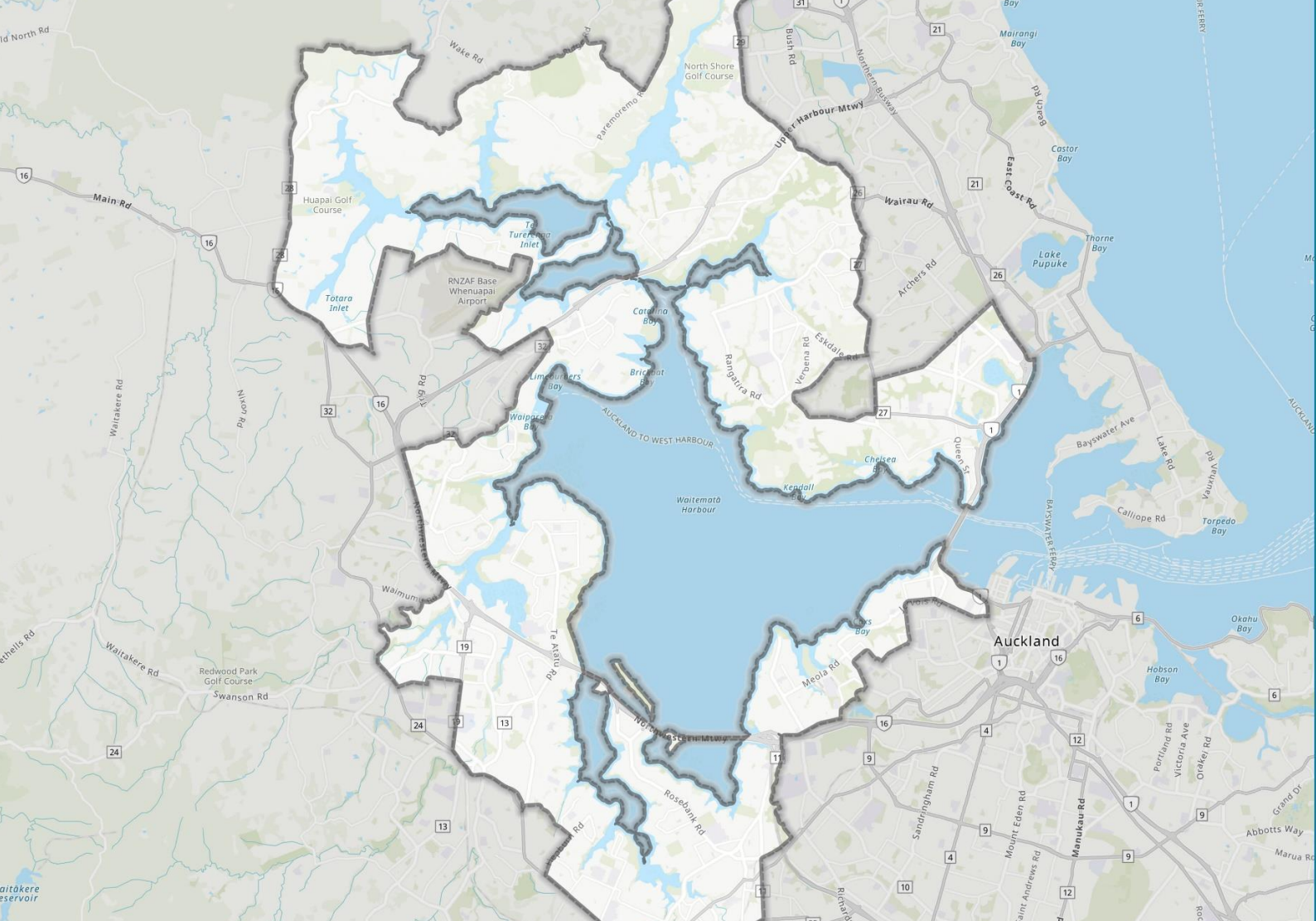




Ngā mahere whakaurutau mō te takutai

Shoreline Adaptation Plan

Waitematā Harbour West

Volume 2: Introduction to the SAP area

April 2025, Version 1.0

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Shoreline Adaptation Plan: Waitematā Harbour West Volume 2: Introduction to the SAP area

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The document was prepared by Engineering, Assets and Technical Advisory, and supported by advice from Healthy Waters, Parks and Community Facilities and numerous other Auckland Council departments, Eke Panuku, Auckland Transport and Watercare Services. Ecomatters have been both community partners and consultants to the Auckland Council team supporting inputs and making community connections.

We would like to acknowledge and thank the Local Boards and Ward Councillors for their ongoing support of the Shoreline Adaptation Plan Programme. The Local Boards and Ward Councillors have actively supported the development of this report, promoting and attending community events and providing valuable insights regarding the challenges for shoreline engagement across the Waitematā Harbour West coastline. The project team would like to acknowledge their support for the programme, as well as the local community, key stakeholders and third party infrastructure and asset/ landowners (including NZTA Waka Kotahi; New Zealand Defence Force and Transpower) and users of the wider Waitematā Harbour West coastline for their engagement, support, and ongoing interest in this SAP.

As set out in *Volume 1: Understanding the 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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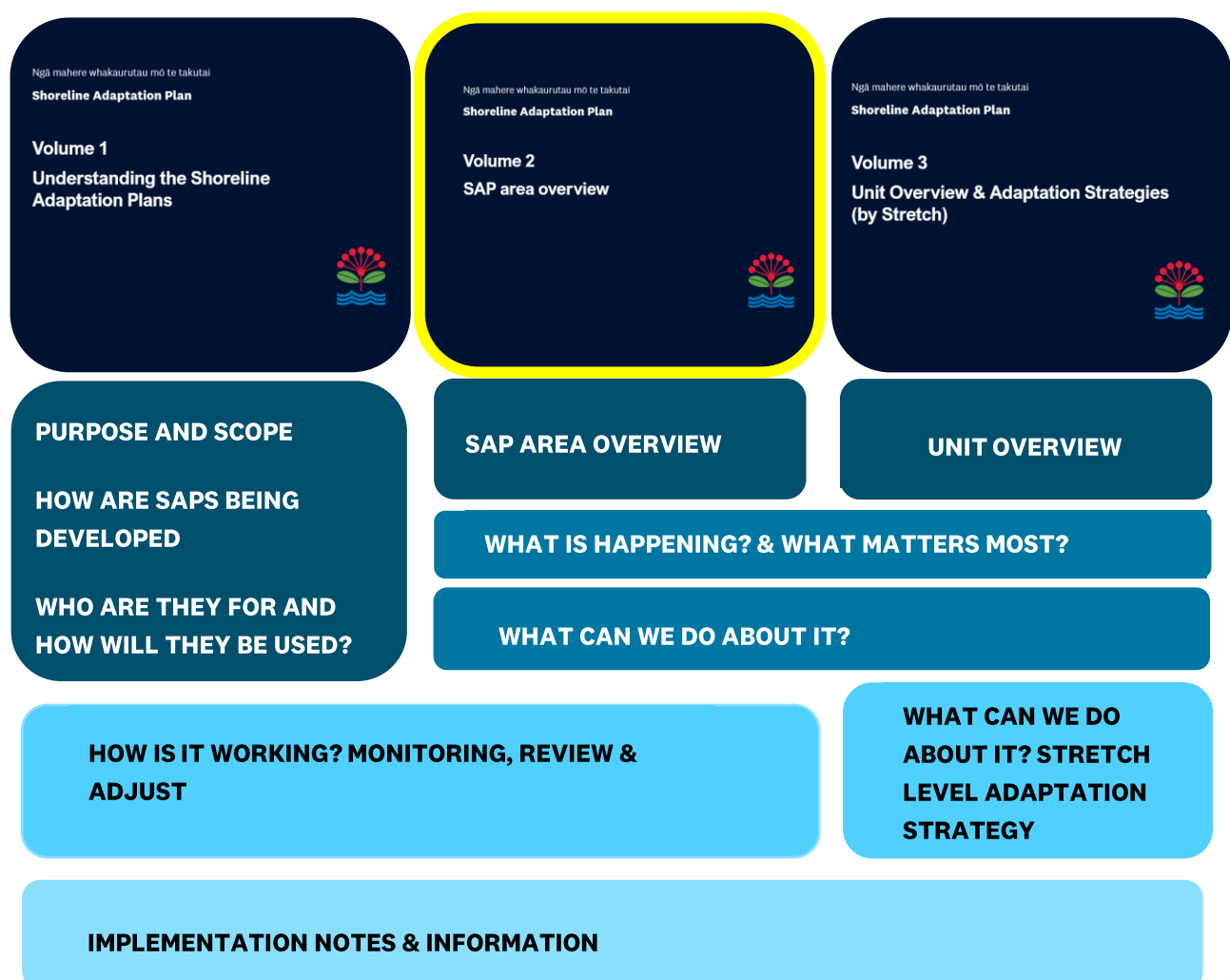
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Quick Reference

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.

