plans programme and regional scale context
- Volume 2: Shoreline Adaptation Plan area specific overview subregional scale (across 20 SAP areas)
- **Volume 3:** Unit (and stretch) context and adaptation strategies set for each section of Auckland's 3.200 km of coastline.



Glossary

Key terminology and infographics commonly used within this volume and all of the shoreline adaptation plan documents are outlined below.

| Term | Definition |
|---------------------------------------|--|
| Adaptive planning | Adaptive planning encompasses the hazard assessments, the values and objectives and the vulnerability and risk assessments that feed into the dynamic adaptive pathways planning approach, and the measures to implement them through the Resource Management Act 1991, Long-Term Plans, asset plans and other Auckland Council plans, along with the monitoring framework for review and adjustment (Ministry for the Environment, 2024). |
| Annual Exceedance Probability (AEP) | The probability of an event occurring in any given year, e.g. the 1% AEP has a 1% chance of being met or exceeded in any given year. |
| 'At Risk' | Term used to describe status of ecological species. Defined by the Department of Conservation (2021) as taxa that meet the criteria specified by Townsend et al. (2008) for Declining, Recovering, Relict or Naturally Unknown. See (Robertson, et al., 2021) for these criteria. |
| Biodiversity Focus Area (BFA) | Prioritised areas of ecological significance that guide a delivery of conservation activity and were identified as they protect a representative range of all indigenous species and ecosystems within the region. |
| Catchment flooding | Flooding which occurs when the amount of rainfall exceeds the capacity of an urban stormwater network or the ground to absorb it. |
| Climate hazard | The potential occurrence of climate-related physical events or trends that may cause damage and/or loss. |
| Coastal erosion | The removal of the material forming the land due to natural processes, resulting in the coastline moving inland over time. |
| Coastal inundation | The flooding of low-lying coastal land that is normally dry, due to elevated sea levels. |
| Coastal marine area | • The coastal area is defined as the area of sea from the line of Mean High Water Springs (MHWS) to 12 nautical miles off the coast. |
| Council-controlled organisation (CCO) | Organisations in which Auckland Council has the responsibility to appoint at least 50% of the board of directors or trustees. Auckland Council has four substantive CCOs: Auckland Transport, Tātaki Auckland Unlimited, Eke Panuku Development Auckland, and Watercare. |
| Council | Auckland Council |
| Cultural Heritage Inventory (CHI) | An Auckland Council database which contains records for archaeological sites, historic buildings, historic botanical sites, shipwrecks, and other places of heritage interest in the Auckland region. |

| Term | Definition |
|---|--|
| Dynamic Adaptive Pathways Planning (DAPP) | A decision-making approach to analyse the flexibility of options and pathways under conditions of uncertainty using scenarios for stress testing options and monitoring of signals and triggers for anticipatory planning (MfE). |
| Ecological District | Areas with relatively homogenous characteristics (e.g. topography, soil, biology, climate). There are 12 ecological districts in Auckland. |
| Exposure | The nature and degree to which a system is exposed to significant climate variations. |
| Fetch | The length of an area of the harbour, estuary or sea in which waves are generated by wind, measured in the direction of the wind. |
| Hazardscape | The net result of natural and man-made hazards and the risks they pose to an area. |
| Indigenous biodiversity | A living organism that occurs naturally in Aotearoa, and the ecological complexes of which they are part of – this includes all forms of indigenous flora, fauna, fungi, and their associated habitats. |
| Mean High Water Springs (MHSW) | The average of high levels of spring tide. |
| Nature-based solution | A collection of approaches to address societal issues, including climate change, through the protection, management, and restoration of ecosystems. |
| SAP | Shoreline Adaptation Plan |
| SAP area | An identified area for the purposes of the SAP development of Shoreline Adaptation Plans. There are 20 SAPs for the Auckland region. |
| SAP stretch | Each SAP unit is typically broken down into smaller stretches considering coastal processes, Auckland Council-owned land and asset location, pubic-land boundaries, and infrastructure considerations. |
| SAP unit | The SAP area is divided into smaller SAP units to enable a more detailed and comparative view of how risk is attributed across the subject area. |
| Sea-level rise | The increase in the level of the ocean, caused by the melting of glaciers and ice sheets and thermal expansion of water as it warms. |
| Significant Ecological Area | Significant Ecological Areas (SEAs) have been identified by the Auckland Unitary Plan (AUP: OP) for terrestrial areas, and parts of the coastal marine area. |
| | Marine Significant Ecological Area (SEA-M): |
| | • Identified areas of important indigenous vegetation or habitats of indigenous fauna located in the coastal marine area, and are afforded protection under the AUP:OP. |
| | Terrestrial Significant Ecological Area (SEA-T): |
| | Identified areas of important indigenous vegetation or habitats of indigenous fauna located on land or in freshwater environments and are afforded protection from the adverse effects of subdivision, use and development. |

| Term | Definition | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Site and place of significance to Mana Whenua | Sites and Places of Significance to Mana Whenua applies to sites and places in the Tāmaki Makaurau/ Auckland region that are protected for their significance to mana whenua. It acknowledges that sites and places have tangible and intangible cultural values in association with historic events, occupation, and cultural activities. | | | | | | | |
| Statutory Acknowledgement Areas (SAA) | A statutory acknowledgement is an acknowledgement by the Crown that recognises the mana of a tangata whenua group in relation to specified areas - particularly the cultural, spiritual, historical, and traditional associations with an area. | | | | | | | |
| Social Infrastructure | Facilities and assets that support social activities, interactions, and wellbeing within a community. | | | | | | | |

Shoreline Adaptation Plan Areas

Tāmaki Makaurau, Auckland, is a coastal city, bounded to the east and west by the South Pacific Ocean and the Tasman Sea. The region has around 3,200 km of dynamic coastline and encompasses three major harbours: the Kaipara, Manukau and Waitemata. Due to its location, much of the city's urban development and supporting infrastructure is concentrated in coastal areas and exposed to coastal processes such as erosion and inundation. These natural processes are considered hazards when they impact on things or locations of value. Climate change related to greenhouse gas emissions is contributing to rising sea levels, which have a range of impacts including increasing the frequency and magnitude of coastal hazard events. Auckland Council began developing a series of Shoreline Adaptation Plans (SAPs) in 2021. These area-based plans form the first step for the SAP programme in achieving a resilient future for Auckland's coasts. A more detailed discussion on the Shoreline Adaptation Plan Program can be found in Volume 1: Understanding Shoreline Adaptation Plans. Twenty SAPs make up Auckland's ~3200 km of coast as follows:

- Aotea Great Barrier and the Hauraki Gulf Islands
- Āwhitu
- Beachlands and East
- Central Auckland
- Highbrook to Whitford
- Kaipara Harbour Moana
- Manukau Harbour East
- Manukau Harbour North
- Manukau Harbour South
- Ōrākei to Tahuna Torea
- Pahurehure Inlet

- Pākiri to Matheson Bay
- Snells Beach to Ōrewa
- Tāmaki Estuary
- Ti Point to Sandspit
- Waiheke Island
- Waimanawa Little Shoal Bay mini SAP
- Waitematā Harbour West
- Weiti Estuary to Devonport Peninsula
- Whangaparāoa
- Whatipu to South Head

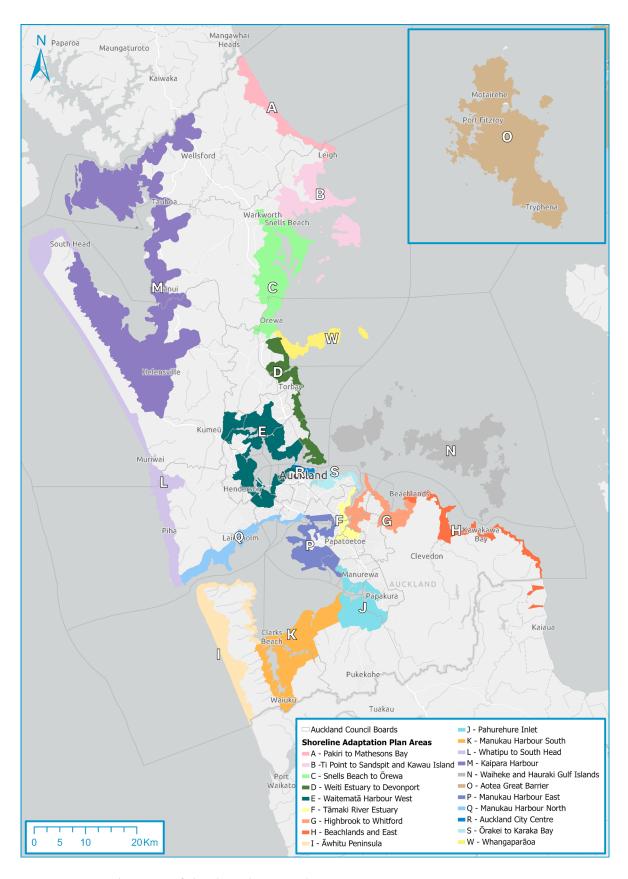
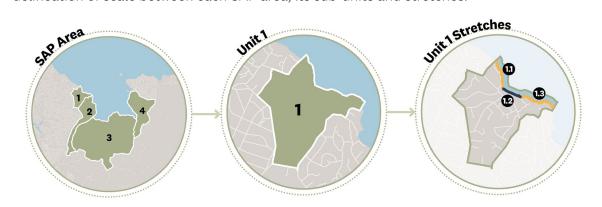


Figure 1-1: Regional Overview of Shoreline Adaptation Plans

SAP areas, units & stretches

Within each SAP area, the coastline has been broken up into coastal stretches based on coastal processes, Auckland Council-owned land and asset location, public land boundaries, and infrastructure considerations. Coastal stretches have been grouped into broader coastal unit areas. It is important to note here that coastal units and stretches do not strictly reflect the historical cultural boundaries which often extend over multiple units or coastal stretches. The figure below outlines the delineation of scale between each SAP area, its sub-units and stretches:



Climate change scenarios (timeframes for change)

For the SAPs, the following scenarios are used to evaluate how exposure to coastal inundation, erosion and instability and sea-level rise may impact coastal land and assets.

Table 1-1: Shoreline Adaptation Plan climate change scenarios

| | Sea-level Rise | Coastal Inundation | Coastal Erosion | Catchment flooding |
|-------------------------------|--|---|--|--|
| Low climate change | Present day (relative) sea levelUp to 0.5 m | 1% AEP storm surge event | Erosion & instability susceptibility line '2050' (RCP 4.5) includes consideration of 0.28 m of sea-level rise) | 1% AEP rain fall event + climate change projections for rainfall |
| Moderate climate change | 0.5 mUp to 1 m | 1% AEP storm surge event plus 0.5 m of sea-level rise | Erosion & instability susceptibility line '2080 RCP 4.5 and 8.5' Includes consideration of 0.55 m of sea-level rise | |
| High climate change | • 1.0 m • Up to 2 m | 1% AEP storm surge event plus 1.0 m, 1.5 and 2 m of sea-level rise | ASCIE 2130 (RCP8.5 and 8.5H+) Includes consideration of 1.18 m and up to 1.52 m of sea-level rise | |

Auckland Council's adaptation strategies

High-level adaptation strategies are developed for each coastal stretch under a low, moderate and high climate change scenario (inclusive of sea-level rise projections), with an indication of how these choices reflect the escalating risk, considerations of infrastructure providers, and the values and objectives of local iwi and the local community. Importantly, strategies outlined within each unit and subsequent coastal stretch apply only to the area of Auckland Council-owned land and assets along the coastal margin.

These recommended strategies do not apply to offshore activities (such as marine farms) or private property. Each high-level strategy provides flexibility for how it is applied to different assets. The value of the strategic approach is to ensure general continuity across asset management, acknowledging hazard risks and impacts of management of one asset class may impact on or have implications for others. Coastal adaptation strategies applied to each coastal stretch are described in further detail below:



No Action

- There are limited risks identified to Auckland Council land and assets as a result of coastal hazards and climate change.
- Natural coastal processes may be complementary to the natural coastal environment or its values.



Maintain

- Better decision-making today for Auckland Council land and assets.
- Actions manage risk, build resilience and support best practice coastal management outcomes.



Protect

- Uses and assets are maintained in their current location.
- Protection measures (mitigations) are required to manage risk, and nature-based solutions and hard protection may be utilised.



Adaptation Priority Area

- Auckland Council land and assets are exposed to hazard risk including the impacts of climate change.
- The value and importance of assets, complexity of the hazardscape and social, cultural
 or ecological values are present which requires further adaptation planning to determine
 a management response.

1

SAP Area introduction

The Waiheke and the Inner Gulf Islands SAP area is situated east of Tāmaki Makaurau / Auckland. The area forms part of the wider Hauraki Gulf / Tīkapa Moana including Waiheke Island's 133 km of coastline, along with neighbouring islands in the inner Hauraki Gulf. Inner gulf islands within this SAP area include the central islands of Rangitoto, Motutapu, Rākino, Motuihe/ Te Motu-a-Ihenga and Motukorea/ Browns Island and south eastern islands including Ponui and Rotoroa.

Waiheke Island is approximately 22 km east of Auckland city, a 40 minute ferry ride from the Auckland downtown ferry terminal, with vehicle ferry access from both central Auckland and Half Moon Bay. The primary urbanised areas are Oneroa, Onetangi and Ostend. These make up Waiheke Island's town centre. Alongside its resident population, the island is a popular holiday destination for both international and local visitors, who come to enjoy the area's world-famous wineries and pristine beaches.

Waiheke has an environmentally aware community that prides itself on being distinct from wider Auckland. Prior to amalgamation with the legacy Auckland City Council in 1989, the island had its own County Council.

Approximately 9,000 people live within the Waiheke and the Inner Gulf Islands SAP area (Statistics New Zealand, 2018). The settlements are located on the northwest of the island with the main residential areas at Oneroa Bay (Unit 1), Blackpool, Surfdale (Unit 1), Palm Beach (Unit 2), Ostend (Unit 7) Ōmiha/Rocky Bay (Unit 6), Onetangi (Unit 3) and more isolated eastern communities at Orapiu and Pearl Bay (Unit 5). Eastern areas support the key community infrastructure on Waiheke Island. The eastern section of Waiheke Island remains less densely populated, with most of the area categorised as productive land or regenerating forest and bush areas. With the high visitor numbers to the Island, a growing percentage of houses are holiday homes rather than permanent residences with a notable 'non-permanent' and visitor population (Auckland Council, 2016a). Rākino Island is located north west of Waiheke, serviced by passenger and vehicle ferry. Rākino supports a small resident and bach community. Facilities are limited, as is the road network. A community hall is the key social infrastructure, located at Sandy Bay. Motukōrea / Browns Island (Unit 8) is located offshore from the Tāmaki Estuary mouth. It is one of the best-preserved volcanic cones in Auckland and has few amenities, with no wharf or jetty; access can only be made by small vessels. Rotoroa Island located to the southeast of Waiheke Island is managed by a Trust with walking trails and public access provided. The balance of the inner islands are primarily in Department of Conservation (DOC), iwi and private ownership.



Figure 1-1: Waiheke and the Inner Gulf Islands SAP area overview

Development of these shoreline adaptation strategies is a starting point for dynamic adaptation planning for the Auckland region and also acknowledges Te tiro ā Māori ki tōna ake ao, a Māori worldview. This reflects the consideration of intergenerational time horizons as a fundamental part of addressing the impacts of climate change and sea-level rise. It also acknowledges the need to consider the tangible and intangible, the inter-relationship of all living and non-living things and the vital connection between people and te taiao (the natural environment) in which they live. The adaptive strategies (Section 4) which guide how coastal land and assets owned by Auckland Council will be sustainably managed have been informed by:

- Technical inputs including hazard risk, coastal hazard and climate change projections, ecological and policy framing (Section 2)
- Local iwi, acknowledging the cultural values and associations of iwi which centred on supporting local iwi objectives and aspirations (Section 3)
- The objectives of the local community, identified through community engagement and analysis of social context, set out in Section 3 (community feedback and social context)
- Advice from infrastructure and assets owners/managers (Auckland Council asset owners, Auckland Transport, Eke Panuku and Watercare Services).

For many stretches, a **no action** approach is recommended across low change, moderate, and high change scenarios to reflect private property and/ or areas of the coast that are Crown land, or areas

of coast with limited Council-owned land or assets. This includes the majority of the inner Hauraki Gulf Islands which are predominantly in Crown, iwi or private ownership.

Under the low climate changes scenario, the majority of coastline within the Waiheke SAP area can be managed through a **maintain** approach. This approach provides for the management of risk through design and location of assets and uses and maintenance of existing interventions within coastal areas (i.e. via localised realignment). It includes management of highly valued walking connections and beachfront areas at Oneroa, Surfdale, areas of Blackpool Beach, Little Oneroa, Palm Beach, and Onetangi. Maintain is also identified for Motukorea / Brown Island, a regional park.

Under a moderate climate change scenario, areas identified as **adaptation priority** include Surfdale, Matenga Point (The Esplanade), Blackpool, Matiatia Bay South, and key coastal walking connections between Matiatia and Owhanake. Additional priority areas include Oneroa Bay, Sandy Bay, Enclosure Bay, central Onetangi, Man O' War Bay, Kuakarau Bay (Mary Wilson Reserve), Anzac Bay, and the low-lying areas of Ostend—specifically Wharf Road, Ostend Domain, Waiheke Sports Club to Te Toki Reserve, and Pūtiki Reserve/Point. Under a high climate change scenario, further areas are identified as adaptation priority, including additional coastal walking connections at Park Point (Te Roreomaiaea), from Church Bay to Matiatia South, Oneroa East and Little Oneroa, Little Oneroa North, Newton Reserve, and Te Akau o Hine (Wairua and Te Whau Reserves/walkways). Low-lying coastal beaches at Palm Beach, Otakawhe Bay, and the co-managed Tawaipareira Reserve and Poukaraka Flats within Whakanewha Regional Park are also prioritised.

A **protect** approach is recommended for a limited number of stretches, typically where the coast has been modified and/ or there is critical infrastructure and transport connections (i.e. ferry transport connections) which will need to be maintained in their current location to allow for continued use, necessitating defence of the coastal edge and reflecting the important role of transport connections for the islands. Protect is identified in the low change scenario at Wharf Road and Enclosure Bay, and across all scenarios at Matiatia Wharf, Orapiu Wharf, the Causeway (Ostend), Kennedy Point Wharf, and for Rākino Wharf.