	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.
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.
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.
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).
Exposure	The nature and degree to which a system is exposed to significant climate variations.
Hazardscape	The net result of natural and man-made hazards and the risks they pose to an area.

Term	Definition
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.
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, public-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.
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 Waitematā. 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 SAP Program can be found in *Volume 1: Understanding the Shoreline Adaptation Plans*. Twenty SAPs make up Auckland's ~3200 km of coast as follows:

- Aotea Great Barrier and the Hauraki Gulf Islands
- Āwhitu
- Kahawairahi ki Whakatīwai / 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 Orewa
- Tamaki 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

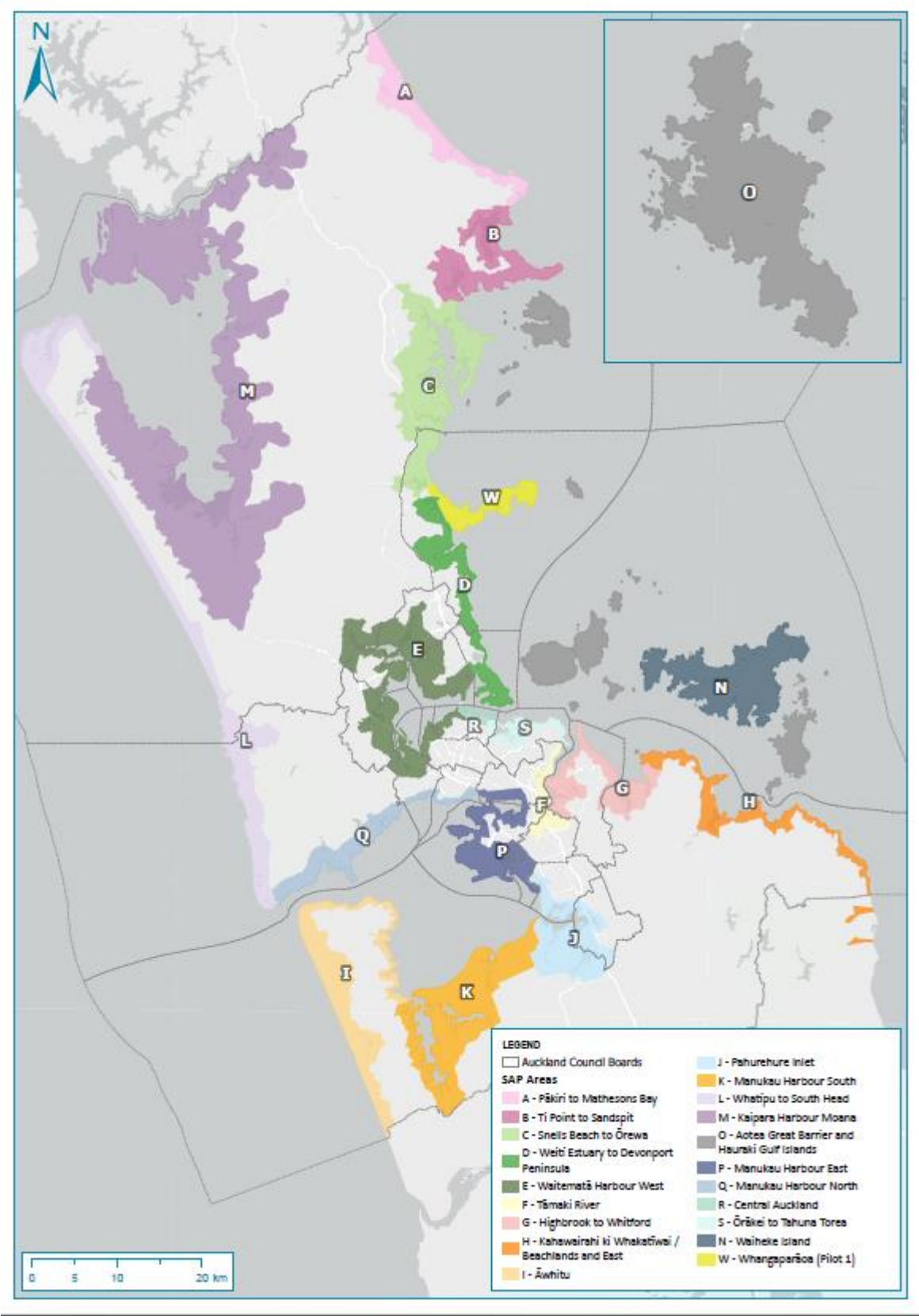
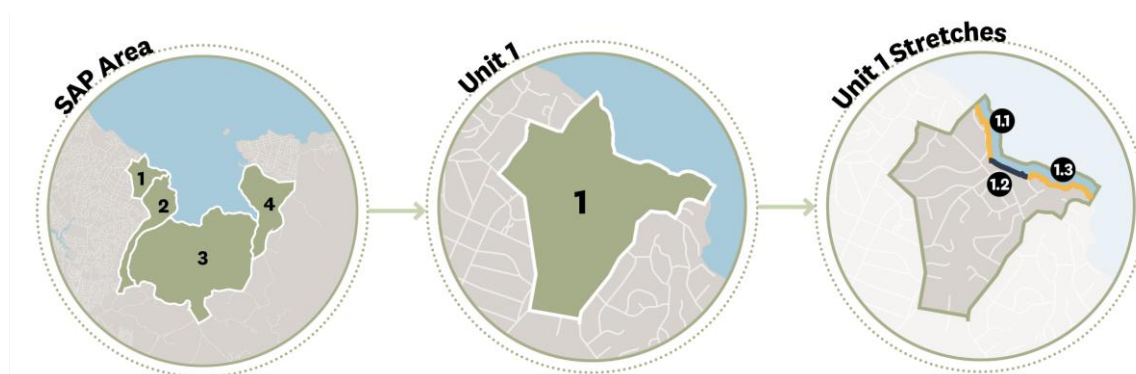


Figure 1-1: Shoreline Adaptation Plans (regional)

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 level • Up 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 m • Up 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 low, moderate and high climate change scenarios (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 Waitematā Harbour West SAP area spans the interior coastal regions of the Waitematā Harbour and has a diverse coastline approximately 231 km in length. This inner harbour is distinguished by numerous small beaches, embayments, and tidal inlets, several of which contain ecologically valuable habitats. These include mangroves, coastal forests, and intertidal flats that house shellfish beds, which are roosting and foraging grounds for shorebirds. The estuarine environment of the Waitematā Harbour West area is generally a low energy coastal environment.

The SAP extends from the Harbour Bridge west along the coastline of the harbour (encompassing Herne Bay, Point Chevalier, Waterview, Avondale, Kelston, Te Atatū South, Te Atatū Peninsula, West Harbour and Hobsonville), and then curves east towards the northern extent of the Harbour Bridge (encompassing Whenuapai, Riverhead, Paremoremo, Greenhithe, Bayview, Beach Haven, Birkdale, Chatswood, Northcote Point, Birkenhead and Northcote). As shown in the map below (Area Overview), the area is divided into 16 SAP units.

Most of the SAP area can be characterised as urban, with the exception of Whenuapai (Unit 9), Riverhead (Units 7 and 8), and Paremoremo (Unit 6), which are more rural (but may urbanise further in time as future development plans progress).

Areas such as Hobsonville and Whenuapai have seen extensive urban development in recent years. Te Atatū South (Unit 12) and Avondale (Unit 13) have high residential populations as well as industrial uses. Throughout Herne Bay (Unit 16), Point Chevalier (Unit 15), Beach Haven (Unit 3), Greenhithe (Unit 5), Chatswood (Unit 2), and Northcote Point (Unit 1), there are suburban residential areas. More urbanised residential areas are located within Waterview (Unit 14) and Hobsonville (Unit 11). Most units have small – medium town centres within them, including shops, cafes and restaurants.

The 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 (Volume 3) which guide how coastal land and assets owned by Auckland Council will be sustainably managed have been informed by:

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

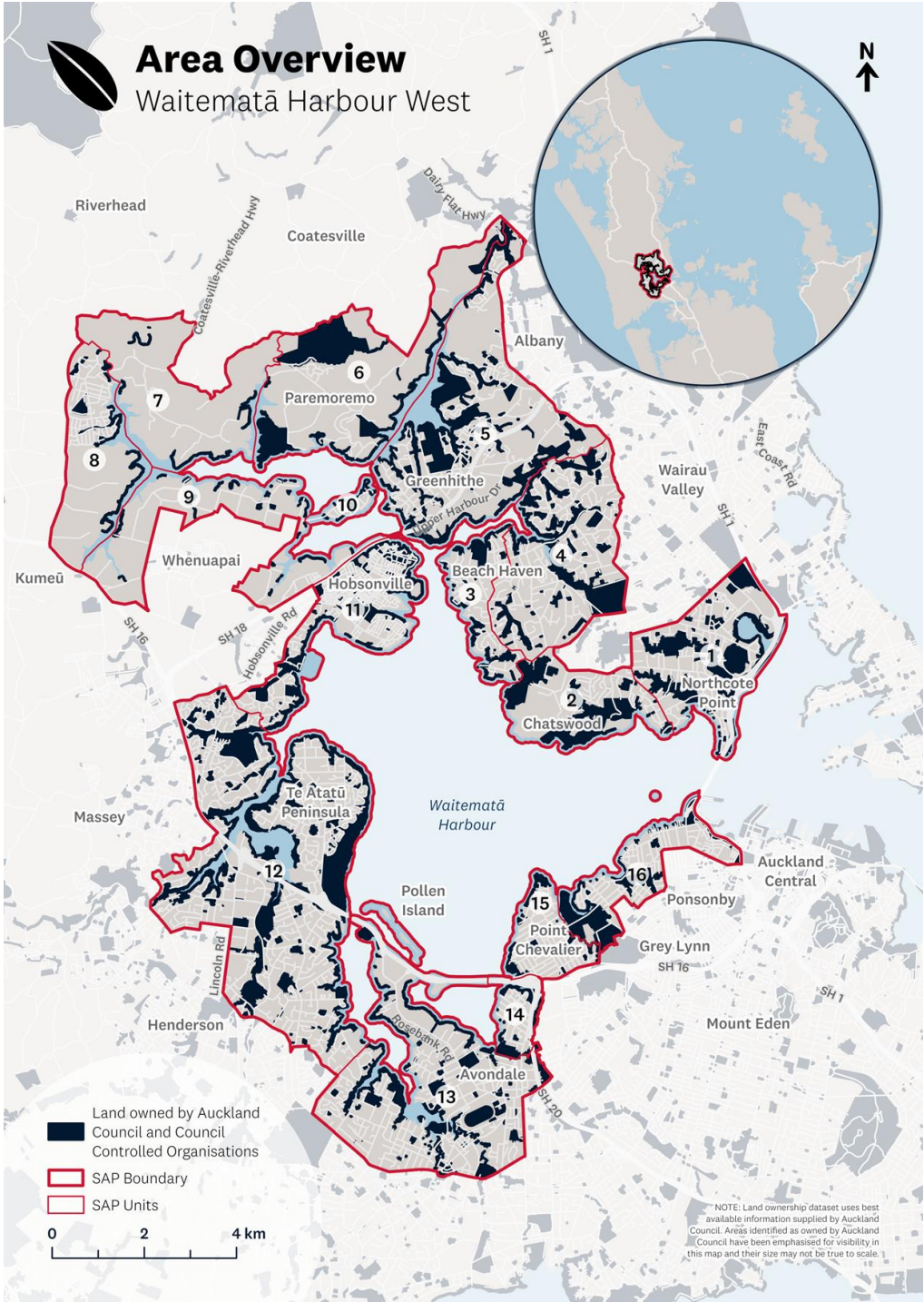


Figure 1-1: Waitemata Harbour West area overview

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 Shoreline Adaptation Plans, refer to *Volume 1: Understanding the Shoreline Adaptation Plans*.

Coastal context

This SAP area covers approximately 231 km of the Waitematā Harbour coastline encompassing Northcote Point to Saint Marys Bay and includes multiple inlets to the north, west and south.

The entrance to Waitematā Harbour is between Bastion Point to the south, and North Head to the north, and is protected from open ocean swells by the inner Hauraki Gulf islands. The inner harbour is characterised by many small beaches, embayments and branching tidal inlets. The estuarine environment of Waitematā Harbour is a low energy environment, only exposed to low, short-period depth restricted wind waves, with limited local fetch distances.

The Upper Waitematā Harbour consists of seven tidal creeks/sub estuaries that converge into a main channel. The harbour enters the central Waitematā Harbour through a narrow outlet between Beach Haven and Hobsonville. Several of the tidal creeks contain ecologically valuable sections of vegetation that transition from mangroves into coastal forest. Intertidal flats around Herald Island house shellfish beds and are important roosting and foraging areas for shorebirds.

Waitematā Harbour is a drowned river valley flooded by sea-level rise that stabilised at the current level around 6,500 years ago. Catchment geology of the harbour's shoreline is comprised of Waitematā Group of sandstone and mudstone that form the cliffs. These soft Waitematā Group sediments are readily weathered and form the base of local beach sands. The lower-lying shoreline of the Henderson Creek and Whau River, and upper harbour around Hobsonville is comprised of Tauranga Group (Puketoka Formation). The Tauranga Group sediments are weakly cemented pumiceous mud sand and gravels with non-welded ignimbrites and alluvial pumice deposits.



Figure 2-1: Short period wind waves, Little Shoal Bay to Halls Beach (Source: Matthew McNeil)

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*⁴. 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.

Within the Waitematā SAP area, coastal inundation flooding is predicted to have the greatest impact at the SAP scale on low-lying land and Auckland Council community facility assets in Litte Shoal Bay (Unit 1), Herald Island (Unit 10) and Te Atatu Peninsula (Unit 12). At a localised scale, there are other areas where the inundation extent will increase with future sea-level rise such as low reclaimed reserves and landing areas adjacent to boat launching ramps (e.g. Island Bay, Rame Reserve, Eric Armishaw Reserve).

Sea-level rise is projected to be uniform along this coastal area, but the relative sea-level rise (RSLR) experienced will be dependent on the rate of subsidence of land, and this varies throughout the Waitematā Harbour West area. Areas with the greatest subsidence rates will have greater RSLR. Within this SAP area, the maximum VLM is -3.5 ± 1.9 mm/year (Station #1172, Riverhead) and minimum VLM is -1.6 ± 2.2 mm/year (Station #1193 at Huruhuru Creek). This means that in areas with the greatest VLM per year, at 2150 under SSP5-8.5 RSLR could be 1.3 times the rate of change of sea-level rise without accounting for land subsidence through VLM.

Figure 2-2 below shows the resulting coastal flooding hazard extents at the Waitematā Harbour SAP scale for:

- Coastal inundation 1% annual exceedance probability (AEP) event (equivalent to a 1% chance of occurring in any year, or a 1 in 100-year return period)
- The same event with 0.5 m and 1.0 m sea-level rise added (to represent medium- and long-term change).