A range of adaptation strategies are recommended across this SAP area, discussed in further detail in Volume 3 and summarised in Section 4 of this report.

2

What's happening

This SAP report considers natural hazards relating to coastal inundation, coastal erosion and coastal land instability, catchment flooding and climate-change induced sea-level rise. Other hazards, including inland land instability, drought and wildfires, are not within the scope of this assessment. In addition, risks from low probability but high potential impact events (such as volcanic, tsunami, and earthquake events) are not included. Such hazards are managed through measures put in place by emergency management groups including Auckland Emergency Management (Civil Defence).

For further discussion regarding coastal hazards and climate change, as considered within the scope of the SAPs, refer to *Volume 1: Understanding the Shoreline Adaptation Plans*.

Coastal context

The Waiheke and the Inner Gulf Island coastlines covered within this SAP are significantly varied in terms of geomorphic character, exposure, and levels of modification.

For Waiheke, the northern-facing coastline is characterised by coastal cliffs, rocky foreshores and dynamic sandy beaches contained within headlands and shore platforms. This northern coastline is exposed to relatively open fetch distances from the direct north and receives both longer period swell events generated from some distance away, and more localised, shorter period storm waves generated by strong onshore winds. As a result, the northern coastline is relatively frequently exposed to significant wave heights of over 1 m, with less frequent, larger events generating significant wave heights of over 2 m. The northern coastline's sandy beaches are dynamic in response to coastal processes. Relatively low-vegetated dune systems are present in places, their growth restricted by adjacent development. These dunes are periodically impacted by storm-event driven erosion. While most of this coastline is unarmoured, in places coastal protection structures or armouring is present (Auckland Council, 2024e).

The remaining southern and eastern-facing coastlines of Waiheke Island are characterised by coastal cliffs, headlands and rocky foreshores, with shallow embayments that transition from intertidal flats to pocket beaches or areas of established mangroves. These sections of coastline are sheltered from longer period swell events but are frequently exposed to more localised shorter period wind waves, with fetch distances of up to approximately 15 km from the southwest. Low vessel wake waves, generated by ferry movements at the Matiatia and Kennedy Point ferry terminals, also arrive at the surrounding coastline. While there are some seawalls present, most of the reserve land along the southern and eastern coastlines is unarmoured, e.g. at Orapiu Wharf. In places, sections of unarmoured reserve along the Waiheke Island coastline are subject to ongoing, relatively slow rates of erosion. The coastal cliffs along the Waiheke Island coastline are also subject to slow, ongoing weathering and erosion, with occasional episodic failures or slips occurring.

The coastlines of the remaining islands within this SAP area are characterised by coastal cliffs and rocky foreshores, with some sandy or coarser sediment pocket beaches in places. These islands are exposed to a range of wave energies, from higher energy, long-period swell events from the north to southeast angles, to shorter period, more localised waves associated with onshore winds from all angles.

2.1 Natural hazards & climate change

Natural processes, such as coastal inundation and erosion, become hazards when they have the potential to negatively impact things of value. Tāmaki Makaurau / Auckland is frequently affected by natural hazard events and is likely to experience more frequent and severe events in the future due to climate change. Sea-level rise will increase the zone of exposure. For shoreline areas with assets and infrastructure, or cultural heritage sites near the coastal edge (including recreational and environmental areas), the impacts of coastal hazards may be significant.

Scenarios for change, or scenario-based climate projections (inclusive of sea-level rise) have been used to evaluate how the risk of coastal inundation, erosion and instability may impact the Waitematā Harbour west area, noting that projected conditions may occur sooner or later depending upon climate emissions.

A fulsome discussion around low, moderate and high scenarios for (climate) change and how each is considered to inform the selection of coastal adaptation pathways can be found in *Volume 1: Understanding the Shoreline Adaptation Plans.*

Coastal inundation (including sea-level rise)

Auckland Council's best available information on extreme sea-water levels in the Auckland region is presented in the report Auckland's exposure to coastal inundation by storm-tides and waves. The modelled spatial extent of potential inundation is published on Auckland Council's web-based portal GeoMaps(Natural hazards theme). A range of scenarios are mapped on this platform, spanning from the 5-year Average Recurrence Interval (ARI), corresponding to the 18% Annual Exceedance Probability (AEP), to the 100-year ARI event (1% AEP) to demonstrate Auckland's exposure to a range of present-day extreme events.

Projected coastal inundation for Waiheke Island is shown in Figure 2-1 below. The Blackpool coastline is significantly low-lying and will be increasingly impacted by coastal inundation with sea-level rise. Coastal inundation is identified as posing the greatest risk to Auckland Council-owned facilities in Units 6 and 7 and areas of Rākino Island in Unit 8 (refer to Volume 3, Unit 8 for inundation figures).

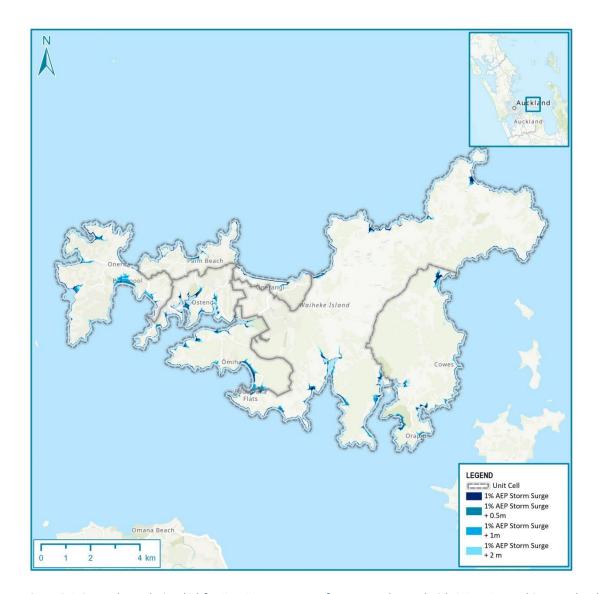


Figure 2-1: Coastal Inundation (CI) for 1% AEP storm surge for present day and with 0.5 m, 1 m and 2 m sea-level rise. Source: Waiheke Island Risk Assessment Technical Report, 2024, Tonkin & Taylor.

Coastal erosion (including sea-level rise)

The areas along the Waiheke and the Inner Gulf Island shorelines that are susceptible to coastal instability and erosion (ASCIE) for a range of climate change (sea-level rise) scenarios and periods are published on Auckland Council's GeoMaps (Natural hazards theme). The mapping is based on Auckland Council's technical report *Predicting Auckland's Exposure to Coastal Instability and Erosion*⁶.

Coastal erosion is the removal of the material forming the land due to natural processes, resulting in the coastline moving inland over time. It is a complex process caused by factors including wave energy, changes to sediment availability and land use and sea-level rise. Although some types of shorelines (e.g. beaches) may undergo short-term periods or episodes of erosion and then recover (i.e. build out again), other types of shorelines (e.g. cliffs) continuously erode with no cycle of recovery. Coastal instability is the movement of land (typically as a landslide) resulting from the loss of support caused by coastal erosion.

Areas Susceptible to Coastal Instability and Erosion (ASCIE) have been mapped using IPCC Assessment Report 5 (AR5) climate change scenarios (RCP emission trajectories), and LiDAR data. Further discussion of the use of hazard data and climate change scenarios is included in Volume 1. The ASCIEs are shown as a line, representing the distance (in metres) landward of the current coastline that is predicted to be susceptible to coastal instability and erosion, based on the modelled assumption of sea-level rise. The regional scale assessment of the ASCIE provides a conservative or 'first pass' appraisal of the natural hazard extent. A more detailed site-specific assessment is required to quantify exposure and risk of localised land or assets of significant value.

Areas with higher exposure to erosive forces are more at risk to coastal instability and erosion, where waves interact directly with cliff faces (e.g. no beach) or where cliffs are steep with little vegetation cover. As sea-level rise occurs, waves will interact with a larger portion of the cliff and slope instability and erosion along the coast are expected to increase.

Periodically, extreme storm events result in significant beach and dune erosion at the higher energy beaches of Oneroa, Palm Beach and Onetangi. While these beaches have been observed to recover naturally from such events, erosion of the adjacent reserve land can result with limited reserve buffer width remaining at Oneroa and Onetangi beaches before the adjacent roads.



Figure 2-2: Coastal Instability and erosion susceptibility for 2050, 2080 and 2130 considering RCP4.5 and RCP8.5 emission scenarios Source: Waiheke Island Risk Assessment Technical Report, 2024, Tonkin & Taylor

Catchment flooding and climate change

Flooding, because of extreme rainfall when the drainage capacity of the natural and/or built environment systems cannot cope, is a natural occurrence and is Auckland's most frequent natural hazard. The flooding event with the highest probabilistic risk is a 1 % AEP event (1:100 year ARI), because an event of such intensity is likely to result in more severe consequences.

Auckland Council's web-based portal GeoMaps (Natural hazards theme) displays the spatial extent of potential flooding. The maps, developed at catchment scale, indicate flood plains, flood prone areas, flood sensitive areas, and overland flow paths, which may be affected by a rainfall event that has a 1% AEP, assuming maximum probable development in the catchment (as per the AUP) and future climate change.

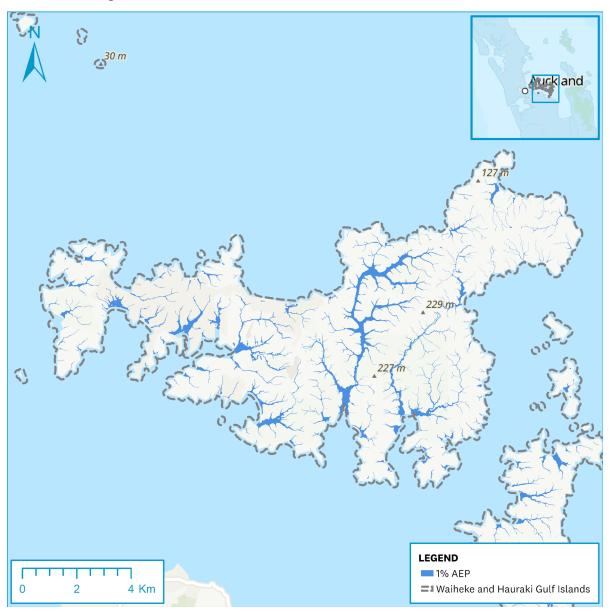


Figure 2-3: Catchment Flooding for the 1% AEP event. Source: Waiheke Island Risk Assessment Technical Report, 2024, Tonkin & Taylor

Other hazards

Auckland is affected by several other natural hazards that are not considered within this shoreline plan, including wildfire, volcanic activity, tsunami, earthquakes, severe wind (such as cyclones) and tornadoes. Refer to *Volume 1: Understanding of Shoreline Adaptation Plans* for a more detailed discussion of other hazards impacting Auckland.

Impacts from the 2023 and other coastal storm events (2017/18) have been felt across the SAP area. This includes loss of private dwellings due to coastal landslides and damage to the Rākino Hall at Sandy Bay on Rākino Island. Impacts and community experience of hazards are included at a unit scale in Volume 3.

Community feedback and input from the Local Board has also identified that land instability is of concern particularly in relation to road access between critical transport connections (wharf areas at Matiatia and Kennedy Point) and more remote areas of the island.

2.2 Current coastal management practices

An overview of existing current coastal management across the Waiheke and the Inner Gulf Island coastal areas is summarised in the table below and discussed in greater detail in *Volume 3:*Adaptation Strategies. Waiheke and the Inner Gulf Islands have an extensive coastal edge. Detailed discussion of the management interventions is included at a unit scale in Volume 3. A non-exhaustive summary of some of the key features is included in the table below:



Flood control or management

- Operational monitoring and options assessment of the stormwater outlet adjacent to Tui Street discharging onto Blackpool Beach due to occasional blocking by beach sediment.
- Management of stream channels has been undertaken within Unit 7 in relation to the Tawaipareira Reserve.



Coastal protection

- Rock masonry seawall and rock revetment armours the coastline of Blackpool Beach, The Esplanade at Blackpool, and Surfdale Beach.
- Sections of seawall armour the reserve at Little Oneroa.
- A vertical concrete seawall armours the reserve edge at Enclosure Bay.
- Onetangi Beach is protected by gabion basket to the east and a backstop rock armouring along the edge of The Strand (buried behind the dunes). Rope and bollard fencing has been installed for dune protection and to define pedestrian accessways.
- Rock revetments and seawall structures armour the coastal edge at Orapiu.
- A rock seawall protects the vehicle parking and foreshore access area of Ōmiha Beach.
- Sections of Kennedy Point Reserve, Wharf Road Esplanade Reserve, Ostend Domain ('The Causeway'), and Anzac Bay are protected by coastal armouring.



Nature-based options

- Auckland Council supported community dune planting is seasonally undertaken at Palm Beach Reserve and Onetangi Beach.
- Targeted planting has been undertaken on the bank between The Strand and the dune towards central Onetangi Beach to help define pedestrian beach accessways.
- Planting has been previously undertaken along the coastal edge at Whakanewha Regional Park to maintain coastal buffer.



Sand replenishment/ soft or nature-based engineering

 A sand transfer resource consent was granted to the Palm Beach Preservation Society after an extreme storm event in 2018, to enable dune replenishment at Palm Beach Reserve to be undertaken in the event that significant dune erosion is triggered by a storm event.

2.3 Risk assessment

The SAP coastal risk assessment provides a regionally consistent method to quantify risk to Auckland Council land and assets over three climate change scenarios. This risk assessment demonstrates how the risk to these assets will increase over time with projected sea-level rise. To read more about the risk assessment please refer to *Volume 1: Understanding the Shoreline Adaptation Plans*.

The risk assessment results are summarised below, noting that these risk results were considered consistent for the topography, geology, and land use within the SAP area.

The table below lists the asset groupings for the risk assessment and a description of what they include.

Table 2-1: Risk assessment asset groupings and descriptions

| Grouping | Description | | | | |
|---------------------------------|---|--|--|--|--|
| Council-owned land | Park and reserve land area. | | | | |
| Council community facilities | Carparks, accessways, paths and tracks, ramps, seawalls, wharves and jetties, community buildings and park amenities. | | | | |
| Culture and heritage | Cultural heritage points, mana whenua areas of significance and sites of historical heritage significance. | | | | |
| Environmental | Areas of ecological significance (SEA) based on the Auckland Unitary Plan. | | | | |
| Transport infrastructure | Roads, bridges, ferry terminals and train stations. | | | | |
| Water assets and infrastructure | Publicly-owned three waters infrastructure. | | | | |

For the Waiheke Island SAP area (Tonkin + Taylor Ltd, 2024), these risk results were considered consistent for the topography, geology, and land use within the SAP area. This is represented in the table below and at a unit scale in Volume 3.

Table 2-2: Risk results for the Waiheke Island SAP area refer to volume 3 Unit 8 for risk information for the inner gulf islands.

| | | Council-owned land | | Council Community facilities | | Transport infrastructure | | | Water infrastructure | | | | |
|------|------------|--------------------|----------|------------------------------|-----------|--------------------------|-----------|-----------|----------------------|-----------|----------|----------|-----------|
| Unit | Hazard | Short | Medium | Long | Short | Medium | Long | Short | Medium | Long | Short | Medium | Long |
| 1 | Erosion | High | High | Very High | High | High | High | High | High | High | High | High | Very High |
| | Inundation | Moderate | High | High | High | High | Very High | Very High | Very High | Very High | Moderate | High | Very High |
| 2 | Erosion | Moderate | Moderate | Moderate | Low | Low | Low | Low | Low | Moderate | Low | Low | Moderate |
| | Inundation | Low | Low | Moderate | Low | Low | Moderate | Low | Low | Low | Very Low | Low | Low |
| 3 | Erosion | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate | High | High | High | High | High | High |
| | Inundation | Low | Low | Low | Moderate | Moderate | Moderate | Low | Low | Low | Low | Low | Low |
| 4 | Erosion | Low | Low | Low | Very Low | Very Low | Very Low | Moderate | Moderate | Moderate | Very Low | Very Low | Very Low |
| | Inundation | Low | Low | Low | Very Low | Very Low | Very Low | Low | Low | Low | Very Low | Very Low | Very Low |
| 5 | Erosion | High | High | High | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate | Very Low | Very Low | Very Low |
| | Inundation | Moderate | Moderate | Moderate | Moderate | Moderate | Moderate | Low | Low | Moderate | Very Low | Very Low | Very Low |
| 6 | Erosion | High | High | High | Moderate | Moderate | High | Very High | Very High | Very High | Very Low | Very Low | Very Low |
| | Inundation | High | High | High | High | Very High | Very High | Low | Very High | Very High | Very Low | Very Low | Very Low |
| 7 | Erosion | High | High | High | Very High | Very High | Very High | Very High | Very High | Very High | Moderate | Moderate | Moderate |
| | Inundation | Moderate | High | High | Very High | Very High | Very High | Moderate | High | High | Low | Low | Low |

3 What matters most?



3.1 Auckland Council land and assets

Auckland's SAPs focus on coastal land and assets owned by Auckland Council. These include, but are not limited to, coastal reserves, defence structures, public facilities, roads, and water infrastructure. This also encompasses infrastructure located within coastal areas, whether situated on, beneath, or adjacent to Auckland Council land or on private land.

While the SAPs take into account third-party infrastructure near the coast, as well as culturally and ecologically significant areas, they are not specifically aimed at managing rick to these assets or values. However, the strategies and associated guidance may reference these connections where relevant, particularly at the level of individual shoreline units or stretches.

The SAPs were developed with input from key stakeholder partners including Auckland Transport, Watercare Services, and Eke Panuku/ Auckland Development office. Council-owned land is primarily identified through Auckland Council's GIS data; in some areas there are landholdings and facilities which involve numerous asset owners and third party infrastructure providers with different ownership, management, or interests.

The Waiheke and the Inner Gulf Islands SAP area includes a wide range of Auckland Council-owned assets and land. These include reserves, roads, boat ramps, playgrounds, public toilets, campgrounds and numerous Auckland Council or Auckland Council-controlled organisation (CCO)-owned buildings.