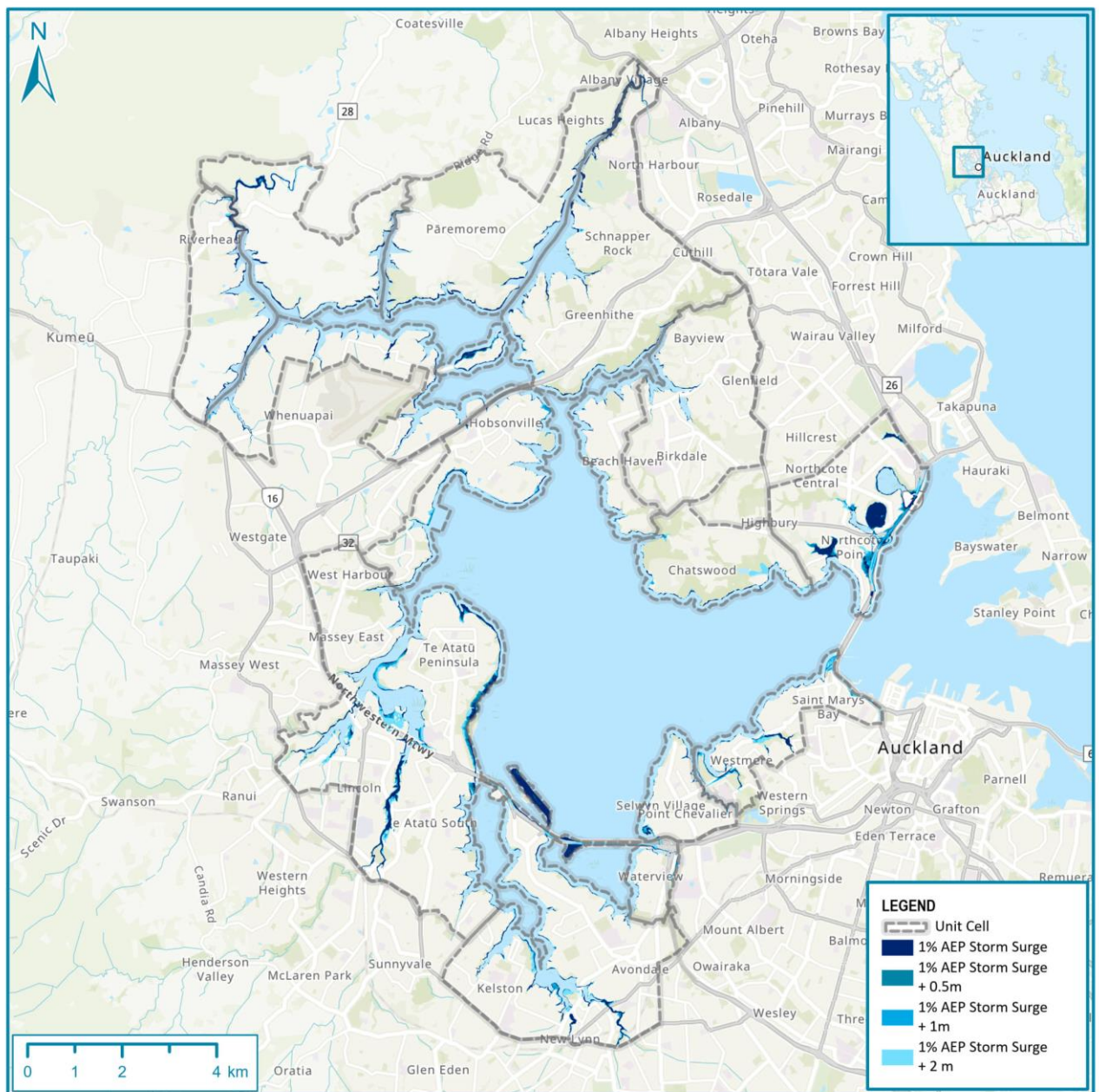


Figure 2-2: Coastal Inundation (CI) for 1% AEP storm surge for present day and with 0.5 m, 1 m and 2 m sea-level rise. Source: Waitematā Harbour West Risk Assessment Technical Report, 2024, Tonkin & Taylor.

Coastal erosion (including sea-level rise)

The areas along the Waitematā Harbour shoreline 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. Along the beach shorelines, erosion predictions are gradual and increase over time with the expected impacts of sea-level rise. The ASCIE lines that indicate the area susceptible to coastal instability and erosion show a low to moderate coastal erosion risk, reflective of the more sheltered environment of Waitematā Harbour. Predicted future rates of erosion are greatest on higher elevated sections of coastline such as along the cliffs around Birkenhead and Beach Haven. Coastal erosion predictions terminate before the upper reaches of the smaller side arms of tidal inlets at the MHWS boundary, however it is noted that these areas will still be exposed to stream bank erosion (particularly on outer meanders).

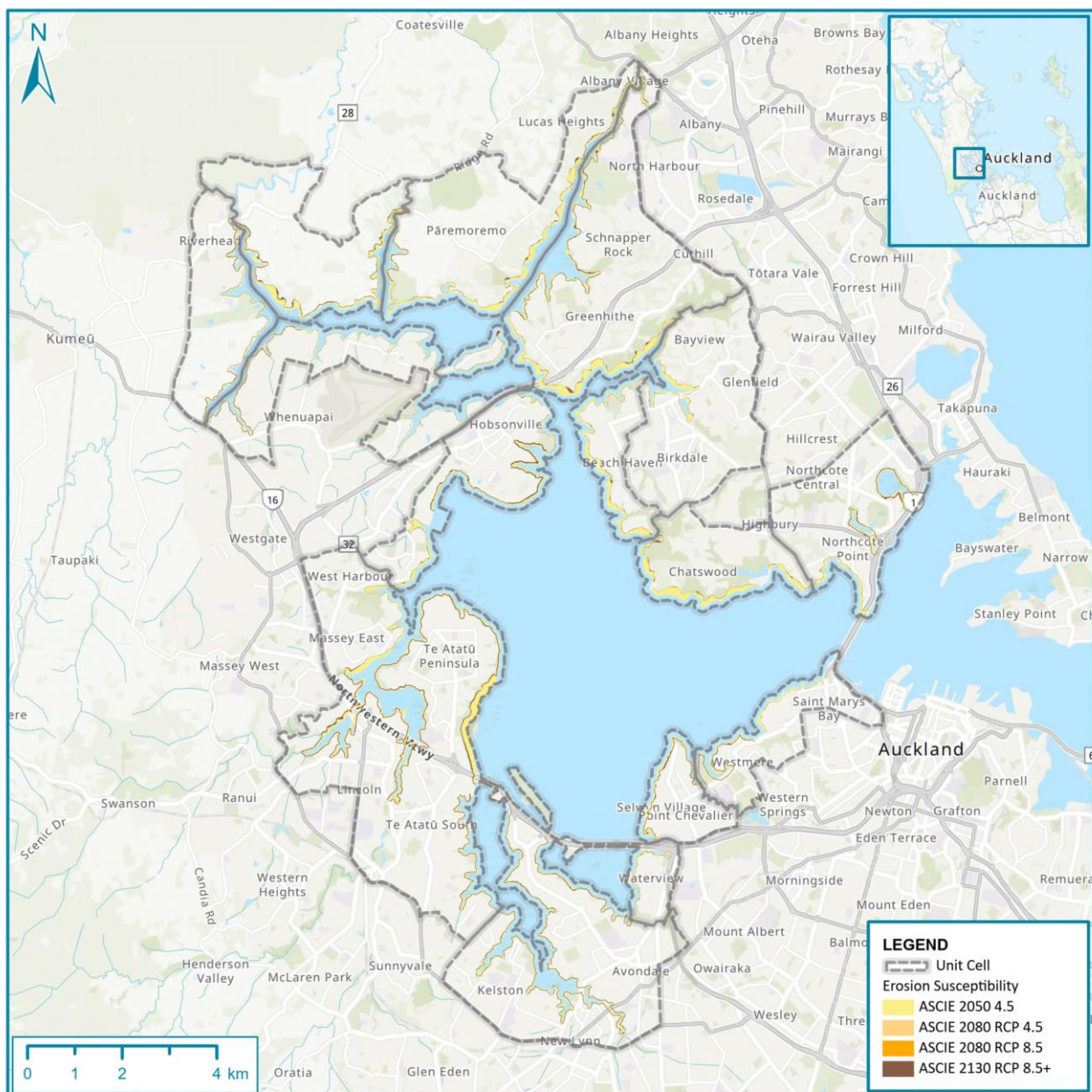


Figure 2-3: Coastal Instability and erosion susceptibility for 2050, 2080 and 2130 considering RCP4.5 and RCP8.5 emission scenarios Source: Waitemata Harbour West Shoreline Adaption Plan: Risk Assessment Technical Report, 2024, Tonkin & Taylor

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 Hazard 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.

Project Twin Streams, a stormwater management project based in the former Waitakere City Council, was used to purchase 156 full and part properties located within the 100-year flood plain of the project catchment. This project was executed over 10 years as a comprehensive scheme that involved the purchase and removal of houses in the flood plains as a significant part of the multifaceted approach, that also restored 56 km of riparian margins. The Project Twin Streams Catchment spans 10,000 ha, including the streams draining from the Waitakere Ranges in the west of Auckland to the Henderson and Huruhuru Creeks, and the Waitematā Harbour – the Opanuku, Oratia, Waikumete, Paremuka, Pixie and Swanson Streams.

Other hazards

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

2.2 Current coastal management practices

An overview of existing current coastal management across the Waitemata Harbour is summarised in the table below and discussed in greater detail in *Volume 3: Adaptation Strategies for the Waitemata Harbour West SAP*. Waitemata Harbour has 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 include:



Flood control or management

- Little Shoal Bay tidal gate.
- Making space for Water Project Twin Streams.
- The Clover Drive, Rānui flood resilience project is identified under Auckland Council's 'making space for water' (blue-green networks). This project is addressing flooding risk for homes and roads, improving stormwater flow and making the network more resilient.



Coastal protection

- **Armoured reclamations:** Northern Motorway (Shoal Bay shoreline); boat landing reserves (Sulphur Point Reserve and Gold Hold); Little Shoal Bay Reserve.
- **Birkenhead seawalls:** Brassey Road Reserve pumping station; Hinemoa Reserve masonry seawall armours carparking area and boat ramp access; Chelsea Bay rock seawall.
- **Beach Haven seawalls:** Island Bay Reserve masonry rock seawall and rock revetment armouring carpark and ramp access; Rosecamp Road Reserve rock revetment armouring at the northern end of the reserve.
- **Beach Haven Point:** Hilders Park and the Larkings Landing reclaimed reserves at Beach Haven Point armoured with a sloping masonry seawall; Tui Park coastal bush reserve with a short length of grouted rock seawall.
- **Hellyers Creek:** The reserve landing is armoured with a seawall; Manuka Reserve reclaimed landing and ramp is armoured with a grouted rock seawall and several stacked rock groynes that were constructed to retain a small renourished beach area; Tui Park coastal bush reserve has a short 25 m length of grouted rock seawall.
- **Lucas Creek:** Rahui Reserve landing and boat access is armoured by a low rock seawall; Rame Road is protected by section of rock revetment; there are armoured approaches to boat launching ramps at Rame Reserve (reclaimed landing) and Wharf Road
- **Upper Harbour:** Attwood Reserve landing seawall armouring approach and short seawall supporting the road east of the wharf; Riverhead historic concrete retaining breastworks at Riverhead Historic Mill Esplanade Reserve; Waimarie Beach Reserve has tipped rock armouring alongside the northern side of the boat ramp.
- **Herald Island:** There is a rock masonry seawall at Christmas Beach; a seawall protects the bank behind the Herald Island wharf.
- **Hobsonville:** Sections of heritage masonry seawall are in the marine precinct at Catalina Bay; substantial rock revetments armour the majority of the recently developed south-facing shoreline of Hobsonville.

- **Henderson Creek:** There is an armoured landing and ramp at The Concourse Strand Reserve in Lincoln where the outside bend of the main creek channel flows close to the shoreline providing good access to deeper water.
- **Te Atatu Peninsula:** Taipari Strand Reserve is an area of historic closed landfill with grouted rock seawall that extends approximately 620 m around the western edge of the reserve with concrete path capping; Kelvin Strand Beach Reserve is armoured with a rock revetment seawall; Spinnaker Strand armoured with rock masonry and rock revetment seawalls and a series of detached rock revetment groynes on the adjacent intertidal area.
- **Waimanu Bay Reserve** has armoured sections of rock revetment seawalls, and a well-vegetated reserve coastal edge. A series of smaller detached rock revetment groynes are present on the adjacent intertidal area. To the south of Harbourview Road, there is a 160 m edge armoured with a rock revetment seawall along the Harbourview Orangihina Reserve. The remainder of the reserve edge is unarmoured and more naturalised, fronted by established mangroves and saltmarsh vegetation.
- **Whau River:** Retaining structures around the edge of reclamation at Archibald Park (historic closed landfill), with tipped rock armour around the perimeter of the reserve and sections of vertical concrete wall to the north of the boat ramp and floating pontoon; Patiki Road is armoured with rock revetment along the western side of the motorway; at Saunders Reserve there is informal rock armouring around the accessway approach to the timber launching ramp and floating pontoon.
- **Point Chevalier:** Eric Armishaw Reserve is armoured with masonry seawalls and has a short length of concrete aggregate and timber; Raymond Reserve is armoured by rock rip rap seawalls that incorporate two boat launching ramps; Coyle Park at the headland has short lengths of grouted masonry and concrete capping along the shore platform that provides access to the popular fishing spot; Small road-end reserves on the eastern shoreline of Point Chevalier Peninsula are armoured at the end of Oliver Street and Johnstone Street.
- **Point Chevalier Beach** was extensively modified by the late 1940s with a full-length seawall present by that time. The existing shoreline armouring comprises a seawall from Joan Street in the north extending south along the main beach. Pōhutukawa and other trees provide significant vegetation cover to the adjacent reserve and along the coastal edge.
- **Motions Creek:** Masonry seawalls armour reclamation undertaken in 1950s for construction of Meola Road, and the historic closed landfill fill site was subsequently developed into Seddon Reserve sports fields.
- **Cox's Bay:** Masonry seawall armours reclamation for West End Road and the historic closed landfill at Cox's Bay Reserve.
- **Westmere shoreline seawalls:** Rawene Street Reserve has a basalt seawall and access steps; Garnet Road Reserve basalt seawall has incorporating steps; Westmere Park Reserve seawall and groyne structure, with an access ramp; Westmere Park Weona Place seawall and concrete path.
- **Herne Bay shoreline armouring** incorporates step access from reserves to the foreshore at Hamilton Beach Reserve; Sentinel Road Reserve; Home Bay Beach Wallace Street; Herne Bay Beach; Short Street Reserve.

**Nature-based options**

- Unit 3: Trial spinifex planting was undertaken in 2019 to create two cells at the southern end of the beach at Rosecamp Road Reserve. The plants are well established despite the lack of windblown sand supply in the harbour location, and a small beach area has accreted.
- Herald Island small-scale sand push up and planting has previously been undertaken on the southern shoreline of Herald Island as an alternative to armouring the low scarped bank at Kowhai Beach.
- Orion Point development area, unarmoured shoreline along Tahingamanu Bay (north) or Nimrod Inlet (south) with full 20 m width of esplanade reserve vested to Auckland Council with developments and walkway assets aligned as far landward as practicable.
- Kelvin Strand Beach Reserve has a naturalised edge adjacent the shelly pocket beach.

**Sand replenishment/ soft or nature based engineering**

- Point Chevalier Beach was renourished with imported sand sourced from offshore Pakiri in 2008, and sand redistributed along the beach in 2010. No beach top-ups or sand transfers have occurred since the initial beach replenishment works.
- Beach nourishment undertaken at three Herne Bay Beaches in 2008: Herne Bay Beach; Sentinel Road Reserve Beach; and Hamilton Road Reserve Beach.

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.
Transport infrastructure	• Roads, bridges, ferry terminals and train stations.
Water assets and infrastructure	• Publicly-owned three waters infrastructure.

For the Waitematā Harbour West 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.

		Council-owned land			Council community facilities			Transport infrastructure			Water infrastructure		
Unit	Hazard	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term
1	Erosion	Moderate	Moderate	Moderate	High	High	High	High	High	High	High	High	High
	Inundation	High	High	High	Very high	Very high	Very high	Very high	Very high	Very high	High	High	High
2	Erosion	High	High	High	Moderate	High	High	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
	Inundation	Low	Low	Moderate	Moderate	Moderate	High	Very high	Very high	Very high	Low	Low	Low
3	Erosion	Moderate	Moderate	Moderate	High	High	High	Moderate	Moderate	Moderate	High	High	High
	Inundation	Low	Low	Low	High	High	High	Very high	Very high	Very high	Moderate	Moderate	Moderate
4	Erosion	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	High	High	High	High	High	High
	Inundation	Low	Low	Moderate	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low
5	Erosion	High	High	High	Moderate	High	High	High	High	High	High	High	High
	Inundation	Moderate	Moderate	Moderate	High	High	High	High	High	Very high	Low	Moderate	Moderate
6	Erosion	High	High	High	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low
	Inundation	Moderate	Moderate	Moderate	High	High	High	Moderate	Moderate	Moderate	Low	Low	Low
7	Erosion	Moderate	Moderate	Moderate	Low	Low	Low	Low	Low	Low	Low	Low	Low
	Inundation	Low	Low	Low	Low	Low	Low	Low	Low	Low	Very low	Low	Low
8	Erosion	Moderate	Moderate	Moderate	Low	Low	Low	High	High	High	Low	Low	Low
	Inundation	Low	Low	Moderate	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low
9	Erosion	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low	Low	Low	Low
	Inundation	Low	Moderate	Moderate	Very high	Very high	Very high	Moderate	Moderate	Moderate	Low	Low	Low
10	Erosion	Low	Low	Low	High	High	High	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
	Inundation	Low	Low	Low	Very high	Very high	Very high	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
11	Erosion	High	High	High	Moderate	Moderate	High	Low	Low	Moderate	Moderate	Moderate	High
	Inundation	Moderate	Moderate	Moderate	High	High	High	Very high	Very high	Very high	Low	Moderate	Moderate
12	Erosion	Very high	Very high	Very high	High	Very high	Very high	Very high	Very high	Very high	High	High	Very high
	Inundation	High	High	High	Very high	Very high	Very high	Very high	Very high	Very high	Moderate	High	High
13	Erosion	High	High	High	High	High	High	High	High	High	High	High	High
	Inundation	Moderate	Moderate	High	High	High	High	Very high	Very high	Very high	Moderate	Moderate	Moderate
14	Erosion	Moderate	Moderate	Moderate	Very low	Very low	Very low	Low	Low	Low	Low	Low	Low
	Inundation	Low	Low	Moderate	Low	Low	Low	Moderate	Moderate	High	Low	Low	Low
15	Erosion	Moderate	Moderate	Moderate	High	High	High	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
	Inundation	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low	Low	Low	Low
16	Erosion	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	High	High	High	Moderate	Moderate	Moderate
	Inundation	Moderate	Moderate	High	Moderate	High	High	High	High	High	Moderate	Moderate	Moderate

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 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. 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 Waitematā Harbour West area includes a wide range of Council-owned land and assets, including reserves and open space, boat ramps, wharfs, parks amenities and facilities and numerous Auckland Council or Council-controlled organisation (CCO)-owned buildings.