Over **665** ha of park/ reserve land, including **2** regional parks

Approx **105**Auckland
Council-owned
buildings &
wharves

1 closed landfill

Of these assets, those that are along the coastline include:

- Facilities to support the access to, and use and enjoyment of, local park areas and beach reserves including parking areas, toilets, playgrounds, and seating. These are distributed across all units in the SAP area but are most highly concentrated in Units 1, 2, 3, 6 and 7.
- Approximately 70 buildings (including accommodation, community buildings such as sports clubs, toilet blocks, maintenance sheds, etc.). These are distributed across all units (except Unit 4) in the SAP area and are more prevalent in Units 1, 6, and 7.
- Whakanewha Regional Park and campground in Unit 6, Motukorea / Browns Island Regional Park located in Unit 8
- Large multi-use community reserves such as Waiheke Sports Park/ Rangihoua (Unit 6) Ostend Domain (Unit 7) and Waiheke Island Reserve at Matiatia (Unit 1)

The presence of Auckland Council land and assets located within the Waiheke and the Inner Gulf Islands SAP area are identified in a non-exhaustive manner in each unit and stretch as relevant to the shoreline adaptation strategies in Volume 3.



Auckland Council land and parks

There are approximately 125 local parks and reserves within this SAP area. Many are located along the coastline and most are small to medium in size. There are two regional parks in this SAP area: Motukōrea / Browns Island Regional Park and Whakanewha. Key elements for these reserves and parks include their significant recreational, cultural and natural values. Several reserves have areas below the mean high water springs and therefore make up part of the Common Marine Coastal Area divested from the reserve under Section 11 of the Marine and Coastal (Takutai Moana) Area Act 2011.

Where relevant, these parks and reserves have been reflected at the unit scale in Volume 3, with notable ones captured below (non-exhaustive list).

- Anzac Bay Reserve
- Anzac Reserve
- Awaawaroa Road Reserve
- Awaawaroa Wetland Reserve
- Beatty Reserve
- Blackpool Cemetery Reserve
- Blackpool Park
- Burrell South Reserve
- Church Bay Esplanade Reserve
- Crescent Road East
- Goodwin North Reserve
- Hill Road
- Kennedy Point Reserve

- Kennedy Reserve
- Kennedy Point Reserve
- Korora Road Reserve
- Little Oneroa Reserve
- Makora South Reserve
- Mitchell Reserve
- Muritai Road Reserve
- Natzka Road Foreshore
- Newton Reserve
- O'Brien Road
- Oneroa Beach Reserve
- Onetangi Road
- Ostend Domain
- Owhanake Reserve
- Palm Beach Reserve
- Park Road Reserve

- Piritaha Esplanade Reserve
- Putiki Reserve
- Sandy Bay Esplanade Reserve
- Sea View Esplanade
- Stony Batter Reserve

Reserve A

- Surfdale Hall
- Reserve & Foreshore Tawaipareira
- Reserve (Closed Landfill)
- Te Awaawa O Makoha Te Huruhi Bay Reserve

- Te Uri Karaka Te Waera Reserve
- Te Whau Road Bridleway
- The Esplanade Blackpool
- Waiheke Island Reserve
- Wharoa Basin
- Wharf Reserve
- Wilma Foreshore Reserve
- Woodside Bay Reserve

In addition to the parks and reserve listed above, the Waiheke Island and Inner Gulf Islands SAP coastline is known for beautiful white sand beaches and dramatic cliffs and coastlines which interact with the Hauraki Gulf. These landscapes serve as dynamic examples of coastal processes with a mixture of untouched wilderness and natural beauty. Key coastal areas include:

- Administration Bay
- Blackpool
- Home Bay
- Islington Bay
- Kennedy Point

- Little Oneroa Beach
- McKenzie Bay
- Man o War Bay

Matiatia Bay

- Garden Bay
- Oneroa Bay
 - Onetangi Beach
 - Orapiu Bay
 - Palm Beach
 - Peachgrove Bay
- Sandy Bay
- Shelley Beach
- Surfdale
- West Bay
- Woody Bay

This is not an exhaustive list and smaller, less accessible beaches/areas located along this coastline have not been included. Outside of the Council-owned or managed reserves, a proportion of this SAP area is protected as reserve or conservation land under management by DOC. Included in this

category are Rangitoto, Motuihe Island / Te Motu-a-Ihenga, and all of which are popular with visitors for nature-based activities such as hiking and bird watching. DOC also co-manages Motutapu (with Ngāi Tai ki Tāmaki).



Co- governed parks

Rangihoua and Tawaipareira Reserves on Waiheke Island are co-managed by the Rangihoua and Tawaipareira Management Committee, which oversees the activities and management of Rangihoua maunga and surrounding area, and the Tawaipareira Reserve. This committee is made up of members from the Ngāti Paoa Iwi Trust (mana whenua) and local board members from the Waiheke Local Board.

The Rangihoua and Tawaipareira Management Committee is responsible for:

- All management decisions for the area
- Ensuring the area is managed according to:
 - Ngāti Paoa tikanga (customs)
 - o District Plans and the Unitary Plan
 - Reserve Management Plans
- Proposing any works or activities to help protect or enhance the area according to the Reserves Act 1977.

The Rangihoua and Tawaipareira Management Committee¹ also oversee the Rangihoua maunga (the Rangihoua Management Area). Rangihoua Management Area is defined as the Rangihoua Maunga and surrounding Landscape Amenity Area as shown in the Auckland Council District Plan - Hauraki Gulf Islands Section - Operative 2013.



Water infrastructure

Centralised, Council-owned water infrastructure systems/ assets on Waiheke Island and the Inner Gulf Islands are limited in scale (with the Owhanake wastewater treatment plant on Waiheke being the primary Watercare-managed facility).

Residents and businesses primarily depend on rainwater harvesting from rooftops, supplemented by water sourced from bores, and springs, along with private systems for managing stormwater (i.e. onsite drainage solutions). With limited reticulated water services to the islands, the importance of water conservation and self-sufficiency is emphasised by locals.

Stormwater networks are present in relation to roading assets and larger impervious land uses such as carparking areas (Ostend and Matiatia) and the modification of water courses, e.g. at Tawaipareira Reserve (Unit 7) and Third Reserve (Unit 3). Stormwater networks generally discharge to the coast or inner estuarine areas.

https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/kaupapa-maori/co-management-arrangements/Pages/rangihoua-tawaipareira-management-committee.aspx

Where water infrastructure is present, this is reflected at a localised scale in Volume 3, with key assets being primarily located in Units 1, 3 & 6 (Oneroa Waiheke pump station, Heathy Waters bore pump stations, treatment plant sheds, Motukorea/Browns Island pump shed and pump stations).



Facilities and structures

Auckland Council-owned infrastructure and assets within this SAP area predominantly consists of walking tracks, parks and sports fields, smaller esplanade reserves, walking tracks, roads, community buildings (such as sports clubs and campground facilities), public amenity buildings, and a range of coastal infrastructure including wharves and boat ramps. These are mainly distributed across all Units in the SAP area but are most highly concentrated in Units 1, 6, and 7.

Facilities and structures distributed throughout the Waiheke and the Inner Gulf Islands include, but are not limited to the following, noting this has also been reflected in Volume 3:

- Blackpool School Community Hall
- Citizens Advice Bureau
- Motukorea/Browns Island:
 Bunk House
- Ocean View Road 'Harbourmasters'
- Rākino Island Community Hall & Toilets - Rākino Community Hall (closed)
- Surfdale Community Hall
- Waiheke Island Artworks
- Waiheke Library
- Waiheke Lions Clubrooms
- Waiheke Sea Scouts (Councilowned building leased to the community/ tenant)
- Waiheke Sports Club (Ostend Domain)
- Waiheke Transfer Station Recovery Shop (Council- owned building leased to the community/ tenant)



Roads and access

The primary access to Waiheke and the Inner Gulf Islands is via ferry transportation from Auckland. For Waiheke Island, the main passenger terminal is located at Matiatia Bay, with ferries running frequently from the Auckland city centre and Devonport (Fullers Group Limited, 2024b). The Matiatia ferry terminal is a short drive to Waiheke Island town centre, with multiple bus services running from the terminal. A second ferry terminal is located on Kennedy Point. This terminal is the only car ferry service on the Island with 4-7 services running a day from the Auckland city centre and Half Moon Bay (Sealink New Zealand Limited, 2024). Additional and often season ferry services operate to Orapiu wharf and the private wharf located at Man O' War Bay.

Passenger ferry services are also available to Rangitoto, Motutapu, Motuihi, Rotoroa and Rākino, noting vehicle ferries also operate to Rākino. Many of these services leave from downtown Auckland. Rākino services travel from Auckland via Half Moon Bay and Gulf Harbour respectively (Fullers360, 2024; Explore Group, 2024; SeaLink, 2024). Many islands are also accessible by air. Waiheke has a private airfield and private helicopter landing facilities with emergency medical transport utilising landing areas at the Onetangi Sport parks (Rangihoua Unit 6).

The eastern section of Waiheke Island is less densely populated, with most of the area categorised as productive land or regenerating slope, forest and bush areas. The area is connected by a 'loop' road (and associated connections) which is gravel in parts. This roading connection provides access to houses and vineyards/restaurants and other tourist destinations (Stony Batter). The southwestern area has small destination bays such as Arran Bay and Connells Bay which hold popular, secluded holiday baches alongside attractions like the Connells Bay Sculpture Park.

Large beaches including Oneroa on Waiheke Island are easily accessible through multiple roads and walkways. These all have bus routes that frequently stop nearby. There are also multiple private tour companies running bus and biking services connecting the popular destinations such as wineries, restaurants and tourist attractions. Smaller bays such as Sandy Bay and Enclosure Bay in Unit 2, located between Oneroa and Onetangi, generally have reasonable access via single roads

Key road connections across the Waiheke and the Inner Gulf Islands SAP area are identified below (non- exhaustive list):

- Anzac Road
- Beach Parade and local road network around Blackpool and Surfdale areas
- Causeway Road
- Donald Bruce Road
- First Avenue
- Fourth Avenue
- Goodwin Avenue
- Gordons Road

- Great Barrier Road Korora Road
- Le Roy Road
- Man O'War Bay Road
- Natzka Road
- Newton Road
- Ocean View Road
- O'Brien Road
- Onetangi Road
- Orapiu Road
- Ostend Road

- Second Avenue
- Seventh Avenue
- Sixth Avenue
- South Pacific Road (Rākino)
- The Esplanade
- The Strand
- Third Avenue
- Waiheke Road
- Wharf Road



Harbour access

The Waiheke and the Inner Gulf Islands SAP area features a variety of parks, reserves, beaches and social infrastructure situated close to the coastline. This includes boating facilities, moorings, sports and recreation clubs and playgrounds. While not all amenities are owned or managed by Auckland Council, they play a role in supporting social activities and emergency responses in the area.

Coastal access is provided through the following boat ramps/ coastal infrastructure (non-exhaustive list):

- Kennedy Point Reserve boat ramp
- Kennedy Point Wharf/ Ferry Terminal
- Little Oneroa boat ramp
- Man o' War Bay Wharf (private wharf)
- Matiatia Wharf new (south)
- Matiatia Wharf old (north)
- Moa Ave boat ramp
- Ōmiha boat ramp
- Orapiu Wharf
- Wharf Road boat ramp
- Pūtiki Reserve boat ramp

Matiatia Wharf on Waiheke island is Auckland's second busiest wharf (Auckland Transport, 2025). It is a key connection point for both visitors and locals. Much of the employment on Waiheke Island is related to the island's visitor economy and with approximately 30% of the resident Waiheke Island population commuting into Auckland for work; the Matiatia wharf is a critical lifeline for the community. Cyclone Gabrielle temporarily cut off all ferry services to and from the Island, with power outages at the Matiatia Ferry Terminal and slips causing road closures.



Access to the coast

There are a range of walking paths throughout the SAP area, which are used for recreation as well as to facilitate access to the coast. Popular walking tracks include Oneroa Art Path, Rangihoua Wetland Path and Whakanewha Forest Path. The Te Ara Hura walking trail is a popular walking network which utilised many of the walking connections identified below to create a route which enables walking access around the full Waiheke Island area. There are walking tracks in all SAP units. Units 1 (Te Huruhi Bay Oneroa Bay), 3 (Onetangi Bay) and 6 (Ōmiha Whakanewha / Rocky Bay to Rangihoua Wetland), have the highest concentration.

In further detail, key paths include (non-exhaustive list, noting walking trails in this SAP area are also reflected per unit in Volume 3):

- Ballysaggart Track
- Burrell Ocean View Walkway
- Esplanade Path
- Cory Road to Miro Road Track
- Fishermans Rock Path
- Garratt Road Accessway
- Matiatia Headland Path
- Matiatia to Oneroa Forest Path
- McKenzie Reserve Path
- Okahuiti Path
- Okoka Beach Path
- Oneroa Art Path

- Onetangi Beach Path
- Onetangi Hidden Gems Path
- Orapiu to Pearl Bay Path
- Palm Beach Lookout Path
- Poukaraka Pā Path
- Rangihoua Wetland Path
- Rocky Bay Beachfront Path
- Rocky Bay Roads Path
- Seventh Avenue Reserve Accessway
- Te Toki Circuit Path
- The Strand Reserve Accessway

- Three Beaches Pathway
- Te Aroha Reserve Accessway
- Wharf Road Walkway
- Stanimoroff Walkway
- Surfdale Reserve Accessway
- Wharf Road Wilma Road Walkway
- Waikare Reserve Accessway
- Water Right Gully Walkway
- Whakanewha Forest Path

Te Ao Māori

The diverse coastlines, estuaries, catchments and harbours of Tāmaki Makaurau hold great spiritual and cultural value to the hapū and iwi of Tāmaki Makaurau who not only live within these areas but are also kaitiaki (guardians, protectors, stewards) of these spaces. Acknowledging intrinsic ancestral connections to lands, water, wāhi tapu (sacred areas) and other taonga (treasures) dispersed in remnants around the coast of Tāmaki Makaurau, engagement and collaboration with Iwi Mana Whenua of Tāmaki Makaurau is a vital step in establishing partnership through the creation and implementation of SAP area plans under the SAP programme. Auckland Council's commitment to growing and supporting partnerships was developed at the programme's inception in 2021 and will continue beyond the completion of these SAP area plans. Programme principles underpinning the development of each SAP area plan are discussed in greater detail in Volume 1: Understanding the Shoreline Adaptation Plans, along with engagement processes underpinning Mana Whenua engagement regionally and locally.

Context and information







The cultural history and context of the area, especially the integration of matauranga Maori and Te Ao Māori principles, has been crucial to the development of the Waiheke Island SAP. To inform engagement with iwi who have an association with the area which this SAP applies to, initial research has been undertaken, using publicly available information, including that which is identified on the AUP:OP maps, within the Cultural Heritage Inventory, legacy parks planning documents and research from other publicly available iwi planning documents. Overarching matters considered within the scope of Waiheke and the Inner Hauraki Gulf Island SAP, along with the wider programme, are discussed in further detail in Volume 1: Understanding the Shoreline Adaptation Plans.

It is important to note that coastal units and stretches reflected in the Waiheke and the Inner Hauraki Gulf Island SAP have been developed to capture Auckland Council asset units and do not reflect the historical cultural boundaries which often extend over multiple units or coastal stretches. Therefore, while all attempts have been made to align with the identified coastal units, the cultural commentary provided throughout this SAP often extends across multiple areas. Where possible, the names of these stretches and units have also been updated to reflect the traditional names.

3.2 Working together- Local iwi engagement

For the Waiheke and the Inner Hauraki Gulf Island SAP, iwi groups were identified using several tools including treaty settlement documents, statutory acknowledgment areas and rohe overlays (identified using Auckland Council GeoMaps). Following identification, iwi were formally approached via a letter extending an invitation to engage on this particular SAP. Where no response was received following provision of the letters, email follow ups were provided restating the invitation to engage. Ongoing Updates on the SAP programme are also provided through the I&ES Mana Whenua Forum, with an overview on the upcoming SAP areas and the extension of an invitation to engage if other parties wished to be involved in the development of upcoming SAP area plans.

In no particular order of relevance, those who whakapapa to the area and/or have expressed an interest in the Waiheke Island & the Inner Hauraki Gulf Island SAP kaupapa includes:

- Ngāti Paoa
- Ngāi Tai ki Tāmaki
- Ngaati Whanaunga
- Ngāti Tamaterā
- Ngāti Maru

- Ngāti Whātua Ōrākei
- Te Patukirikiri
- Marutūāhu Collective (Ngāti Maru, Ngaati Whanaunga, Ngāti Paoa, Ngāti Tamaterā, Te Patukirikiri (of Kapetaua))

Throughout the SAP development process, Auckland Council has been engaging with iwi representatives to develop individual iwi authored 'Cultural Statements' and/or cultural commentary to inform the understanding of cultural values, interests and associations with the coastal environment and the adjoining whenua. The Cultural Statements can guide the selection of adaptation approaches for each of the stretches set out within this SAP and are also to be held by iwi and used as they might require when addressing and commenting on other related kaupapa.

Importantly, we recognise each iwi own and have control over their respective mātauranga and thus all cultural narrative (in this SAP and the supporting 'Cultural Statements') are safeguarded and subject to a disclaimer to protect the intellectual property of each iwi. The same applies for all cultural kōrero, values and mātauranga embedded within this report. Following publication of this report, each iwi has communicated that they will direct how their respective mātauranga and aspirations should be shared through ongoing and continuous engagement as project partners in the implementation of the SAPs. A partnership approach with iwi must be applied to coastal management within each specific coastal stretch and across the entire Tāmaki Makaurau coastline. Failure to do so has the potential to result in significant adverse cultural impacts and Auckland Council not fulfilling its obligations to iwi as Treaty Partners.

Local iwi aspirations, values and principles

Holding statement:

All Auckland Council Shoreline Adaptation Plans are considered living documents, noting that the SAP team is committed to ensuring that the values, aspirations and outcomes sought by Mana Whenua of Tāmaki Makaurau are represented in each plan and supported throughout implementation. The SAP team will continue to work with and support iwi to respond to the SAP programme and include linkages to this cultural narrative in further revisions of the SAP reports within the rohe of respective iwi authorities.