The figure overleaf shows the general location of Auckland Council land and assets located within the Waitematā Harbour West SAP area. These are identified in each unit and stretch as relevant to the shoreline adaptation strategies in Volume 3.

**Auckland Council land and parks**

The Waitematā Harbour West area features diverse coastal environments. Across the SAP area are over 609 parks/reserves. These are distributed across all units in the SAP area but are most highly concentrated in Units 1, 2, 4, 5, 6, 11, 12 and 16. There are no regional parks currently located within this SAP area, noting an opportunity for a new regional park is emergent in the Greenhithe area.



1,645.6 ha of
park and reserve
land & over **550**
km of road
infrastructure.

Over **225**
Auckland
Council-owned
buildings

27
closed landfills

Water**Infrastructure**

As a highly urbanised area of the Auckland region, the Waitematā Harbour SAP area is traversed by numerous waste, potable and stormwater piped infrastructure. This includes key piped connections

which are located in proximity to the coastal edge or traversing areas of the coastal marine area. Infrastructure is distributed across the entire SAP area but is most highly concentrated in Units 1, 2, 15 and 16.

- Water infrastructure such as wastewater and water pump stations are often located in low lying areas due to the function of the networks. Key pump stations located in proximity to coastal areas include:
 - Albany pump station
 - Churchhouse Esplanade Reserve wastewater pump station
 - Colonial Road
 - Hobsonville pump stations
 - Kahika pump station and storage tank
 - Kyle pump station
 - Lake Road, Sulphur Beach Schnapper Rock pump station
 - Those in Te Atatū North and Edgars Creek
 - Westmere Park wastewater pump station
- There is one water reservoir at Cuthill within Unit 5.
- Stormwater assets include piped networks, stormwater management devices such as ponds and the management of watercourses which discharge to the coast.



Facilities and structures

Over 225 buildings and numerous significant structures (such as wharves), owned or managed by Auckland Council are located within the SAP area including accommodation, community buildings such as libraries and sports clubs, toilet blocks, and maintenance sheds etc. These are also distributed across all units in the SAP area but are most highly concentrated in Units 1, 5, 13, 15 and 16.

Many of these facilities are host to community organisations and groups. There are additional (non-Council-owned) buildings and structures located on Council landholdings.

Large recreational and sporting facilities include Shepherds Park (Unit 3), Moire Park (Unit 12), Seddon Field (Unit 16), and Coxs Bay Reserve (Unit 16).

Historic land use has resulted in coastal modifications and reclamation in some areas of the Waitematā Harbour SAP area. This includes 27 closed landfill assets which are managed by Auckland Council; their locations are generally spread across the harbour area with a high concentration in Units 12, 13 and 16.

- Archibald Park
- Bridge Avenue Reserve
- Chelsea Estate Heritage Park
- Coletta Esplanade
- Cox's Bay Reserve
- Daytona Strand
- Drury Street Esplanade
- Harbour View Reserve
- Jack Colvin Park
- Kelman Square
- Kelvin Strand
- McLeod Park
- Masefield Reserve
- MOTAT, Seddon Fields and Meola Reef Reserve
- Paremoro Scenic Reserve
- Park Reserve
- Point Erin Park
- Queen Mary Reserve
- Rerewai Reserve
- Rawene Road Reserve
- Rewarewa Esplanade
- Span Farm Esplanade
- Spargo Reserve
- Taipari Strand
- The Concourse Strand
- Te Atatū South Park
- Waitākere Resource and Recycling Centre



Roads and access

The SAP area is generally well connected, with SH1, SH16 and SH18 traversing the SAP area and connecting to regional and local arterial roads.

- The Northwestern Cycleway, a 20.5 km shared path along the Northwestern Motorway, runs through the SAP area, providing active transport options for residents in Units 15, 14, 13, and 12.
- Given the high residential population, the SAP area is frequently serviced by public transport connections including bus and ferry services. Ferry terminals are located at Hobsonville Point (Unit 11), Beach Haven (Unit 3), Birkenhead (Unit 2), and Northcote Point (Unit 1) and offer alternative modes of transport across the Waitematā Harbour.
- Key road connections providing access to the harbour are identified below (non- exhaustive list):
 - Council Terrace (Unit 1)
 - Queen Street (Unit 1)
 - Onetaunga Road (Unit 2)
 - Balmain Road (Unit 2)
 - Hinemoa Street (Unit 2)
 - Island Bay Road (Units 2/3)
 - Beach Haven Road (Unit 3)
 - Cresta Avenue (Unit 3)
 - Manuka Road (Unit 4)
 - Pemberton Avenue (Unit 4)
 - Kahika Point Road (Unit 4)
 - Eskdale Road (Unit 4)
 - Schnappers Rock Road (Unit 5)
 - Upper Harbour Drive (Unit 5)
 - Rame Road (Unit 5)
 - Paremoro Road (Unit 6)
 - Sanders Road (Unit 6)
 - Coatesville-Riverhead Highway (Units 7/8)
 - Waimarie Road (Unit 9)Twin Wharf Road (Unit 10)
 - Clearwater Cove (Unit 11)
 - Launch Road (Unit 11)
 - Hudson Bay Road (Unit 11)
 - Te Atatū Road (Unit 12)
 - Beach Road (Unit 12)
 - Granville Drive (Unit 12)
 - Gill Avenue (Unit 12)
 - Archibald Road (Unit 13)
 - Binsted Road (Unit 13)
 - Rosebank Road (Unit 13)
 - Great North Road (Unit 14)
 - Point Chevalier Road (Unit 15)
 - Harbour View Road (Unit 15)
 - West End Road (Unit 16)
 - Meola Road (Unit 16)
 - Garnet Road (Unit 16)
 - Marine Parade (Unit 16)
 - Curran Street (Unit 16)
- Popular walking tracks include Smiths Bush Path, Oakley Creek Walkway and Henderson Creek Path. There are walking tracks in all SAP units but Units 1 (Northcote / Birkenhead), 3 (Beach Haven) and 12 (Te Atatū Peninsula) have the highest concentration.



Access to the coast

As indicated in the section above, the Waitematā Harbour West area features diverse coastal environments, including over 20 main beaches/ bays. Noting that this is not an exhaustive list and smaller less accessible beaches/bays are located along this coastline that have not been included in the list below, as follows:

- Coxs Bay
- Chapman Strand
- Charcoal Bay Beach
- Chelsea Bay Beach
- Christmas Beach
- Hadfield Beach
- Halls Beach
- Hamilton Road Beach
- Herne Bay Beach
- Hilders Park Beach (Beach Haven)
- Home Bay
- Fitzpatrick Bay Beach
- Island Bay
- Kendall Bay Beach
- Kelvin Strand Beach
- Little Kendall Beach
- Manuka Reserve Beach (also a reserve)
- Onetaunga Bay
- Point Chevalier Beach
- Sentinel Rd Beach
- Scott Point Beach Waimanwa / Little Shoal Bay
- Shepherds Park Beach
- Taipari Strand
- Tui Park Beach

Beaches between Beach Haven and Northcote (Units 1, 2, and 3), as well as those from Point Chevalier to Herne Bay (Units 15-16), are the most popular spots for swimming and beachgoers in the Waitematā Harbour West area.