Acknowledging the importance of protecting cultural narratives and sustaining ongoing, lasting relationships with iwi Mana Whenua for the Waiheke and the Inner Gulf Islands Shoreline Adaptation Plan, the 'Holding Statement' reflected above has been created. This serves as a reminder that this document, and any others which are developed as a result of this document, may be revised to incorporate additional cultural context provided by iwi when they choose to share it.

In addition, for each coastal stretch, iwi may share additional mātauranga through the ongoing engagement to occur as part of the implementation of the approaches set out in Section 4.0 and Volume 3. Reflected in the sections below, some iwi have chosen to share some high-level mātauranga ā iwi values that are fundamental to ensuring that coastal management is undertaken in a way that is respectful of the cultural associations of iwi and supports the cultural values present within each of these areas. Beyond those which are identified in the Auckland Unitary Plan, the specific location of sites of cultural significance may be protected by iwi and not shared. In addition, some of these sites, due to their proximity to the coast, may sit within private ownership which has resulted in iwi being excluded from these areas, with iwi unable to protect them and exercise the appropriate tikanga.

Where Auckland Council has an interest and/or assets within these areas, it is vitally important for direct engagement to be undertaken with iwi so that cultural impacts can be identified and avoided; Auckland Council is committed to the provision of ongoing engagement with iwi as project partners through the full extent of the SAP programme.

Except where otherwise stated below, to ensure that engagement with iwi in the Waiheke and the Inner Gulf Islands SAP is effective, meaningful and aligned with the principles of Te Tiriti o Waitangi / Treaty of Waitangi, the following guidelines set out below should be followed for each stage of the SAP programme.

| SAP Development Phase | • | Local iwi who whakapapa to the area and have a recognised interest need to be provided the opportunity to review and respond to the risks and adaptation approaches identified by Council in each of the relevant SAP Plans. |
|--------------------------------|---|---|
| Programming Phase | • | Local iwi who whakapapa to the area and have a recognised interest wish to be engaged with to provide cultural input on how the SAP kaupapa will be programmed and prioritised. |
| Design and Consenting Phase | • | For any tranche-specific implementation of the proposed adaptation approaches, local iwi who whakapapa to the area and have a recognised interest wish to be involved in the concept and detailed design of any approach. |
| Implementation Phase | • | A role in the consent design and post consent process to provide for and enable the kaitiaki responsibilities of local iwi who whakapapa to the area and have a recognised interest in the Waiheke & Inner Hauraki Gulf Island SAP. |

Marutūahu Collective

The Marutūāhu Confederation (collective) is comprised of Ngāti Maru, Ngāti Pāoa, Ngāti Tamaterā, Ngaati Whanaunga and Te Patukirikiri (of Kapetaua). The interests across the Marutūāhu iwi extend from Mahurangi in the north to the Bay of Plenty in the south 2 noting that the individual rohe boundaries of each iwi entity within this confederation may fluctuate in terms of areas of interest.

Responding to matters raised during individual hui over 2024- 2025, engagement has been undertaken with the Marutūāhu as a collective, with a statement in response to the SAP programme anticipated.

The intention is that this statement will set out a response to the SAP program, an overview of customary acknowledgements and historical accounts, as well as expectations around engagement and aspirations for the Marutūāhu confederation in relation to coastal management across Tāmaki Makaurau.

Acknowledging the cultural footprint of the Marutūāhu confederation as set out in the Marutūāhu Collective Deed of Settlement Summary², the SAP team will continue to work collaboratively with the Gulf Islands SAP, as well as other SAPs of interest. The collective statement will also aim to enhance and provide vital context to the individual contributions each iwi has and will make to the SAP programme.

Ngāti Tamaterā

The rohe of Ngāti Tamaterā is vast and extends from the Kaimai Ranges near Tauranga Moana in the south, to Warkworth in the northwest and the Coromandel Peninsula and Aotea (Great Barrier Island) to the east³.

The SAP team is currently working with Ngāti Tamaterā on various SAP plans within their rohe, in with the aim of gathering Ngāti Tamaterā feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waiheke and the Inner Gulf Islands SAP, noting that Ngāti Tamaterā has expressed interest in specific aspects of this SAP that relate to their rohe.

Multiple hui have been undertaken and a cultural statement in response to the SAP programme is anticipated. The SAP team will continue to work collaboratively with Ngāti Tamaterā to input into the implementation of the SAPs for the Waiheke and the Inner Gulf Islands area and other SAPs of interest within their rohe. While this statement is being developed, this section acts as a 'Holding Statement' on behalf of Ngāti Tamaterā.

Ngāti Tamaterā Aspirations:

For Ngāti Tamaterā, Te Moananui-ā-toi captures the wider Hauraki Gulf and surrounding areas of the moana and includes the Waitematā Harbour. The view of Ngāti Tamaterā is that the Auckland Council's SAP programme needs to acknowledge the connection of the entirety of Te Moananui-ā-Toi and its impacts on the shoreline and whenua within the SAP programme boundary of Tāmaki Makaurau.

The Ngāti Tamaterā Environmental Management Plan identifies their overarching goals and aspirations. These goals and aspirations are summarised below and include:

https://www.whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Marutuahu/Marutuahu-Collective-Redress-Deed-Settlement-Summary.pdf

³ https://www.tkm.govt.nz/iwi/ngati-tamatera/

- <u>Kaitiakitanga and Tino Rangatiratanga</u>: Uphold and exercise guardianship and selfdetermination over land, water, and sacred sites in alignment with Ngāti Tamaterā tikanga and kawa.
- <u>Sustainability and Environmental Protection</u>: Support long-term sustainable practices that protect and enhance the mauri (life force) of water, land, and biodiversity for future generations.
- <u>Uphold the Treaty of Waitangi</u>: Ensure that the principles of Te Tiriti o Waitangi are upheld in all resource management decisions affecting their rohe.
- <u>Active Participation and Partnerships</u>: Establish and maintain partnerships with external parties responsible for resource management within the Tamaterā rohe.
- <u>Preservation of Mātauranga (Knowledge)</u>: Safeguard and promote traditional knowledge held by kaitiaki for the benefit of Ngāti Tamaterā.
- Resilience to Natural Hazards: Ensure land use planning avoids significant risk, and that Ngāti Tamaterā are prepared for, and resilient to, natural hazards while maintaining environmental integrity.

Ngāti Tamaterā Engagement Statement:

Ngāti Tamaterā view the partnership with Auckland Council and other iwi as being crucial in advancing our collective goals and advocating for the needs and aspirations of our people. The following principles support best practice engagement and consultation with Ngāti Tamaterā:

- Kanohi ki te kanohi face-to-face meetings
- Upholding Te Tiriti o Waitangi principles of partnership, mutual respect and good faith
- Early engagement on issues of known mutual interest
- A commitment to open and honest and transparent communication
- Operating from a 'no surprises' approach
- Acknowledging that the relationship is evolving and not prescribed
- Respecting the independence of the parties and their respective individual mandates, roles and responsibilities
- Recognising and acknowledging that both parties benefit from working together and sharing knowledge and expertise
- Committing to good faith engagement at the highest level.

Ngāti Pāoa

The SAP team is currently working with Ngāti Pāoa on various SAP plans within their rohe, with the aim of gathering their feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waiheke and the Inner Gulf Islands SAP, noting that Ngāti Pāoa has expressed interest in specific aspects of the SAP that relate to their rohe.

Ngāti Paoa signed a Deed of Settlement with The Crown in March 2021 and the Ngāti Paoa Claims Settlement Bill, was passed in 2023.

This settlement addresses Crown actions and omissions that caused immense harm to Ngāti Paoa, including land confiscation, the effects of native land laws, and Crown purchasing that left the iwi

virtually landless. The settlement provides a Crown apology, cultural redress, and financial and commercial redress.

Council must ensure that sites specific to settlements are acknowledged accordingly when the SAPs are being implemented and we will continue to engage with Ngāti Paoa to determine their aspirations and needs when implementing the SAPs in Ngāti Paoa areas on interest.

Ngāti Paoa also have interest in the following Collective Settlements:

- <u>Ngā Mana Whenua o Tāmaki Makaurau Collective:</u> Ngāti Paoa is part of this collective, which addresses shared interests in the Auckland region.
- <u>Pare Hauraki Collective:</u> The iwi is a member of this collective of 12 iwi with interests in the Hauraki region.
- Marutūāhu Collective: Ngāti Paoa is one of the Marutūāhu iwi (alongside Ngāti Maru, Ngāti Tamaterā, Ngaati Whanaunga, and Te Patukirikiri) that signed a collective redress deed for shared interests. Several hui have been undertaken with Ngāti Paoa and we will continue to work with them to ensure that their perspective and aspirations are met when SAP implementation begins in their areas of interest.

Te Patukirikiri

The SAP team is currently working with Te Patukirikiri on various SAP plans within their rohe, with the aim of gathering Te Patukirikiri feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waiheke and the Inner Gulf Islands SAP, noting that Te Patukirikiri has expressed interest in specific aspects of this SAP that relate to their rohe.

Multiple hui have been undertaken and a cultural statement in response to the SAP programme is anticipated. The SAP team will continue to work collaboratively with Te Patukirikiri to input into the implementation of the SAPs for the Waiheke and the Inner Gulf Islands area and other SAPs of interest within their rohe.

Reflecting on the above, this section of the report serves as a 'holding statement' for Te Patukirikiri Iwi Incorporated are yet formalise their Treaty Settlement with the Crown.

Ngaati Whanaunga

Over the course of the SAP programme, the SAP team had the opportunity to work with kaitiaki representatives from Ngaati Whanaunga to develop numerous plans, with engaged supported by hui and workshops. Over the 2024 -2025 calendar year, the SAP team has continued to work with Ngaati Whanaunga, with hui remaining ongoing to support Ngaati Whanaunga to have input into plans of interest at a regional scale via the completion of a Cultural Statement.

Kaupapa Matua Guiding Principles:

'Ki te whakarite te taha tinana, te taha hinengaro, te taha wairua, te taha whaanau ki te aoturoa, kia tino whai mana te mauri'

To ensure that there is a holistic balance between and in tune with the natural world and that the mauri of Te Taiao is enhanced via the implementation of all SAPs.

Whakatauakii by 'Auntie Betty Williams'

'Kaitiaki Principles are practised by all'

Ngaati Whanaunga enhances the mauri elements of the Te Taiao and seeks to protect our whenua tuupuna, moana waahi tapuu and other taonga, from the effects of development and the many activities that take place within the rohe.

The core objectives of the Ngaati Whanaunga Environmental Plan seek to ensure the long-term wellbeing of land, freshwater, coastal and marine areas, biodiversity, air, culture, and heritage such as historic structures, archaeological sites, and places of significance that may include nature features such as trees, springs, rivers, or awa⁴. Coastal and marine areas are important to Ngaati Whanaunga because they:

- Provide valuable habitat, nurseries and feeding grounds for native species. Ngaati Whanaunga advocate for the protection and enhancement of the mauri of indigenous flora and fauna
- Provide mahinga kai, weaving and carving materials
- Regulate rainwater, drinking water, and climate
- Recreational/ community values and amenities when they align with Te Taiao (kia tino whai mana te mauri)
- Economic values, e.g. tourism/ ecology/ aquamarine areas/ commercial development of fisheries, shorebird adaptation centre (supporting the migration of taonga species).

Ngaati Whanaunga Aspirations and Outcomes for the Takutai and whenua:

- Ngaati Whanaunga seeks to achieve the following goals in the Takutai moana space:
 - o To enhance coastal and marine habitats: regeneration of wetlands, use of mangroves as nature-based solutions and recognize their role in ecosystem services.
- Sustainable resource use:
 - o To recognise connections mountains to the sea.

Documents which support Ngaati Whanaunga outcomes and aspirations include but are not limited to the Estuarine Tool Kit developed by NIWA in consultation with Ngaati Whanaunga and the shellfish monitoring toolkits supplied by Hauraki Gulf Forum/ translated in the dialect of Ngaati Whanaunga for use at schools⁵. Further to the principles above, Ngaati Whanaunga seek to be included in any decision-making as part of the SAP kaupapa.

Ngāti Maru

The SAP team is currently working with Ngāti Maru on various SAP plans within their rohe, with the aim of gathering Ngāti Maru feedback on the SAP programme and the individual plans. This ongoing

⁴ Estuarine tool kit developed by NIWA in consultation with Ngaati Whanaunga. This can be supplied via the Ngaati Whanaunga office @ 24 Wharf Road Coromandel. Ph 07 866 1011.

Shellfish monitoring toolkit supplied by the Hauraki Gulf Forum/ translated in the dialect of Ngaati Whanaunga for use at schools – Yr 1- Yr 13. This can be supplied via Ngaati Whanaunga website www.ngaatiwhanaunga.maori.nz or office @ 24 Wharf Road Coromandel. Ph 07 866 1011.

partnership has extended to the development of the Waiheke and the Inner Gulf Islands SAP, noting that many areas and sites across Waiheke and the Inner Gulf Islands area hold great significance to Ngāti Maru. In Tāmaki, Ngāti Maru along with other the Marutuahu Tribes had many fortified pā, sites of significance and Wahi Tapu and a deep whakapapa connection and intermarriages with other early iwi of the district. The Ngāti Maru history has that occupation in the Tāmaki area began many generations before the coming of the British Crown's occupation and settlements.

Reflecting on the above, this section of the report serves as a 'holding statement' for Ngāti Maru to add to once ready, noting a Cultural Statement in response to the wider SAP Programme is under development.

Ngāi Tai ki Tāmaki

The rohe boundary of Ngāi Tai ki Tāmaki includes the area to which this SAP applies to being Waiheke and the Inner Gulf Islands SAP. The commentary included below outlines the aspiration and processes for fostering meaningful engagement with Ngāi Tai ki Tāmaki as the SAP programme advances through its various implementation phases. It also emphasises the importance of recognising Ngāi Tai ki Tāmaki interests and ensuring their active participation in the planning and execution of the SAP programme and highlighting that their role as kaitiaki of whenua, wai, and Taonga is respected and upheld.

The cultural narrative shared below serves as a starting point, acknowledging the partnership development and the intention to ensure each SAP report remains a living document and may be updated to reflect further cultural context shared by Ngāi Tai ki Tāmaki. The commentary below is provided as a 'holding statement' to identify:

- Ngāi Tai ki Tāmaki areas of interest with respect to the SAP kaupapa; and
- How Ngāi Tai ki Tāmaki wish to be involved in the kaupapa going forward engagement.

The rohe boundaries of Ngāi Tai ki Tāmaki have a long and deeply rooted connection to their ancestral boundaries. Prior to the arrival of European explorers and their decision to adopt Tāmaki Makaurau as a hub of settlement and population growth, Ngāi Tai ki Tāmaki upheld their territorial responsibilities for hundreds of years, through the right of ahikā and the expression of manaakitanga to those who arrived on our shores. In some cases, these arrivals became their allies.

Ngāi Tai ki Tāmaki developed sophisticated agricultural practices, supported by domestic trade and well-established societal routes that extended through Tāmaki Makaurau and beyond. Enterprise was a cornerstone of Ngāi Tai identity, grounded in deep knowledge of maramataka, weather systems, and wave patterns.

Regarding the Council's SAP programme, and acknowledging that Ngāi Tai ki Tāmaki wish to protect all of our areas of interest ki uta, ki tai, Ngāi Tai ki Tāmaki kaitiaki responsibilities extend over the area to which this SAP applies.

The partnership between Ngāi Tai ki Tāmaki and Auckland Council within the SAP programme presents a valuable opportunity to ensure that environmental adaptations are culturally aligned, sustainable, and acknowledge the role of Ngāi Tai ki Tāmaki as Kaitiaki. Ngāi Tai ki Tāmaki have identified a set of aspirations and outcomes, with the intention that these are upheld and supported through the implementation of coastal adaptation strategies and SAPs as follows:

- Mātauranga is equally important in guiding coastal adaptation and management strategies and approaches. All coastal / shoreline management should be subject to cultural input and co-design from Ngāi Tai ki Tāmaki.
- Ngāi Tai ki Tāmaki prefer the use of 'soft' engineering solutions wherever possible, recognising that interference with natural processes is not always necessary. Where appropriate, we advocate for nature-based approaches to coastal engineering, initiatives that support and enhance ecologically significant areas and vital ecological corridors.
- Ngāi Tai ki Tāmaki is supported to conduct its own monitoring of the effectiveness of environmental regulation in the protection of its cultural resources, biodiversity wāhi tapu and other taonga within their rohe.
- Kaitiakitanga is embraced and empowered as a commitment to rehabilitate and heal the natural systems that support us all.

Ngāti Whātua Ōrākei

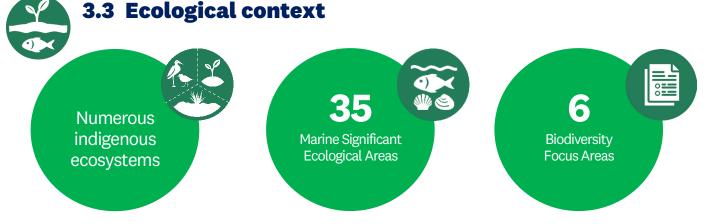
The SAP team has worked with Ngāti Whātua Orākei on various SAP plans within their rohe, with the aim of gathering Ngāti Whātua Orākei's feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waiheke and the Inner Gulf Islands SAP, noting that Ngāti Whātua Orākei has expressed interest in specific aspects of the SAP that relate to their rohe.

As mana whenua of central Tāmaki Makaurau, Ngāti Whātua Ōrākei emphasise their historical relationship with the Crown, including the impacts of land loss and the significance of their Treaty settlement. Their planning documents, Hā Tuamatangi and Te Pou o Kāhu Pōkere, articulate a climate strategy focused on ecological restoration, cultural resilience, and achieving net-zero emissions by 2030. These documents also highlight the importance of integrating mātauranga Māori and kaitiakitanga into environmental governance.

Ngāti Whātua Ōrākei advocate for a shoreline adaptation approach that reflects their cultural values and ancestral responsibilities. Their aspirations include restoring the mauri of coastal ecosystems, protecting customary practices, and ensuring that adaptation strategies are co-developed with iwi leadership. The iwi management plan, Te Pou o Kāhu Pōkere, outlines specific outcomes such as enhancing cultural landscapes, protecting sites of significance, and embedding Māori knowledge into planning and reporting. These goals are framed within a broader vision of intergenerational wellbeing and environmental stewardship.

Ngāti Whātua Ōrākei advocate for a Te Tiriti-based framework in shoreline adaptation planning, placing importance on partnership, protection, and participation. Ngāti Whātua Ōrākei expect early, ongoing, and meaningful engagement from Auckland Council, with co-design of adaptation strategies and recognition of their role as kaitiaki. Key principles such as kanohi ki te kanohi (face-to-face engagement), transparency, and shared decision-making are essential to ensuring that shoreline adaptation efforts uphold the mana and values of Ngāti Whātua Ōrākei and protect the cultural and environmental integrity of their rohe.

The SAP team will continue to work collaboratively with Ngāti Whātua Orākei to have input into the implementation of the SAPs for the Waiheke and the Inner Gulf Islands area and other SAPs of interest within their rohe.



Ecosystems and significant ecological areas

Numerous indigenous ecosystem types are found in this area. These include but are not limited to four forest ecosystems, three regenerating ecosystems, two dune ecosystems, two coastal saline ecosystems, five wetland ecosystems, one cliff ecosystem and eight regional variants, as described by the regional ecosystem classification system (Singers et al., 2017). There are no terrestrial SEAs mapped for Waiheke Island and terrestrial ecological values have instead been captured in the Marine Schedule of the AUP:OP.

As shown in Figure 3-1, there are approximately 36 marine SEAs identified within the Waiheke and the Inner Gulf Islands SAP area. Taonga species will be informed based on local iwi recommendations, as different hapū and iwi associate with different taonga species. The Waiheke Island area includes three key Biodiversity Focus Areas (BFAs), which are key areas prioritised by Auckland Council for ecological management. Biodiversity focus areas include Awaawaroa / Awaawaroa Bay Road Wetlands, Te Matuku Bay, and Whakanewha, (also a regional park) additional areas of focus include Owhiti Bay, Rangihoua, Te Toki/Okahuiti and at Omaru Bay.



Figure 3-1: Overview of BFA areas across the Waiheke and the Inner Gulf Islands SAP. Source: Tiaki Taiao Maps, Auckland Council (2025).

Proposed Hākaimangō-Matiatia Marine Reserve: Waiheke Island

Over the past decade, the continued decline of the Hauraki Gulf has been the subject of significant concern and discussion, most recently highlighted in the 2023 State of the Gulf report⁶. With the Hauraki Gulf on the doorstep of Waiheke and neighbouring islands, advocating for protection of the marine environment has been a focal point for local communities.

In 2022, DOC received an application to create a new marine reserve by the Friends of the Hauraki Gulf (under Section 5 the Marine Reserve Act 1971), this being the proposed Hākaimangō-Matiatia Marine Reserve in Northwest Waiheke, as shown in Figure 3-2. Supporting evidence was provided by the Friends of the Hauraki Gulf. The marine reserve proposal was publicly notified under Section 5 of the Marine Reserves Act in early 2022. It received overwhelming public support, with 93% of submissions in favour, including strong backing from local iwi, noting Waiheke's Piritahi Marae and tangata whenua authority, the Ngāti Paoa Trust Board, both submitted in support⁷.

This proposed marine reserve extends two existing marine reserve (at Leigh and Cathedral Cove), adds five Seafloor Protection Areas and 12 High Protection Areas. There is community advocacy to have the Hākaimangō-Matiatia Marine Reserve added to the Hauraki Gulf/ Tīkapa Moana Marine Protection Bill (under Schedule 2), noting that this bill is extending two existing marine reserves (at Leigh and Cathedral Cove), adds five Seafloor Protection Areas and 12 High Protection Areas.

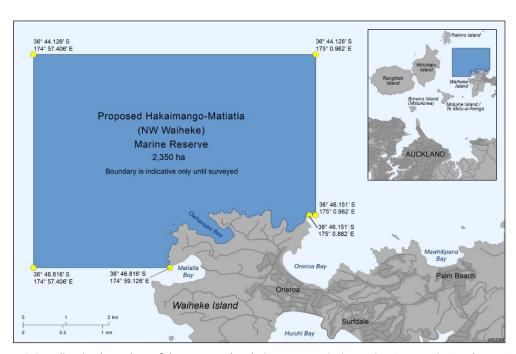


Figure 3-2: Indicative boundary of the proposed $H\bar{a}$ kaimang \bar{o} -Matiatia Marine Reserve in Northwest Waiheke 7 with community groups (such as the Hauraki Gulf Conservation Trust) and the Waiheke Local Board proposing to create

Aspirations for marine protection in the form of marine reserves has been an ongoing discussion with local communities on Waiheke Island, with a feasibility study undertaken by eCoast/eTakutai back in 2016 on behalf of the Waiheke Island Local Board and Hauraki Gulf Conservation Trust. This study set

⁶ https://www.knowledgeauckland.org.nz/publications/state-of-our-gulf-2023/

⁷ https://friendsofhaurakigulf.nz/

out to address a proposed network of five no-take marine reserves around Waiheke Island at the time, which were intended to encompass southern, northern, and north-western sections of the coastline of Waiheke Island situated within the central Hauraki Gulf.

This was proposed with the intention of not only forming a localised network for Waiheke Island, but also working to complement the protection benefits of existing marine reserves within the wider Hauraki Gulf Marine Park⁸.

A more detailed discussion of the key features located within each unit is included in Volume 3. This includes ecological features and values that may influence the selection of adaptation strategies or are vulnerable to climate change hazards.

The table below has been informed by Significant Ecological Area (SEA) schedules and descriptions (Auckland Council, 2024t), Biodiversity Focus Area (BFA) information, fauna and flora records and other publicly available information. These ecological features and values should be considered alongside the significant cultural values associated with them and where possible, factored into decision making. Statutory direction to protect and enhance the Waiheke Island area is reflected in several national and regional policy documents and more specifically, local board plans for the seven local boards, as noted in the social and policy sections below.

Summary by SAP unit of Waiheke Island vulnerable ecological features and values

Unit Summary of ecological features and values

- 1 Unit 1 includes the western side of the Island, which consists of farmland, indigenous forest, vineyards and several suburbs.
 - Te Wharau Bay Beach and Matarahui Bay are located at the southern end of this unit. The coves are bordered by p\u00f6hutukawa-dominated cliffs which transitions to regenerating native scrub, kauri, podocarp, broadleaved forest and areas of raup\u00f6 reedland.
 - There are a number of small bays wrapping around the coastline of this unit, including Sandy Bay,
 Cable Bay and Matiatia Bay Beach. A large number of coastal avifauna have been recorded at
 Matiatia Bay Beach and ferry terminal, including fluttering shearwater and white-fronted tern.
 Marine mammals, including New Zealand fur seal and subantarctic fur seal are also frequently found resting within these rocky beach environments (iNaturalist, n.d.).
 - Motukaha Island is located offshore from Church Bay and is an important breeding site for coastal birds, including white-fronted tern, reef heron, and little penguin.
 - Pōhutukawa treeland wraps around the entire border of this unit, including within Council-owned reserves (Owhanake Matiatia Walkway, Korora Beach Reserve, and Little Oneroa Reserve).
 - There are records of seagrass in the marine areas of Blackpool Beach and Surfdale Beach (Department of Conservation, 2011).
 - There are several active wetland restoration projects occurring within this unit, including the raupō reedland wetlands to the southeast of the Matiatia Ferry Terminal and adjacent to the Owhanake Recreation Reserve (Waiheke Resources Trust, 2024a).

https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/local-boards/all-local-boards/waiheke-local-board/docswaihekeplans/waiheke-marine-reserve-gaps-feasibility.pdf

Unit Summary of ecological features and values

- 2 Unit 2 encompasses the coastal land between Little Oneroa Reserve and Opopoto Bay, including the suburb of Palm Beach.
 - Pōhutukawa treeland extends around nearly the entire coastline of Unit 2 and is frequently the type of vegetation found in Council-owned reserves, including Sandy Bay Esplanade Reserve, Newton Reserve, Hekerua Bay Reserve and Hekerua Foreshore Reserve.
 - Goodwin South Reserve is classified as coastal broadleaved forest.
 - There is a small area of raupō reedland within the Mawhitipana Reserve which is located to the western end of Palm Beach.
 - To the east of Palm Beach, there are two small areas of pīngao duneland which is one of the few sites remaining for pīngao on Waiheke Island. One of these dunelands is located within the small cove to the east of Matapana Reserve, and the other is within Repo Bay Beach. There is a large raupō reedland located to the east of Matapana Reserve.
 - Spotted shag has been recorded within the rocky reef environment to the south of Opopoto Bay.
- 3 Unit 3 encompasses a section of the island from Sea View Esplanade Reserve to Onetangi Reserve.
 - Pōhutukawa treeland can be found within Sea View Esplanade Reserve, Sea View Road Reserve and along the eastern cliffs of Onetangi Bay.
 - There is a large forest mosaic within the eastern section of Unit 2 which is predominately kauri, podocarp, broadleaved forest with areas of regenerating native forest. A large number of avifauna are recorded within this forest (New Zealand eBird, n.d.).
 - There is a small raupō reedland within Third Reserve.
 - Onetangi Beach supports a large variety of coastal birds, including variable oystercatcher, whitefronted tern, black-billed gull, New Zealand dotterel, and Buller's shearwater (New Zealand eBird, n.d.).
- 4 Unit 4 covers the majority of the eastern portion of Waiheke Island, from Onetangi to Hooks Bay and then to Awaawaroa Bay in the south. There is a very large portion of indigenous ecosystems within this unit many of which are located outside of Council-owned land.
 - Most notably, there are several large privately-owned wetlands running adjacent to Man O'War Road. These wetlands are classified as raupō reedland and oioi, restiad rushland.
 - The marine area from Onetangi to Hooks Bay is recognised as one of the best examples of exposed rocky reef habitat in the Inner Hauraki Gulf. The reef system is surrounded by coastal forest dominated by pōhutukawa. Several threatened plants have been recorded within these coastal forest remnants, including tūrepo.
 - Owhiti Bay contains significant ecological sequences from pīngao duneland to brackish and freshwater wetland. Owhiti Bay and the surrounding landscape are also an important breeding site for New Zealand dotterel, New Zealand pipit and variable oystercatcher.
 - Awaawaroa Wetland Reserve is located at the southern end of the unit and holds significant
 ecological value. There is an important ecological sequence within this area; from shell barrier
 beach to mangrove forest to oioi, restiad rushland and raupo reedland, and finally to coastal forest.
 The wetland and stream system within this reserve holds a population of giant kokopu one of the
 last known populations within the region. Cryptic wetland birds can also be found within the

Unit Summary of ecological features and values

wetland mosaic, including North Island fernbird, banded rail, spotless crake and Australasian bittern.

- The Awaawaroa Bay shellbanks are an important high-tide roost site for a variety coastal birds.
 Caspian tern, New Zealand dotterel, pied shag, and variable oystercatcher breed within Awaawaroa Bay (Auckland Council, 2024f)
- 5 Unit 5 encompasses the eastern section of the Island, including Man O'War Bay to Te Matuku Bay.
 - Man O'War Bay is surrounded by a large remnant of kauri, podocarp, broadleaved forest with smaller areas of kahikatea, pukatea forest. There are also small areas of oioi, restiad rushland and raupo reedland located behind the beach at Man O'War Bay.
 - Further south down this stretch of coastline, moko skink and copper skink have been recorded
 within the coastal environment of Karipaka Bay and Pōhutukawa Bay. Waiheke Island is recognised
 as a renowned native lizard hotspot and supports at least seven species (Te Korowai o Waiheke,
 2021).
 - Coastal forest dominated by pōhutukawa and kauri, podocarp, broadleaved forest continues to wrap along the coastline of several small bays, including Waikopou Bay, Days Bay, and Cowes Bay.
 - Te Matuku Bay is an estuarine area which provides a variety of habitats for a range of plant and animal communities. There are several chenier-type shellbanks within the bay which are surrounded by mangrove forest and coastal shrub. This saline vegetation grades into small wetlands, including areas of oioi restiad rushland, raupō reedland, and mānuka, tangle fern, scrub, fernland. The huge forested area behind the marine coastal area is largely regenerating native bush with areas of kauri, podocarp, broadleaved forest.
 - The shellbanks (particularly the large one to the east) are recognised as important high-tide bird roosts. The intertidal environment provides important feeding habitat for a variety of coastal avifauna, including New Zealand dotterel, banded dotterel, bar-tailed godwit, Caspian tern, South Island pied oystercatcher and several other species. Cryptic wetland birds utilise the saline vegetation and freshwater wetland ecosystems.
 - The coastal marine area was established as the Te Matuku Bay Marine Reserve in 2005 and is administered by the Department of Conservation (Department of Conservation, n.d.).
 - There are also a large number of white-fronted tern which rest on the Orapiu Bay Point Wharf (New Zealand eBird, n.d.; iNaturalist, n.d.).
- **6** Unit 6 includes Whakanewha Regional Park, several reserves surrounding the suburb of Ōmiha, and several sheltered coves.
 - Whakanewha Regional Park is classified as coastal broadleaved forest and regenerating scrub dominated by kānuka. There are two large freshwater wetland systems; one in the south and one in the north. The southern wetland system is classified as raupō reedland and the northern wetland is classified as flaxland. The Whakanewha coastal area consists of a long strip of chenier-type shell bank which grades into mangrove forest. The regional park provides habitat for native lizards, passerine birds, cryptic wetland birds, and coastal birds. Little penguin are found in burrows along this stretch of coastline.

Unit Summary of ecological features and values

- Pōhutukawa-dominated forest continues along Te Whau Point, within Ōmiha Beach Reserve, Wairua South Reserve, and Te Whau Esplanade Reserve. This belt of coastal pōhutukawa forest is one of the largest remaining examples on Waiheke Island.
- Pūtiki Bay contains a complex of saline wetlands grading from mangrove forest to saltmarsh and into areas of freshwater wetland. Banded Rail are present within the estuarine environment.
- 7 Unit 7 encompasses the remaining coastal environment of Waiheke Island, including Ostend and Kennedy Point.
 - At Okauiti Bay, there are important ecological sequences to the north of Causeway Road, whereby mangrove forest grades into coastal broadleaved forest and freshwater wetlands.
 - Põhutukawa-dominated coastal forest wraps around most of this unit, including within Anzac Bay Reserve, Kennedy Point Reserve, and Pūkiti Reserve. Little penguin are found in burrows along this stretch of coastline.
 - Seagrass is recorded within the marine area of Pūkiti Bay (Department of Conservation, 2011).
- 8 Unit 8 encompasses the 'innermost' and south-eastern islands of the Hauraki Gulf / Tīkapa Moana.
 - Rangitoto Island is made up of two scenic reserves administered by DOC. The island is regionally significant as it exhibits all stages of vegetation succession following a volcanic eruption and is largely classified as pōhutukawa scrub/forest. There are more than 200 species of native ferns and flowering plant species found growing on the island, including several threatened species (Esler, 1991; Auckland Council, 2024i). There are areas of oioi-coastal needle grass on lava flows on the coastal margins of the islands some of the best examples of this saline ecosystem type in the region. Rangitoto was declared mamallian pest-free in 2011 and supports a large number of native fauna, including coastal species, such as New Zealand dotterel, variable oystercatcher, white-fronted tern, egg-laying skink, shore plover, and banded rail.
 - Islington Bay and Gardiner Gap (located between Motutapu and Rangitoto) are hotspots for coastal avifauna which have been recorded breeding, feeding, and roosting in the intertidal area found here (iNaturalist, n.d.).
 - Motutapu Island is also mammalian pest-free and administered by DOC. The island is predominately
 pasture with areas of native planted vegetation that have been established by the Motutapu
 Restoration Society. There are some small remnants of pōhutukawa-dominated coastal forest.
 Motutapu Island hosts a diverse array of animal species comparable to those found on Rangitoto
 Island
 - Motuihe Island/Te Motu-a-Ihenga is another small island administered by DOC and is largely covered in native planted vegetation. Coastal avifauna have been recorded resting on the Motuihe Wharf, including a large colony of white-fronted tern (iNaturalist, n.d.). Shore skink, tuatara, moko skink, and copper skink are also found on Motuihe Island (Department of Conservation, n.d.).
 - Motukorea/Browns Island is a regional park which has largely been developed over time and
 contains a small amount of remnant coastal forest. Variable oystercatcher utilise the island as an
 important nesting site, particularly along the southern section and Folko's Bay (iNaturalist, n.d.).
 New Zealand dotterel and little penguin also nest along the coastal environment of the island. There
 are several threatened vascular plants found on the island, including sand spurge (Euphorbia

Unit Summary of ecological features and values

glauca, Threatened – Regionally Endangered) and *Geranium solanderi* (Threatened – Regionally Vulnerable).

- There is a group of islands, islets, and rocks located to the north of Motutapu the larger of which include Rākino Island, Motuhoropapa Island, Otata Island, and David Rocks. Most of these islands comprise areas of coastal forest dominated by pōhutukawa (WF4, CL1, VS1). Reef heron (*Egretta sacra*, Threatened Nationally Endangered) is commonly found amongst these islands. Maria Island is one of the few breeding sites in the region of spotted shag (*Phalacrocorax punctatus*, Threatened Nationally Vulnerable) and white-faced storm petrel (*Pelagodroma marina*, At Risk Relict).
- Tarahiki Island, located in the northernmost section of this unit, is the biggest and most important breeding area for spotted shag in the Hauraki Gulf (and potentially within New Zealand). Other coastal birds that are found here include little penguin, grey-faced petrel, and reef heron. Turepo (Streblus banksii, Threatened Regionally Endangered) also grows on this island.
- Pakatoa Island, Rotoroa Island, and Frenchman's Cap all comprise small areas of coastal forest (WF4, CL1) with some areas of native plantings.
- Ponui Island is a large island with brown kiwi (Undin, Lockhart, Hills, & Castro, 2021) and areas of
 remnant coastal forest (WF4, CL1) and freshwater raupō wetland (WL19). Scully Reef, located to the
 north of Byrants Bay, supports a large number of nesting and roosting white-fronted tern, New
 Zealand dotterel, and spotted shag. White-fronted tern and red-billed gull breed on Te Kawau Bay, a
 small islet to the north of Ponui.
- Pakihi Island and Karamurama Island are largely classified as exotic forest with some small areas of coastal broadleaved forest (WF4) and pōhutukawa-dominated treeland (CL1).