The beaches within this area are also home to a number of marine clubs such as:

- Beach Haven Scout Group
- Birkenhead Sea Scouts
- Birkenhead Yacht Club
- Hawke Sea Scouts
- Kenley Water Ski Club
- North Shore Rowing Club
- Pt Chevalier Sailing Club
- Taikata Sailing Club
- Te Atatū Boating Club
- Waitematā Canoe and Multisport Club
- Waitematā Rowing Club
- West End Rowing Club



Harbour access

The Waitematā Harbour West 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):

- Archibald Park
- Attwood Reserve Boat Ramp
- Avondale West Reserve
- Brighams Esplanade Boat Ramp
- Bristol Road Esplanade Reserve
- Kauri Esplanade
- Little Shoal Bay Foreshore Reserve Boat Ramp
- Little Shoal Bay Reserve/Dudding Park Boat Ramp
- Riverpark Reserve
- Riverhead Wharf Road Boat Ramp
- Rurawaru Esplanade
- Scott Esplanade

- Chapman Strand Spinnaker Strand
- Concourse Strand
- Edward Jonkers Drive Reserve
- Harbourview
- Herald Island Boat Ramps
- Hilders Park Boat Ramp
- Hinemoa Street Boat Ramp
- Hughes Esplanade
- Manuka Reserve Boat Ramp
- Marina Esplanade
- Newton Road Boat Ramp
- Rahui Reserve Boat Ramp
- Rame Reserve Boat Ramp
- Rawene Road End
- Raymond Reserve
- Tawa Esplanade
- Waimarie Beach
- Waitangi Road Reserve
- Westmere Park
- Wharf Reserve
- Wharf Road End Ramp (Riverhead)

The Waitematā Harbour West area features several tidal inlets including the Whau River Inlet, Rarawaru Creek and Te Wai O Pereira / Henderson Creek. These areas tend not to be used for swimming but provide for water access for small water craft and boat moorings (including the Westpark Marina which is not Council-owned).

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. Key paths include:

- Chelsea Heritage Path
- Hellyers Creek Path
- Hobsonville Point Path
- Moire Park Path
- Pt Chevalier Path
- Sanders Reserve Recreation Path
- Te Atatū Peninsula Harbourside Path
- Te Atatū Peninsula North Path
- Tuff Crater Path
- Weona- Westhaven Path
- Westhaven Path

The Te Atatū to City Path is a 25 km cycling and walking route that follows the Northwestern Motorway into the city centre. The development of Whau Path is currently underway in stages connecting from Te Atatū through towards Manukau Harbour in the south.

The figure overleaf shows the location of several key beaches, parks, reserves and walking trails in this SAP area. More detailed social context is provided per unit in Volume 3.





3.2 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. We acknowledge the intrinsic ancestral connections that tangata whenua have to lands, water, wāhi tapu (sacred areas) and other taonga (treasures) around the coastlines of Tāmaki Makaurau. Engagement and collaboration with the iwi of Tāmaki Makaurau is integral to the development of the SAP area plans and SAP implementation. Auckland Council's commitment to growing and supporting partnerships with iwi 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 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 mātauranga Māori and Te Ao Māori principles, has been crucial to the development of the Waitematā Harbour West 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 the Waitematā Harbour West, 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 Waitematā Harbour West 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.

3.3 Working together- Local iwi engagement

For the Waitematā Harbour West 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, those who whakapapa to the area and/or have expressed an interest in the Waitematā Harbour West SAP kaupapa include:

- Ngaati Whanaunga
- Ngāti Tamaterā
- Ngāti Maru
- Ngāti Paoa
- Te Patukirikiri
- Te Ākitai Waiohū
- Ngāti Whātua Ōrākei
- Marutūāhu Confederation (collective) - (Ngāti Maru, Ngaati Whanaunga, Ngāti Paoa, Ngāti Tamaterā, Te Patukirikiri (of Kapetua))
- Te Kawerau Ā Maki
- Waikato Tainui
- Ngāi Tai ki Tāmaki
- Ngaati Te Ata Waiohū

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') is 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 Ngā hapū me ngā iwi o 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 for the Waitematā Harbour West 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 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, noting that 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 Waitematā Harbour West is effective, meaningful and aligned with the principals 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 Waitematā Harbour West SAP.

Te Kawerau ā Maki

Te Kawerau ā Maki values ultimately stem from Te Ao Māori – our world view – and are given effect through our Te Kawerautanga – the body of tikanga or customs specific to our people. Te Kawerau ā Maki worldview, at its foundational or metaphysical basis, consists of different domains of the world governed by ancestral atua (such as Papatūānuku, Rangī, Tāne, and Tangaroa), and core concepts such as whakapapa (lineage), mana (authority), wairua (spirit), mauri (life essence), and tapu (sacredness). Te Kawerau ā Maki values include ensuring the mana of our ancestors and our descendants is upheld. We emphasise a holistic ethic where people are part of the world, rather than separate from it. The body of knowledge passed down and expanded upon each generation is our mātauranga (what we know of the world). The practices of how to use it is our tikanga (how to navigate the world). While some publicly identified sites of significance and portages have been identified at a local scale across Volume 3, the kōrero around management of these sites is to be lived and activated by Te Kawerau ā Maki and requires ongoing engagement to do so.

Mātauranga shared by Te Kawerau ā Maki includes:

The organization (legal entities) that represent Te Kawerau ā Maki people have adopted the following values and tikanga as guiding principles:

Mana Motuhake	Independence
Kaitiakitanga	Guardianship and stewardship of te tiao
Whanaungatanga	Whanau-focused
Auaha	Innovation
Mātauranga Māori	Culture-led

The table above has been developed as a starting point for guiding the implementation of coastal adaptation strategies set out in Volume 3.0 of this report.

To help guide the use of this table, the following questions have been set out through engagement with Te Kawerau ā Maki, and are to be addressed by Te Kawerau ā Maki during implementation of coastal adaptation strategies:

- Are Te Kawerau ā Maki rights protected?
- Is Te Kawerau ā Maki making/contributing to decision-making or otherwise collaborating?
- Is Te Kawerau ā Maki mana maintained/increased?

- Is Te Kawerau ā Maki identity acknowledged and celebrated?
- Are Te Kawerau ā Maki heritage places protected or otherwise managed and interpreted/activated?
- Is tapu maintained?
- Is mauri maintained/enhanced?
- Can Te Kawerau ā Maki safely collect kai?
- Can Te Kawerau ā Maki access the coastline?
- Can Te Kawerau ā Maki access the harbour?

Table 3-1: Te Kawerau ā Maki framework for Coastal Management across the *Waitematā Harbour West* SAP

	RaNgātiratanga (whakapapa to place, rights, mana over resources, mana to make decisions, and identity of Te Kawerau ā Maki)	Wairuatanga (whakapapa to entities, recognition of spiritual elements and practices, protection of tapu)	Kaitiakitanga (ability to uphold the mauri of the place, protection of taonga)	Manaakitanga (ability to care and provide for guests)
Tangaroa	- Te Kawerau ā Maki rights and associations with the harbour are acknowledged - Te Kawerau ā Maki decision-making is upheld - Te Kawerau ā Maki identity is acknowledged - Our marae and lands are protected	- Tangaroa is acknowledged and the interactions he has with other atua - The interaction between Tangaroa and Taane at coastline is natural, and therefore hard infrastructure/hold the line should be avoided except in exceptional circumstances - Taniwha are acknowledged - Tapu of certain places is protected - Cultural tohu/indicators are utilised	- Mauri is thriving - Kaimoana can be safely collected - mahinga kai - No noa/kino activities are discharged into harbour - Te Kawerau ā Maki can access the harbour easily along the coastline and via boat ramps - Heritage places are protected and celebrated - Native species are protected	- Visitors/public can safely access the coastline - Visitors/public can safely access the harbour - Emergency services can access the harbour - Critical infrastructure is maintained - Kaimoana can be gathered to provide for the needs of guests and customs (i.e. tangi) - Te Kawerau ā Maki can activate tourism opportunities on the harbour

	RaNgātiratanga (whakapapa to place, rights, mana over resources, mana to make decisions, and identity of Te Kawerau ā Maki)	Wairuatanga (whakapapa to entities, recognition of spiritual elements and practices, protection of tapu)	Kaitiakitanga (ability to uphold the mauri of the place, protection of taonga)	Manaakitanga (ability to care and provide for guests)
Papatuuaanuku	- Te Kawerau ā Maki rights and associations with the coastline are acknowledged - Te Kawerau decision-making is upheld - Te Kawerau identity is acknowledged - Our marae and lands are protected	- Papatuuaanuku is acknowledged and the interactions she has with other atua - Taniwha are acknowledged - Tapu of certain places is protected - Cultural tohu/indicators are utilised	- Mauri is thriving - Topsoil is preserved - Coastal topography is preserved - Te Kawerau ā Maki can access the harbour easily along the coastline - Heritage places are protected and celebrated - where these are naturally eroding the maatauranga about them is protected e.g. via cultural activation of space	- Visitors/public can safely access the coastline - Critical infrastructure is maintained
Taane	- Te Kawerau ā Maki rights and associations with the coastline and its vegetation are acknowledged - Te Kawerau ā Maki decision-making is upheld - Te Kawerau ā Maki identity is acknowledged	- Taane is acknowledged and the interactions he has with other atua - The interaction between Tangaroa and Taane at coastline is natural, and therefore hard infrastructure/hold the line should be avoided except in exceptional circumstances - Tapu of certain places is protected - Cultural tohu/indicators are utilised	- Mauri is thriving - Native vegetation is protected and enhanced - Vegetation provides for rongoa and textiles (i.e. weaving) - Te Kawerau ā Maki can access areas of native vegetation - Heritage places are protected and celebrated - Native species are protected	- Visitors/public can safely access the coastline - Rongo/textiles can be gathered to provide for the needs of guests and customs (i.e. tangi)

Noting the numerous sites of significance situated along the coastline of the Waitematā Harbour West SAP, it is important to note here Te Kawerau ā Maki concerns in regard to heritage, noting that only the Te Kawerau ā Maki Trust or its agents can establish the significance of any historic place or area associated with Te Kawerau ā Maki. Heritage in this context refers to Te Kawerau ā Maki's history, culture, traditions, tikanga, place, names, artefacts, wahi tapu and historical places and areas. Each of these are all taonga and their significance is recognised under the Treaty of Waitangi, Conservation Act 1987, Resource Management Act 1991 and Historic Places Act 1993.