Potential opportunities: nature-based solutions?

Coastal environments around the world are under pressure from climate change. Pressures can vary from localised flooding and erosion to changes in habitats and species distribution. To avoid losing highly valued, vulnerable ecosystems, there is an opportunity to consider a range of nature-based solutions.

For example, where indigenous ecosystems are threatened by increasing inundation and sea-level rise, supporting ecosystems to shift inland, or allowing to adapt naturally is encouraged. Another opportunity is to utilise nature-based solutions (e.g. beach nourishment, dune planting) to protect shorelines from climate change in favour of hard protection structures, which can cause displacement of impacts further around the coastline and coastal squeeze (amongst other impacts).

Recognising the microcosm of ecosystems lining the Waiheke and the inner Gulf Islands SAP, opportunities for nature-based solutions will be factored into decision making in implementation.

3.4 Social and policy context

The social (and policy) context provides a foundation of knowledge for testing adaption strategies and the key drivers for each community, their assets, uses and how this may be conveyed in local policy within a SAP area.

It is important to understand who lives in an area and how they use and interact with coastal areas to understand the role that Auckland Council land and assets play in supporting community and social outcomes. Considering what communities have already conveyed as important and the outcomes or aspirations they may have adopted in policy also complements the engagement undertaken directly with communities.

Who lives here

The resident population within this SAP area is primarily based on Waiheke Island, with a resident population of approximately 9,000 people. Rakino Island has significantly less (approximately 20 permanent residents) (Statistics New Zealand, 2018). The median age is 46, which is older than the regional median age of 36. Within the Waiheke Island area, 89% of the population identify as being of New Zealand European ethnicity which is significantly higher than the regional proportion of 54% (Statistics New Zealand, 2018). Other ethnicities include Māori (11.3%), Asian (4.0%), Pacific Peoples (3.9%), Middle Eastern, Latin American, and African. The Māori population in this area is lower than the Auckland regional proportion of 13%.

Community groups and organisations

The Waiheke and the Inner Gulf Islands SAP is home to many environmental community groups with similar aspirations of enhancing the natural environment on the Island, eradicating pests, and regenerating native wildlife. These groups have an active presence in the community. Waiheke Island residents themselves have been characterised as being actively involved in their communities, making more submissions to government per capita than any other community in New Zealand (Auckland Council, 2016a). Groups such as Protect Pūtiki and others have actively protested the development of Kennedy Point Marina (Rolleston, 2021).

Key community volunteer organisations include the Motuihe Restoration Trust, the Motutapu Restoration Trust, the Rotoroa Island Trust, the Waiheke Resources Trust and Waiheke Collective. The group hosts services such as community environmental workshops, a bike hub, venue hire and planting days. Waiheke Collective is a community group focused on maintaining and improving the environment on Waiheke Island while fostering community relationships (Waiheke Collective, n.d.). Te Korowai o Waiheke was the first project launched by the Waiheke Collective (though now operates quite independently) and has the ambitious goal of making Waiheke Island the world's first predatorfree urban island. The first stage, begun in 2019, is focused on eradicating mustelids (stoats) across the island (Te Korowai o Waiheke, n.d.).

The Hauraki Gulf Conservation Trust is another prominent community group highly active in the Waiheke and the Inner Gulf Islands SAP area, supporting and advocating for marine restoration initiatives. In addition to these environmentally focussed groups, the Rangitoto Island Historic Conservation Trust (2024) works to manage, restore, and protect the heritage baches on Rangitoto alongside DOC and iwi.

The Waiheke Collective supports key local projects: The Waiheke Marine Project is a collaborative Mana Whenua and Waiheke Island community partnership project. As well, Te Korowai o Waiheke is the first project launched by the Waiheke Collective. Further detail is provided below.

Multiple resident and ratepayer and community associations are also present within the SAP area. including those with local place-based interests and those with a wider purview for the gulf islands or Waiheke collectively. With numerous groups, a list is not produced here - key organisations are identified in the community feedback section below and through response to feedback provided in the Volume 3 document.

Relevant Policy

Understanding the regulatory and policy context applicable to the area helps us appreciate previously expressed issues by the communities, as well as their values, objectives and aspirations. Key documents are identified as applicable to the programme in Volume 1 and at a unit scale in Volume 3. Policy direction of note includes (not an exhaustive list):

- District Plan: Hauraki Gulf Islands and relevant section of the AUP:OP as applicable to Waiheke and the inner gulf islands.
- Essentially Waiheke (Auckland Council, 2016a)
- Hauraki Gulf Marine Spatial Plan: Sea Change Tai Timu Tai Pari (Hauraki Gulf Marine Park, 2017)
- Hauraki Gulf / Tīkapa Moana Marine Protection Bill
- Rangitoto and Motutapu Islands: Island Operating Procedure (Department of Conservation, 2019)
- Te Motutapu a Taikehu Heritage Management Plan (Department of Conservation, 2022)
- The Hauraki Gulf Marine Park Act (Hauraki Gulf Marine Park Act, 2000)
- Waiheke Island Local Climate Action Plan (Waiheke Local Board, 2022)
- Waiheke Island Pathways Plan (Auckland Council, 2019)
- Waiheke Local Board Plan 2023 (Waiheke Local Board, 2023).
- Waiheke Island Local Parks Management Plan (2023)
- Rangihoua Reserve and Onetangi Sports Park Management Plan (2024)
- Waiheke's Open Space Network Plan (Auckland Council, 2012)

Community use and initiatives

This section provides an overview of the key land uses within the Waiheke and the Inner Gulf Islands SAP area. Although this includes uses and activities outside Council or CCO-owned land, this aids with providing an understanding of the wider context and how the wider SAP area is used by communities.

The Waiheke and the Inner Gulf Islands SAP area can be broadly split between islands which are uninhabited and used primarily as nature or recreational reserves and those which have permanent residents. The former group (including Rangitoto, Motukorea/Browns Island, Motuihe Island/Te Motu-a-Ihenga, and several smaller islands) have very minimal infrastructure, usually limited to

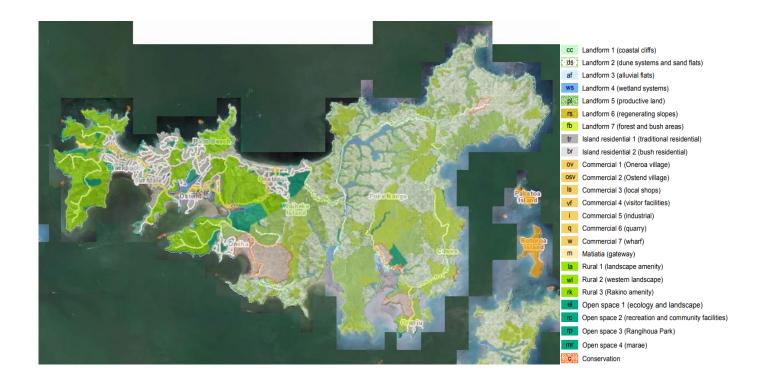
paths, wharves, and a few buildings used for rangers, visitor accommodation, or kept for historic significance. These islands are in varying stages of conservation, with some largely untouched from their natural state, and others farmed or used for other purposes which has resulted in native vegetation clearance and they are now in the process of revegetation and active restoration (e.g. Motutapu, Rotoroa).

When it comes to islands with a permanent population, most development on Rākino occurred in the 1960s, when no council was responsible for building controls for the island (Peart & Woodhouse, 2020). Homes on Rākino are mostly centrally located on the island and accessed from land. The settlements on Waiheke Island are located on the northwest of the island with the main residential areas at Oneroa Bay, Blackpool Beach, Palm Beach, Ostend and Onetangi Beach. These areas are the primary community centres on Waiheke Island and contain a mixture of zoning for both traditional and bush residential housing. In contrast, the eastern section of Waiheke Island remains comparatively unpopulated, with much of the area categorised as productive land, regenerating slope, forest and bush areas. The area is connected by a 'loop' road which connects houses and vineyards/restaurants. The southwestern area has small destination bays such as Arran Bay and Connells Bay which have popular secluded holiday and baches alongside attractions, e.g. the Connells Bay Sculpture Park. Stony Batter Reserve is located on the northeast and offers guided tours of the World War II Coastal Defence Fortress (Stony Batter Tunnels, n.d.). There is a small area zoned bush residential to the south at Orapiu Bay. Ferry services to the eastern end of the island are generally seasonal.

With the high visitor numbers to the Island, a growing percentage of houses are holiday homes rather than permanent residences. Oneroa Village and Ostend Village are popular spots for tourists and locals alike with many boutique shops, bars and cafes (Tourism Waiheke & Island Waiheke Information, 2024a) and contain medical centres.

There are approximately 30 wineries (Wine Tourism Global, 2024) and multiple olive oil plantations which attract tourists from Auckland and afar. These are primarily located on the western side of the Island, with only one vineyard located on the east. Waiheke Island also attracts visitors with multiple annual arts festivals (Tourism Waiheke & Island Waiheke Information, 2024b) such as Sculpture on the Gulf (SOTG, 2024). The three primary ways to access Waiheke Island are through the passenger ferry at Matiatia Bay, the car ferry at Kennedy Point and light aircraft at Carsons Airfield.

The figures below show the planning notations for the SAP area under the Hauraki Gulf Island District Plan and have informed the land use analysis (Auckland Council, 2024j).



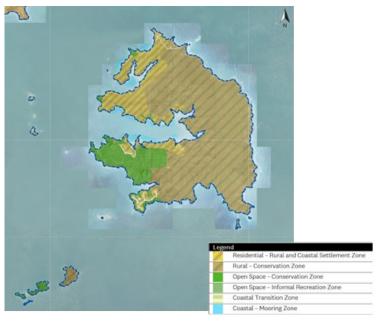


Figure 3-3: Key planning notations for Rākino Island Source: Auckland Council GeoMaps



Community buildings / assets

Social infrastructure, which may be located on Auckland Council-owned land or other landholdings identified by the community is relevant to the consideration of adaptation strategies. Note that while the adaptation strategies relate to Auckland Council-owned land, infrastructure and assets, the wider social context of the area has been considered when determining strategies in terms of understanding how the community use and value the area.

Social infrastructure on Waiheke Island is located across a number of settlements on the northwest of the island between Oneroa and Ostend. Oneroa Village contains a library, numerous businesses,

and a medical centre. The township is home to the Artworks Community Theatre which regularly hosts community events. The township lies adjacent to Oneroa Bay which is a popular swimming beach and has a playground to the east.

Ostend contains multiple businesses and services including a supermarket and skatepark as well as more industrial businesses. Waiheke Primary school is located in this area, along with the Ostend Medical Centre. To the east of the town centre is a collection of more frequented wineries, all within walking distance.

Surfdale, located on the southern coast between Oneroa and Ostend, contains Te Huruhi Primary School and Waiheke High School, the only high school in the SAP area with a roll of 420 (Education Counts, 2023). The eastern side of Waiheke Island has a scattering of isolated vineyards and holiday homes. Stony Batter Reserve is located on the northeast and offers guided tours of the World War II Coastal Defence Fortress (Stony Batter Tunnels, n.d.).

Community halls are located within each settlement area in Oneroa, Blackpool, Surfdale, Onetangi, Palm Beach, Ostend and Ōmiha / Rocky Bay. These halls, often community owned and maintained support a range of community activities, connection, markets and art. In many cases, halls also support community resilience and civil defence outcomes.

Key projects, critical infrastructure, facilities or key Infrastructure

The Waiheke and the Inner Gulf Islands are not identified for significant development, however, the area requires investment in existing infrastructure upgrades due to aging infrastructure and increasing service demand. Equally, a focus on restoration and preservation of values is also supported by community initiatives and actions.

The following list is a summary of the key projects which have potential to change how communities interact with the coastal space:

- The Matiatia old wharf renewal project has been completed with Auckland Transport committing to upgrades to the new wharf. This will involve construction and supply of new gangways, hydraulics and pontoons at the main ferry berths (Auckland Transport, 2022). There is also emphasis on providing safe cycling routes around the Island, with the top four priority projects in the Waiheke 10 Year Transport Plan being cycle path installations or improvements. (Auckland Transport, 2022).
- Quiet skies Waiheke: In July 2025, a plan change to better control helipad consenting was taken to the Policy and Planning Committee. This is a key focal/ discussion point for communities within the Waiheke and the Inner Gulf Islands SAP area, noting that Quiet Sky Waiheke has made a submission on the proposed plan change PM16 (Helipads).
- Waiheke marine project: The Waiheke Marine Project is a community-led initiative launched in April 2019, focused on protecting and regenerating the marine environment surrounding Waiheke Island. Driven by local residents, mana whenua, scientists, fishers, conservationists, and community groups, the project brings together a wide range of perspectives to co-design solutions that ensure a healthy, thriving moana (ocean) for future generations, with strong focus and commitment to Te Tiriti o Waitangi and combining mātauranga Māori with scientific knowledge to guide marine conservation efforts in the area.

• Emergency management: Whilst developing the SAPs, Auckland Emergency Management has, in collaboration with local communities and local boards, developed Emergency Response and Readiness Plans for each of the 21 local board areas. A plan for the Waiheke local board area (which extends to Waiheke Island, the islands of Rangitoto, Motutapu, Motokorea, Motuihe, Ponui, Rakino and several smaller islands) has been produced and identifies key information and details for response and readiness including the location of Civil Defence centres, community hubs, marae and urgent care facilities throughout the wider area. This plan can be found on the Auckland Council website here. Civil defence centres and hubs identified in this plan are generally set back from the coastal edge and may be identified in Volume 3 where applicable to coastal adaptation strategies.



Landscape features and character

Areas within the SAP identified as having Outstanding Natural Landscapes (ONL), High Natural Character (HNC) areas, and/or Outstanding Natural Features (ONF).

Key areas identified within the Inner Hauraki Gulf Islands (not including Waiheke) include but are not limited to:

- East Pakatoa Island broken formation
- Frenchmans Cap (Kahakaha)
- Motuekareka Island and islets
- Motuketekete Island Waitemata Group Miocene basal limestone
- Motuihe Island/Te Motu-a-Ihenga, Limestone Point basal Waitemata Group sedimentary rocks, Motuihe Island/Te Motu-a-Ihenga, Ocean Beach basal Waitemata Group sedimentary rocks
- Motukorea/Browns Island and Rangitoto Island (volcanic)
- Motutapu folded chert, Administration Bay, Motutapu Island coastal features incl. basal Waitemata Group contact, with fossil giant barnacles

- Pakatoa Island, South Pakatoa shore platform
- Papakōhatu Island / Waiheke Island
 Southwestern rocks and islands, Ponui Island
- Rotoroa Island, North Kaheno Cove folded greywacke, South Kaheno Cove coastal stack and south Rotoroa Island boxwork weathering
- Ruthe Passage Islands
- Rākino greywacke and basal Waitemata section, Rākino Island Islet landforms and headlands
- Tarahiki (Shag) Island

Within the Waiheke Island area there are 7 identified Outstanding Natural Landscapes (ONL) and 8 Outstanding Natural Features (ONF) (Auckland Council, 2024g; Auckland Council, 2024h) with approximately half of the coastline identified as an ONL, including the entire eastern end of the Island.

Common themes within the identified ONL are the dramatic cliffs and coastlines which interact with the Hauraki Gulf. These are often intermixed with a combination of native forest, wetlands, open pasture and vineyards. These landscapes serve as dynamic examples of coastal processes with a mixture of untouched wilderness and natural beauty.

There are many distinct ONFs celebrating volcanic rock forms including the Blackpool spilite (type of rock) located on Huruhi Bay and the Island Bay submarine volcanics. Waiheke Island also contains multiple sites of rich well-preserved Miocene fossil localities including Fossil Bay and 'Double U' Bay on the northwestern peninsula and Oneroa Beach. An ONF is located between Church Bay and Motukaha Island that is the best example of a narrow gravel tombolo (sandbar/spit) in the region. A

cobble and pebble 2-8 m wide tombolo stretches 200 m across the gap between Waiheke Island and Motukaha Island.

An Environmental Defence Society (EDS) report notes that the landscape of Waiheke Island has also been shaped by the removal of shingle and sand for use in concrete construction in Auckland (Peart & Woodhouse, 2020). While this practice was stopped in the 1920s to protect the coastline's recreational values, coastal erosion caused by the removal of shingle remains visible at Ōwhanake and Hooks Bay (ibid.).

There are also a significant number of features listed as cultural heritage sites or features under the Auckland Unitary Plan (AUP:OP) (Auckland Council, 2016a).

- Matiatia, Matiatia Bay foreshore and surrounds,
 Ocean View Road Waiheke Island, Schedule ID MHS
 3: Wāhi tapu, kāinga, mara, urupā
- Ahipao, Matietie Historic Reserve, Ocean View Road Waiheke Island, Schedule ID MHS 2: Wāhi tapu, kāinga, urupā
- Mokemoke, Matietie Historic Reserve, Ocean View Road Waiheke Island, Schedule ID MHS 1: Wāhi tapu, pā, kāinga
- Te Rangihoua, 33-165 Onetangi Road, Waiheke,
 Schedule ID 106: Pā site, wāhi tapu, rawa Tūturu
- Historic heritage sites:
 - The remains of the Scow Rahiri at Blackpool Beach Building (UID 1051): Blackpool (Surfdale) School (Unit 1)

- Building (UID 363): Stony Batter Entire Complex (including gun emplacements, war shelters, tunnels and entrances, engine 23-8 exhausts, fuel inlet, airshaft building, foundations of workshop and store and ordinance workshop, magazine/gun stores, pump and engine rooms). (Unit 4)
- Kennedy's Bay Oyster Farm (Unit 7)
- Cultural Heritage Inventory:
 - o Kainga, Heritage ID 14968: Kainga
 - Te Whau, Heritage ID 11786: Wāhi Tapu Area –
 Pa Wāhi Tapu
 - Te Whau wahi tapu
 - o Te Rangihoua Te Pūtiki o Kahumatamomoe

Additionally, the Waiheke Island area is home to numerous historic heritage sites of significant historical value. The Hauraki Gulf District Plan has identified the following buildings, objects, properties and places of special value (Auckland Council, 2013b):

- Fortress Observation Post (Unit 1)
- Alison Woolshed and yards (Unit 1)
- Blackpool (Surfdale) School (Unit 1)
- Wharetana house (Unit 6)
- Rocky Bay Store (Unit 6)
- Omiha Welfare and Recreation Society Memorial Hall (Unit 6), Memorial Plinth and Flagpole (Unit 6)
- Building (UID 363): Stony Batter Entire Complex (including gun emplacements, war shelters, tunnels and entrances, engine 23-8 exhausts, fuel inlet, airshaft building, foundations of workshop and store and ordinance workshop, magazine/gun stores, pump and engine rooms) (Unit 4)
- Cowes Police Station / Oyster Inspectors House (Unit 5)
- Hewin/Connells Homestead / Store / Post Office.
 Including out-building. (Unit 5)

This SAP contains 2 historic heritage sites identified as part of the Auckland Unitary Plan; the remains of the Scow Rahiri at Blackpool Beach (Unit 1) and Kennedy's Bay Oyster Farm (Unit 7) (Auckland Council, 2016b). Beyond this, there are over 750 archaeological sites recorded on Waiheke Island (Auckland Council, 2013c). Heritage features may also be identified at a unit and stretch level in Volume 3. Engagement with the Auckland Council Heritage Team and Heritage New Zealand may be needed to understand whether any heritage features are exposed to climate hazards or are likely to be impacted by the implementation of adaptation strategies.

3.5 Community Feedback

Community engagement throughout the SAP development process has been extensive to understand how communities use and value their coastal areas including contemporary interests, issues and aspirations regarding their interaction, and use of coastal areas. By identifying broad community objectives which reflect shared contemporary outcomes or aspirations sought by

each community for their coastal areas, this can then inform the selection of appropriate coastal adaptation strategies.

Community engagement for the Waiheke and the Inner Gulf Islands SAP ran in parallel to the development of the Aotea Great Barrier Island and Outer Hauraki Gulf Islands SAP and was open from the 7 August - 7 October 2024.

To capture a diversity of demographics, a range of events and engagement opportunities were held, including both in-person and online engagement. These are summarised below, with notes from



Photo: 3-1 Community engagement at Ostend Market. Shoreline adaptation plan display and SAP team engage with community members.

each event capturing basic attendance observations and key issues or matters discussed. The key call to action at both in-person events and digital engagement platforms during community engagement was to identify 'what matters most' to communities about public coastal areas and their associated facilities, socialise and seek feedback on draft coastal adaptation strategies, educate communities on coastal hazard risks, and understand future aspirations. Additionally, during the engagement period, Ecomatters have been both community partners and consultants to the Auckland Council team supporting inputs and making community connections during the engagement window (i.e. with the Waiheke Resources Trust). Refer to *Volume 1* for more on the methodology used to plan and undertake community engagement.

<u>In-person events:</u>

- Downtown ferry terminal
- Morra Hall, Waiheke
- Ostend Market, Waiheke

- Rakino Wharf
 - Waiheke Collective Film Festival
 - Waiheke Library

<u>Digital engagement:</u>

- AK Have Your Say
- Social Pinpoint

Webinars: Coastal Hazards 101

Community feedback (in-person and digital) was analysed alongside that which has been received from Local Boards and key stakeholders. This included:

- Approx 42 pindrops on the interactive Social Pinpoint map
- Approx 52 'AK Have Your Say' Feedback forms
- Individual community submissions.

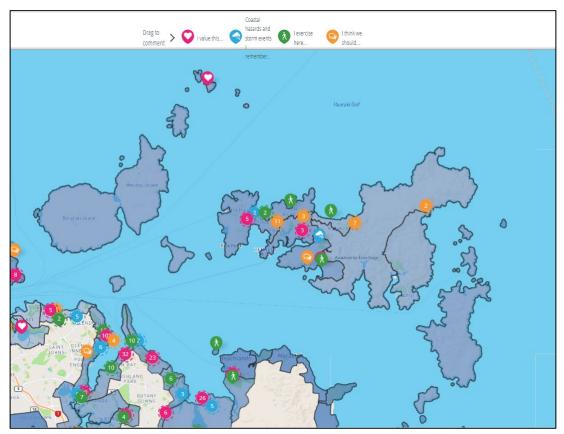


Figure 3-4: Social Pinpoint screengrab showing the spatial location of community feedback for the Waiheke and the Inner Gulf Islands SAP area during the engagement window

Key themes were identified from the feedback and findings at an SAP scale are discussed below. Volume 3 includes a more detailed analysis of specific feedback at a location-specific scale, alongside any feedback/ community views of the draft adaptation strategies that were provided for engagement.

Who did we hear from

Feedback was received via several different platforms. Of those where statistics were gathered (optional), the following profiles can be identified:

| Connection to the coast | • | Most submitters lived within the Waiheke and the Inner Gulf Islands SAP area, with submissions from others visiting the coast for recreational purposes. |
|-------------------------|---|--|
| Gender | • | A slightly higher percentage of males than females responded to the Have your Say survey. |
| Ethnicity | • | A significant portion in this area say the ethnic group they belong to is Pākehā /NZ European, followed by those whole selected 'Asian' and 'Pasifika'. |
| Age group | • | Of those who engaged in digital feedback, the majority are aged 55-64 or 65+, followed by those aged between 35-54. |

Community discussions

In addition to digital engagement platforms and in-person events, feedback was also received via submissions sent to the SAP inbox. These were primarily from residents and community groups associated with the SAP area, including but not limited to:

- Onetangi Beach Ratepayers' Association (OBRA)
- Waiheke Resources Trust
- Rākino Residents and Ratepayers' Association
- Protect Our Gulf.

Over the course of engagement, webinars and direct engagement with key community groups also took place, including a 'Coastal Hazards 101' webinar and presentations to prominent community groups (Onetangi Beach Ratepayers' Association). Additionally, with a focus on capturing a wide array of demographics, the SAP team ran a youth-targeted campaign in late 2024 via Buzzly.nz - a youth-targeted platform run via a partnership with Auckland Council and the Mission Impact Foundation⁹. Community discussions and priorities reflected a holistic and community-focused approach to climate change adaptation on Waiheke and the Inner Gulf Islands, balancing environmental protection, cultural preservation, and inclusive decision-making.

As highlighted in *Volume 1: Understanding the Shoreline Adaptations Plans*, and under the local board views section above, SAPs are living documents, with a note that initial community engagement over the course of developing the Waiheke and the Inner Gulf Islands SAP marks the beginning of an ongoing dialogue with communities about how we adapt our coastlines (room for further engagement with local communities in implementation of this plan).

Local Board Views

During the development of the Waiheke and the Inner Gulf Islands, the Waiheke local boards highlighted a range of considerations, including but not limited to:

Plain language

- Advocacy for plain language in coastal management and adaptive planning.
- Local boards supported the shift toward using clear, accessible language, particularly in communicating adaptation pathways. Reflecting this, terminology describing the overarching strategies within the SAP report has been updated.

Engagement and education

- A key matter raised was the importance of ensuring that community feedback accurately reflects the voices of those across the area.
- The need for continued engagement with local communities, iwi, and local boards through educational workshops and in-person events located within local board areas was noted.
- Acknowledgement that adaptive planning is a complex kaupapa, requiring time, trust, and sustained relationship-building to ensure meaningful and inclusive outcomes.

⁹ https://buzzly.nz/challenge-hub/details/7

Living The importance of recognising SAPs as living documents, marking the beginning of an ongoing dialogue with communities about how we adapt our coastlines. documents The need to update stretches and strategies where further investment or development of assets or use sin coastal areas occurs, such as walking networks and coastal access to remote coastal areas. Consideration of signals, triggers and thresholds in the implementation of coastal Signals, adaptation strategies and the need for coastal monitoring. triggers and thresholds Support for continued coastal monitoring, including coastal monitoring cameras and beach profiles. Critical Recognition of critical infrastructure and roading connections. including links within the island from key ferry connections and water based alternative access for coastal areas infrastructure where road access may be compromised. Importance of coastal access for coastal communities, e.g. Orapiu (wharf) and Ōmiha boat ramp which provide access in the event that roading connections are damaged. Experience from the 2023 storm events highlighted vulnerabilities in many of the coastal Landslides and communities. instability Stormwater The need for integrated catchment management planning. management Support for investment in management, including natured based approaches.

Community Uses/ Values

During community feedback, respondents were asked, 'when thinking about the coastal areas they use in the Waiheke Island and the Inner Gulf Islands area, which values matter the most to them'.

The most popular values centred around ecosystems, coastal habitats and biodiversity, flora and fauna, reflecting a strong appreciation for the natural landscapes and coastal ecosystems. Recreation and amenities, such as swimming, walking along the beach, and other water-based activities, were also identified as important, reflecting the community's enjoyment of the coast for leisure and wellbeing. Many respondents also emphasised the importance of access to the coast, particularly through boat launching facilities that support swimming, sailing, and other marine activities.

Uses, access and frequency

Most respondents said they often go to the coast by via walking or cycling, closely followed by those who use a private vehicle. Just over half of respondents said they visit the coast daily or most days, while a smaller majority visited the coast at least once or twice a week.

When it came to beaches, most respondents visited Oneroa Bay and Onetangi, followed by Hururi Bay and Pūtiki Bay areas, noting that the latter includes a diverse range of facilities and local areas, including Blackpool, Surfdale, Ostend and Shelley Beach areas. The most common reason for visiting the coast in these areas was the availability of walkways and spaces for walking, cycling, hiking, and dog walking. This was followed by swimming and relaxation/unwinding, boating and water-based activities.

Activities

Activities enjoyed were quite varied across the various units within the Waiheke and the Inner Gulf Islands SAP covering passive recreation, water-based activities, open-water activities, walking / cycling and nature-watching, etc. Overall, the most popular were:

- Swimming/ playing in the water, water-based activities
- Walking or running on the beach, walkways or roads, e.g. for exercise, dog walking, etc.
- · Passive recreation, e.g. sitting, relaxing, picnicking, sunbathing
- Nature watching, e.g. birds, marine mammals etc.



Community cultural values / comments

Community responses highlighted:

Cultural connection and landscapes

Community feedback highlighted support for Piritahi Marae and Piritahi Hauora, with an emphasis on the importance of securing land to enable managed retreat for Piritahi Marae and Piritahi Hauora, ensuring the long-term safety of these key cultural and health institutions.

Role of local iwi

- Acknowledgement of the critical role of local knowledge and cultural values in shaping sustainable and effective responses to climate change.
- Calls for more inclusive planning processes that actively involve iwi, hapū, Māori
 communities, and the broader public in climate adaptation and shoreline management
 decisions.
- Collective sense of duty to protect the land, with a strong emphasis on heritage, stewardship, and intergenerational responsibility.

Community values of ecosystems and impacts of climate change

Reoccurring feedback themes from across the Waiheke and the Inner Gulf Islands' coastline included, but were not limited to:

Concern for natural ecosystems

- Loss of native vegetation, damage to habitats, and disruption to coastal ecosystems as a result of coastal erosion (particularly around Oneroa Bay, Te Huruhi Bay, and around Matiatia Wharf).
- Frequent users of areas such as Oneroa Bay expressed concern over the steady deterioration of grassed areas and dunes, calling for low-cost interventions to slow erosion.
- Commentary that although some community-led initiatives, such as planting, have had
 protective effects, the island remains vulnerable to rising sea levels and increasingly
 frequent and intense storm events.
- The impact of coastal change is perceived to threaten the sustainability of local marine life, particularly fish and shellfish populations, and are compounded by pollution and insufficient stormwater management.

Water quality and ecosystem health

 Contributing factors include sewage overflows, stormwater runoff, and sediment discharge, which are particularly problematic following periods of heavy rainfall. These issues impact both environmental health and public enjoyment of the coast. Community feedback strongly emphasised the importance of improving water quality and
restoring ecological balance across the Waiheke and the Inner Gulf Islands unique coastal
environments. Respondents called for more effective stormwater management systems and
targeted ecological restoration, particularly in sensitive coastal and wetland areas. These
efforts are seen as essential for supporting native biodiversity, reducing sediment and
pollution runoff and enhancing the resilience of coastal ecosystems to climate impacts.

Wetland Restoration and Green Infrastructure

- Feedback highlighted community support for wetland regeneration to enhance coastal resilience, manage flood risks, and control erosion.
- Advocacy for nature-based approaches such as coastal planting, wetland restoration, and sustainable stormwater systems - to protect shorelines and promote biodiversity.

Aspirations for marine protection

• Feedback highlighted community support for marine protection in around the Waiheke and the Inner Gulf Islands SAP area, with reference to the proposed Hākaimangō-Matiatia (Northwest Waiheke) Marine Reserve

Community experience of hazards / concerns

When asked about coastal processes or hazards people have experienced or are most concerned about, respondents most frequently identified coastal erosion (particularly around Oneroa Bay, Te Huruhi Bay, and around Matiatia Wharf) and coastal storm events as primary concerns. Other commonly mentioned issues included coastal inundation, sea-level rise and flooding from extreme rainfall events.

When asked about their experience with coastal hazards, just over half of residents reported observing beach erosion, slips, fallen trees, or cliff erosion, while a quarter noted an increased frequency of tidal inundation. Other noticeable changes included reduced fish and marine life, closed or rerouted walking tracks, increased silt and sediment, and instances of pollution or toxic waste. These insights are identified in Volume 3 in relation to each unit, with a high-level summary of key themes detailed below:

Stormwater and infrastructure

- Commentary that multiple factors are exacerbating the impact of coastal hazards (i.e.
 erosion), including poor infrastructure maintenance, high visitor numbers, and buildings
 constructed too close to the shoreline.
- Additional contributors, such as storm surges, inadequate drainage, and wake from boats, are perceived to be accelerating beach loss and limiting access to certain coastal areas.
- Locals questioned whether current systems, e.g. pipes and drains, can effectively manage heavy rainfall or increased surface runoff, with reports of surface flooding and water pooling in multiple locations.

Coastal hazards and management of public spaces

- Community feedback highlighted the gradual erosion of public reserves, such as at Oneroa Bay, due to a lack of effective protective infrastructure and poor vehicle management.
- Concern was raised about vehicles parking under sensitive pōhutukawa trees and driving over dunes, contributing directly to coastal erosion.
- Flooding was frequently reported in streets and homes, underscoring the need for improved flood management and infrastructure adaptation.
- Residents expressed strong concern about the increasing salinisation of groundwater,
 urging a halt to the installation of new bores in affected areas.



Community values and aspirations

Values and aspirations for the future

Respondents were asked what type of values they'd like to see maintained, enhanced, or restored in the future. A broad range of values, aspirations and suggestions were provided, with the highest mentions for 'more/better access to the water line....' and 'respect natural landscapes and coastal ecosystems'. This was closely followed by 'preserve the natural shoreline,' and 'less intensification'.



Community suggestions for management and feedback on strategies

Key themes and topics mentioned included but were not limited to:

Public access and asset management:

Coastal connections

- Equitable and safe access to beaches and coastal areas was a high priority, particularly for recreational activities such as walking, swimming, and picnicking.
- Community members emphasised the need to protect walking tracks and limit vehicle
 access directly onto beaches to prevent environmental degradation and ensure pedestrian
 safety.

Walkway repairs and connectivity

- There was strong support for maintaining and improving accessible infrastructure,
 including designated parking for disabled individuals and safe pathways from land to sea.
- The need to protect walking tracks and limit vehicle access directly onto beaches to prevent environmental degradation and ensure pedestrian safety.
- Calls for enhanced facilities at popular beaches, such as toilets, picnic tables, and barbecues, to support family-friendly and inclusive use of coastal spaces.

Boating and Mooring Areas

- Community feedback highlighted concerns about the impracticality of the current mooring
 arrangements in the Okahuiti (Causeway) Inlet, particularly due to unsafe and muddy
 conditions. There was strong support for reclassifying the entire inlet as a designated
 mooring zone to allow for safer and more efficient management.
- Need to improve boat ramp infrastructure, including regular maintenance of launching ramps and the provision of additional parking for boat users.

Managing roading connections and parking facilities

- Restoration efforts, such as those needed at Shelly Beach, were highlighted due to erosion problems caused by vehicles parking too close to the shoreline.
- Repairing access roads and managing water flow effectively were also priorities to improve infrastructure resilience.
- Concern about the ongoing deterioration of local roads, particularly due to the impact of heavy tour vehicles. It was suggested that limiting the weight and size of vehicles on more vulnerable roads could help prolong their lifespan and reduce maintenance costs over time.
- Alternative use of vulnerable routes: The dirt road between Blackpool and Surfdale was
 identified as an opportunity to create a bicycle and pedestrian walkway, restricted to
 emergency vehicle access. Some suggested transforming it into a sculpture walk or scenic
 route, enhancing its aesthetic and recreational value.
- Access and public use: Several responses called for beaches to be kept vehicle-free, ensuring public access and safety, especially for families and swimmers.

Community Facilities and Infrastructure

- Respondents consistently emphasised the importance of maintaining and upgrading key public assets, including parks, picnic areas, coastal walking tracks, and stormwater systems. These spaces are valued not only for their recreational use but also for their role in protecting the coastal environment and fostering community wellbeing.
- Strong community support for infrastructure improvements that serve both environmental
 and social purposes, such as preventing flooding, enhancing stormwater management, and
 ensuring continued access to natural spaces.

Nature based solutions and ecosystem management:

Natural solutions to coastal protection measures

- Strong support for nature-based coastal protection strategies, such as restoring
 mangroves, dunes, and wetlands, rather than relying on hard engineering solutions, e.g.
 seawalls. Preference was given to ecological restoration as a primary method for addressing
 coastal erosion and enhancing the resilience of natural habitats.
- There was significant support for the use of nature-based designs in the restoration and resilience-building of waterways and former wetlands, especially those previously reclaimed. The community highlighted the availability of local expertise and knowledge to guide these efforts (acknowledging initiatives such as the Waiheke Marine Project).

Environmental Protection and Restoration

- Strong community support for the removal of invasive tree species such as large pine and macrocarpa, in favour of restoring native vegetation to stabilise land and enhance biodiversity.
- Coastal wetlands and streams were viewed as critical ecosystems, with a strong call for their protection and restoration as a central focus of climate adaptation and erosion control efforts.
- Concerns were raised about the environmental impact of high visitor numbers, with feedback calling for limits on tourism to ensure it remains within sustainable levels to not degrade natural resources.
- The prevention of residential development in areas prone to inundation was recommended, to avoid increased risk to property and the environment. There was strong recognition of Waiheke Island's unique character and a widespread desire to protect it from overcommercialisation.
- Advocating for limited, low-impact development that respects the existing culture and natural environment across Waiheke and the Inner Gulf Islands, ensuring growth is sustainable and sensitive to local values.

Natural landscapes and biodiversity

- Residents emphasised the importance of preserving the natural character of the shoreline for future generations and balancing development with environmental stewardship, ensuring the coast remains accessible, resilient, and ecologically diverse.
- Protection of marine life and ecosystems: Residents highlighted the importance of maintaining a healthy marine environment, noting a noticeable decline in fish and shellfish populations over recent decades.
- Natural beauty and recreation: Beaches such as Onetangi were described as iconic and irreplaceable, with strong calls to preserve their current character, allowing for safe swimming, walking, and connection to nature.

Stormwater management and infrastructure pressures:

Stormwaterwastewater management

Strong community support for improving drainage and stormwater management systems to reduce erosion and protect vulnerable coastal areas.

Wastewater resilience

Prioritise the protection of key infrastructure, particularly the wastewater network to prevent overflows and contamination during periods of high demand or extreme weather.

Stormwater runoff and urban development

 Increased impervious surfaces due to infill housing and intensification was placing significant pressure on existing infrastructure; calls for more permeable surfaces, improved drainage planning, and better debris/ leaf litter management (e.g. particularly for trees near storm drains).

Resilience, adaptation and community engagement:

Community involved adaptation planning

- The term 'managed retreat' and indicative timeframes for the identification of strategies (short, medium and long term) was included in consultation documents. Community feedback across multiple unit areas indicated a strong opposition to the concept of managed retreat and concern with the identification of timeframes associated with climate change projections (sea level rise). The term 'Adaptation priority' is included in this report and Volume 2 responding to the need for further community engagement and consideration of options to manage risk. Climate change scenarios and sea level rise considerations which have been considered are also now reflected as low, moderate and high climate scenarios.
- Community feedback also identified a strong desire for community involved adaptation planning, considering private land and third-party assets alongside that of council interest.

Climate Resilience and Long-Term Planning

- Strong support for strengthening the community's resilience to climate-related impacts, particularly from storm surges, sea-level rise, and extreme weather events.
- Advocacy for long-term, sustainable visions for Waiheke and the wider Inner Gulf Islands
 area, driven by local initiatives and grassroots actions. Suggestions included incentives and
 education for homeowners to adopt adaptive measures, such as raising homes and using
 flood-resilient designs, to reduce individual and community vulnerability.

Wider Influence of Third-Party Land

Calls for the plan to incorporate broader land-use considerations, acknowledging that third-party land, assets, and interests significantly influence erosion, runoff, habitat health, and long-term sustainability.

Land Use, Development, and Regulation

- Community feedback reflected a desire for stricter land-use controls, particularly in coastal and hazard-prone areas, to avoid developments that could worsen environmental risks.
- Calls for stronger regulatory frameworks.
- Opposition to continued coastal developments that don't align with long-term sustainability goals.

Key feedback from communities and local boards has been the need for further and ongoing conversations regarding adaptation and further work on adaptation options alongside decision-making responsibilities. There was general acknowledgement that this is a long-term intergenerational conversation.

Community objectives for the Waiheke and the Inner Gulf Islands SAP area

Community feedback received during the period of engagement was collated and reviewed in collaboration with Auckland Council's Parks and Community Facilities Department, to develop the following high-level objectives:

Coastal connections, use and access

- Ensure equitable and safe access to Waiheke's beaches and coastal areas for all community members, prioritising recreational activities such as walking, swimming, and picnicking.
- Maintain and enhance accessible infrastructure to support all users, including providing designated parking for disabled individuals and creating safe pathways from land to sea.
- Protect and preserve walking tracks by limiting vehicle access directly onto beaches, preventing environmental degradation, and ensuring the safety of pedestrians.
- Enhance boat ramp infrastructure through regular maintenance of launching ramps and the
 provision of additional parking spaces for boat users, ensuring easier and safer access to
 the water.

Social and cultural

- Iwi, communities and stakeholders are central to and leading conversations, assessment of
 options and implementation actions and decision making in relation to adaptation in
 coastal areas.
- Promote long-term, sustainable visions for Waiheke Island and the broader Inner Gulf
 Islands, driven by local initiatives, grassroots actions, and community-led education. This
 includes encouraging homeowners to adopt adaptive measures (e.g. raising homes, using
 flood-resilient designs) to reduce vulnerability.
- Locally relevant signals and triggers for change are developed, in response to a dynamic coastal environment and sea-level rise, to support adaptation decision making.

Responding to risk

- Proactively address risks to critical transport networks, including valued coastal walkways and access points, to ensure continued community access during and after hazard events.
- Advocate for stronger regulatory frameworks to guide sustainable land-use and environmental protection, ensuring alignment with long-term sustainability goals.

Environmental

- Protect and restore coastal wetlands and streams as key ecosystems, making their preservation a core element of climate adaptation and erosion control efforts.
- Work to safeguard the shoreline's natural character, maintaining its accessibility, resilience, and ecological diversity for future generations, supporting nature-based solutions in coastal management in alignment with community values.
- Where possible, ensure coastal management approaches support marine life and ecosystems, addressing the decline in fish and shellfish populations to ensure a healthy marine environment.



What can we do about it?

Summary of adaptation strategies per unit

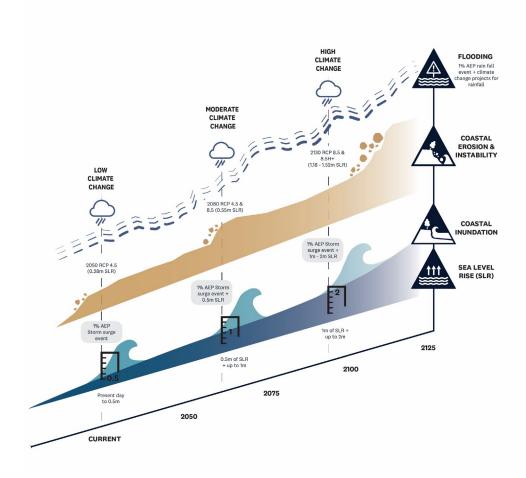
The adaptation strategies are identified in the quick reference guide at the start of the document. The table below lists adaptation strategies for each unit and stretch. Volume 3 provides additional detail on adaptation strategies at a stretch level.

Climate scenarios

To reflect that exposure and therefore risk will change depending on climate scenarios, necessitating flexibility to change as required, strategies are split across:

- Low (climate) change sea-level rise
- Moderate (climate) change sea-level rise
- High (climate) change sea-level rise.

Scenarios are indicative only and transitions between strategies will be in response to identified changes in conditions at a given location (i.e. signals, triggers and thresholds).



Auckland Council's adaptation strategies

Coastal adaptation strategies applied to each coastal stretch are described in further detail below:

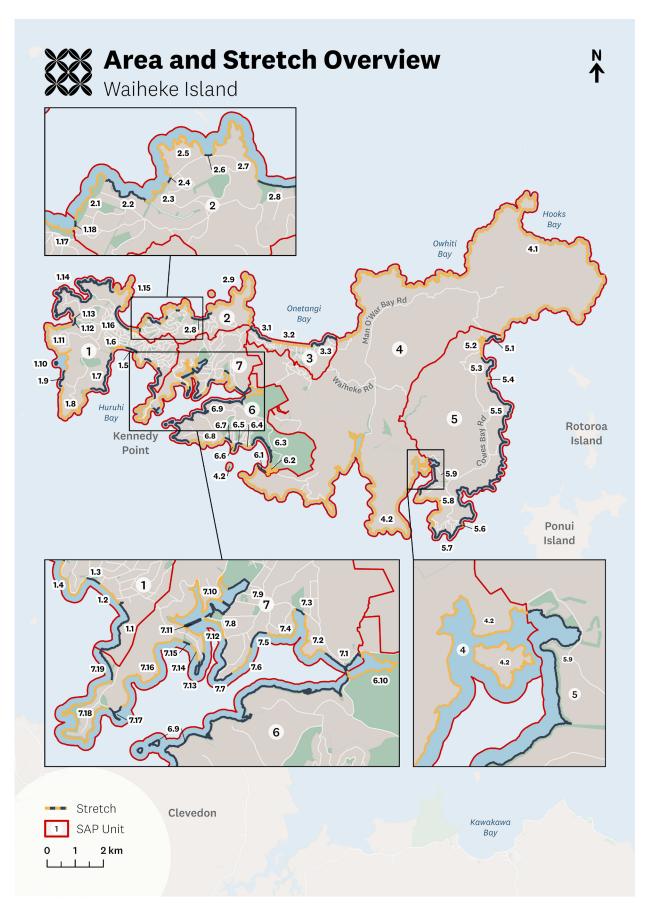


Figure 5: Stretch Overview for Waiheke island. NOTE: Refer to Unit 8 for the location of stretches within the inner gulf islands.

| Icon | Acronym / colour | Adaptation strategy |
|------|------------------|---------------------|
| | | No Action |
| | | Maintain |
| | | Protect |
| | | Adaptation Priority |

| | | Adaptation Strategy | | |
|---|---|---------------------|------------------------|------------------------|
| Unit | Stretch | Low Change | Moderate change | High change |
| 1 – Waiheke West (Te | 1.1: Donald Bruce Road, Huruhi Bay south | No action | No action | No action |
| Huruhi Bay – Oneroa Bay) | 1.2 Surfdale east | Maintain | Maintain | Adaptation Priority |
| | 1.3: Surfdale reserve | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.4: Matenga Point (The Esplanade) | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.5 Blackpool east | Protect | Adaptation Priority | Adaptation Priority |
| | 1.6: Blackpool west (Te Huruhi reserve) | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.7: Maunganui Point (Te Huruhi Bay west) | No action | No action | No action |
| | 1.8: Park Point (Te Roreomaiaea) | Maintain | Maintain | Adaptation Priority |
| | 1.9: Te Rere Point | No action | No action | No action |
| | 1.10: Motukaha Island | No action | No action | No action |
| | 1.11: Church Bay to Matiatia South | Maintain | Maintain | Adaptation Priority |
| | 1.12: Matiatia Bay south | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.13: Matiatia Wharf | Protect | Protect | Protect |
| | 1.14: Owhanake – Matiatia Walkways | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.15: Hakaimango Point | No action | No action | No action |
| | 1.16: Oneroa Bay | Maintain | Adaptation Priority | Adaptation Priority |
| | 1.17: Oneroa East & Little Oneroa | Maintain | Maintain | Adaptation Priority |
| | 1.18: Little Oneroa North | Maintain | Maintain | Adaptation Priority |
| 2 – North West Coast (Hekerua Bay to | 2.1: Little Oneroa to Newton Road (Newton Reserve) | Maintain | Maintain | Adaptation Priority |
| Onetangi west) | 2.2: South Hekerua (Newton Road north) | Maintain | Maintain | Maintain |
| | 2.3: Hekerua Bay | Maintain | Maintain | Maintain |
| | 2.4: Sandy Bay | Maintain | Adaptation Priority | Adaptation Priority |
| | 2.5: Sandy Bay to Enclosure Bay | No action | No action | No action |
| | 2.6: Enclosure Bay | Protect | Adaptation Priority | Adaptation Priority |
| | 2.7: Enclosure Bay to Mawhitipana Bay (Palm Beach) | No action | No action | No action |
| | 2.8: Palm Beach | Maintain | Maintain | Adaptation Priority |
| | 2.9: Thompsons Point | No action | No action | No action |

| 3 - Onetangi Bay | 3.1: West Onetangi | No action | No action | No action |
|---|---|-----------|------------------------|------------------------|
| | 3.2: Central Onetangi | Maintain | Adaptation Priority | Adaptation Priority |
| | 3.3: East Onetangi | No action | No action | No action |
| 4 – Waiheke East (North and South coast) | 4.1: Waiheke East - North coast | No action | No action | No action |
| | 4.2: Waiheke East – Southern coast | Maintain | Maintain | Maintain |
| 5 - Man O'War Bay to | 5.1: North Man O'War Bay | No action | No action | No action |
| Te Matuku Bay | 5.2: Man O'War Bay | Maintain | Adaptation Priority | Adaptation Priority |
| | 5.3: Rangitawhiri Point | No action | No action | No action |
| | 5.4: Waikopou Bay | Maintain | Maintain | Maintain |
| | 5.5: Eastern coast | No action | No action | No action |
| | 5.6: Orapiu wharf | Protect | Protect | Protect |
| | 5.7: Hunterville & Otakawhe Bay | Maintain | Maintain | Adaptation Priority |
| | 5.8: Pearl Bay & north | No action | No action | No action |
| | 5.9: Te Matuku Bay | Maintain | Maintain | Maintain |
| 6- Ōmiha, | 6.1: Whakanewha South | No action | No action | No action |
| Whakanewha / Rocky Bay to Rangihoua Wetland | 6.2: Poukaraka flats (Whakanewha Regional Park) | Maintain | Maintain | Adaptation Priority |
| | 6.3: Whakanewha (Whakanewha Regional Park) | No action | Maintain | Maintain |
| | 6.4: Whakanewha to Ōmiha Rocky Bay | No action | No action | No action |
| | 6.5: Ōmiha Bay | Maintain | Maintain | Maintain |
| | 6.6: Pohutukawa Reserve Headland | No action | No action | No action |
| | 6.7: Kuakarau Bay (Mary Wilson Reserve) | Maintain | Adaptation Priority | Adaptation Priority |
| | 6.8: Te Akau o Hine (Wairua and Te Whau Reserves/walkways) | Maintain | Maintain | Adaptation Priority |
| | 6.9: Te Whau & Southern Pūtiki Bay | No action | No action | No action |
| | 6.10: Rangihoua | Maintain | Maintain | Maintain |
| 7 - Pūtiki Bay (Ostend | 7.1: Onetangi Road/Ostend Road | Maintain | Maintain | Maintain |
| to Kennedy Point) | 7.2: East Tawaipareira / Ostend Road South | No action | No action | No action |
| | 7.3: Tawaipareira Reserve | Maintain | Maintain | Adaptation Priority |
| | 7.4: Calais Terrace/ Anzac Bay reserve | No action | No action | No action |
| | 7.5: Anzac Bay (Natzka Road) | Maintain | Adaptation Priority | Adaptation Priority |
| | 7.6: Albert Crescent/ Anzac Bay west | No action | No action | No action |
| | 7.7: Wharf Road | Protect | Adaptation Priority | Adaptation Priority |
| | 7.8: Ostend Domain | Maintain | Adaptation Priority | Adaptation Priority |

| | 7.9: Waiheke Sports Club to Te Toki Reserve | Maintain | Adaptation Priority | Adaptation Priority |
|--|---|-----------|------------------------|------------------------|
| | 7.10: Te Toki Reserve to the Causeway | No action | No action | No action |
| | 7.11: Causeway west | Protect | Protect | Protect |
| | 7.12: Shelly Beach Road east | No action | No action | No action |
| | 7.13: Pūtiki Reserve/ Point | Maintain | Adaptation Priority | Adaptation Priority |
| | 7.14: East Putaki Bay | No action | No action | No action |
| | 7.15: Shelley Beach (Putaki Bay) | Maintain | Maintain | Maintain |
| | 7.16: Donald Bruce Road East/ West Pūtiki Bay | No action | No action | No action |
| | 7.17: Kennedy Point Wharf and access | Protect | Protect | Protect |
| | 7.18: Kennedy Point Reserve | No action | No action | No action |
| | 7.19: Kennedy Point north and Picnic Bay | Maintain | Maintain | Maintain |
| 8: Unit 8: Inner Hauraki Gulf Islands (Rangitoto, Motutapu, Rākino, Motuihe/ Te Motu-a-Ihenga, Motukorea/ Browns Island) | 8.1: Rākino Island wharf | Protect | Protect | Protect |
| | 8.2: Rākino Island | No action | No action | No action |
| | 8.3: Central islands | No action | No action | No action |
| | 8.4: Motukorea / Brown Island | Maintain | Maintain | Maintain |
| | 8.5: South eastern Islands | No action | No action | No action |
| | 8.6: Other islands | No action | No action | No action |

4.1 SAP Monitoring and implementation

Implementation of this SAP is a live and developing process which will require continued collaboration across multiple Auckland Council departments and Auckland Council-controlled organisations and entities. This will be undertaken alongside ongoing engagement with iwi to ensure that iwi have a partnership/co-management role in the project design, development, and implementation phases. This is a live document which will be kept updated by Auckland Council to reflect any developments in the ongoing implementation of the SAP.

The SAP area reports are currently anticipated to be reviewed on a five-yearly cycle. This will enable updated information to become available and be appropriately considered. Several specific factors may trigger a review or update of this SAP including review requested by iwi and national or regional legislative or policy changes.

Coastal monitoring activities in the Waiheke Island SAP area will be considered in implementation to inform signals triggers and thresholds. A more detailed discussion regarding implementation of the Shoreline Adaptation Plan Programme can be found in Volume 1.

Recommended monitoring activities

Auckland Council services a comprehensive, regional coastal monitoring programme. The programme is dedicated to developing innovative methods for assessing changes in our coastal areas, focusing on beach erosion, accretion, and coastal inundation. This data informs the regional State of the Environment reporting but will also be a key source of information when monitoring and implementing Shoreline Adaptation Plans. A live portal hosts all councils monitoring data and is publicly available here.

Undertaking a beach monitoring programme will enable a greater understanding of beach profiles, recovery cycles and mean high tide position for the beach and enable long term recorded change to be identified. This could inform signals and triggers for future adaptive actions for this stretch.



Regular monitoring surveys of established beach profiles



Coastal Monitoring cameras are/will be located at Oneroa and Onetangi beaches to support and understanding of coastal change.

Live Camera

The results of this monitoring will inform signals triggers and thresholds for implementation of the plan and specific strategies. A more detailed discussion regarding implementation of the SAP Programme can be found in <u>Volume 1</u>.

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