Concerns of Te Kawerau ā Maki in regard to heritage include ensuring:

- The protection of Te Kawerau ā Maki heritage without necessarily prohibiting all use and development in areas associated with Te Kawerau ā Maki heritage
- Recognition of and provision for Te Kawerau ā Maki cultural heritage and spiritual values in decision making
- Real opportunities for Te Kawerau ā Maki to manage, enhance and monitor heritage are created, supported and realised
- That Te Kawerau ā Maki's guardianship of our cultural property is recognised and provided for.

It is of note here that the Te Kawerau ā Maki Trust Resource Management Statement has a section on Coastal Marine Areas which identifies areas of key concerns, these identified as being:

- Protecting heritage sites and areas from inappropriate access and development
- Water quality
- The quality and availability of kaimoana
- Waste disposal from boats and the provision of waste disposal facilities for boats
- Development and rental of coastal space
- Additionally, it is noted that the statement discusses the protection of waterways from waste from industry services.

Te Kawerau ā Maki expects to be involved in any plans to improve access to coastal areas to ensure the access does not impact negatively upon heritage sites. Additionally, Te Kawerau ā Maki wishes to be informed and actively engaged in any coastal development proposals in order to assess the likely effects on heritage sites. Other points raised by Te Kawerau ā Maki:

- It is key that the SAPs are clear that in the Māori world view it is tikanga that guides the activities and practices in respect to the taiao, including within Tangaroa and on Papatuanuku. The interactions of these environments need to be developed but not reinvented.
- Mātauranga is equally important in guiding coastal adaption and management strategies and approaches. All coastal / shoreline management should be subject to cultural input and co-design.
- It is the preference of Te Kawerau ā Maki that 'soft' engineering is used where required, noting that there is not always a need to interfere in the natural processes.
- An acknowledgement that areas may not be able to be, or need to be, 'saved' as nature is the dominant force, with the loss of the whenua and sites being in part accepted as coastal

adaptation. Te Kawerau ā Maki consider that recording (e.g. taking photos and surveys) te taiao in its present state and also progressively recording the changes that occur over time. Te Kawerau ā Maki consider that this is a way of preservation and an opportunity to regenerate mātauranga.

- Recognise and uphold tino rangātiratanga over natural resources.

Te Ākitai Waiohua

Over the course of the SAP programme, the SAP team had the opportunity to work with kaitiaki representatives from Te Ākitai Waiohua. Through development of the Kahawairahi ki Whakatiwai (Beachlands and East), Awhitu and Manukau South SAP area plans, hui were held and korero shared. Over the 2024 - 2025 calendar year, the SAP team deepened their understanding of the cultural landscape through further hui and hikoī for the Waitematā Harbour West SAP area. Korero and hui remain ongoing.

This SAP is considered a living document, and the SAP team is committed to ensuring that the values, aspirations and outcomes sought by Te Ākitai Waiohua are represented in this plan and through implementation. The SAP team will continue to work with and support Te Ākitai Waiohua to prepare a cultural statement in response to the SAP programme and include linkages to this in further revisions of the Waitematā Harbour West SAP report.

Brief history and connection: Te Ākitai Waiohua¹

The tūpuna who would, in the fullness of time, give rise to Waiohua were well established throughout Tāmaki Makaurau and the shores of Te Waitematā when the Tainui waka made landfall adjacent Takamāiwaho (now Duder's Beach Reserve) in 1350CE.

Ngā Iwi, Ngā Oho and Ngā Riki would eventually coalesce under Huakaiwaka- “The Eater of Canoes” in the C17th to become Waiohua, “The Waters of Hua”. Thus followed the “Golden Age of Tāmaki and the influence of Waiohua”, reflecting the prosperity and opportunity of the time (C17th to mid C18th). Kiwi Tāmaki - the progenitor of Te Ākitai Waiohua, would fall in battle in the mid C18th. Whilst Waiohua maintained principle pā at Maungawhau, and latterly Maungakiekie by Ikamaupoho and his son Kiwi Tāmaki, numerous sites of strategic importance and cultural significance- not to mention resource rich mahinga kai (food gathering sites), were situated across the expanse of Te Waitematā and were variously occupied, visited and carefully harvested- respectively, on a seasonal basis.

¹ This cultural narrative provides a snapshot of Te Ākitai Waiohua cultural association and whakapapa to the Waitematā Harbour West and herein does not represent the full breadth and depth of Te Ākitai Waiohua's association to this area of coastline. Furthermore, this commentary provided does not represent a fullsome position in respect of the SAP kaupapa, and maybe subject to change without prior notice.

Te Waitematā is translated as “The Obsidian dark waters”, whereas Te Waitemata is ascribed to Te Arawa Chief Kahumatamomoe, specifically the mauri stone “Te Mata”, which he laid on Boat Rock, south of Te Matarae o Mana (Kauri Point).

The waters of Te Waitematā are held by Te Ākitai Waiohūa as a living entity, replete with its own mauri (life force and mana (prestige)). These life sustaining waters are a sacred resource that must be protected. Accordingly, taniwha are typically associated with various bodies of water, and in this instance it is Ureia, the spiritual kaitiaki who take the form of a whale, and is associated not only with Te Waitematā and Te Okā (Pt. Erin), but Tikapa Moana also. From the Hauraki Gulf to the south of the Firth of Thames. Te Waitematā is seen as a taonga of great cultural and spiritual significance to Te Ākitai Waiohūa. Similarly, the association of Te Ākitai Waiohūa with Te Waitematā and Tikapa Moana is indelible and remains an affirmation of its tribal identity. Te Ākitai Waiohūa wish to continue to assert its kaitiakitanga obligations in this SAP project space, in keeping with the relationship that Te Ākitai Waiohūa and the Engineering Assets & Technical Advisory group have grown and nurtured to date.

Ngaati Te Ata Waiohūa

The SAP team has been working with Ngaati Te Ata Waiohūa on various SAP plans within their rohe, including through the development of the Manukau East, Manukau North, Manukau South, Aawhitu, Pahurehure Inlet, Waitemata Harbour West and Auckland Central, with the aim of gathering Ngaati Te Ata Waiohūa feedback on the SAP programme and the individual plans as they have been developed. This ongoing partnership has extended to the development of the Waitematā Harbour West SAP, noting that Ngaati Te Ata Waiohūa has expressed interest in specific aspects of the Waitematā Harbour West SAP that relate to their rohe. Whilst Ngaati Te Ata Waiohūa has an interest in the Waitemataa coastline, they acknowledge the interests of other iwi and hapu. Ngaati Te Ata Waiohūa place a high importance on the connection of portages around the Waitemataa, noting many locations around the moana are important for traditional cultural practices, mahinga kāi and the Ngaati Te Ata Waiohūa way of life.

Te Waitematā – Ngaati Te Ata Waiohūa

Ngaati Te Ata Waiohūa holds a deep and enduring relationship with Te Waitematā and its tributaries — a connection that has existed mai rā anō (since time immemorial). This relationship is grounded in our Waiohūa whakapapa (genealogical connections), which links us to key tūpuna (ancestors) who lived across the prominent headlands, inland pā, and kāinga of Tāmaki Makaurau — including Maungawhau (Mt Eden), once held by the Waiohūa rangatira Huakaiwaka, grandfather of our Ngaati Te Ata Waiohūa ancestress Te Ata-i-Rehia.

These sites formed an interconnected network that tied land and sea together, anchoring the presence of Waiohūa across the region and around Te Waitematā.

Our oral traditions offer multiple interpretations of the name Waitematā, each carrying cultural and historical significance. For Ngaati Te Ata Waiohūa, the harbour is also known as Te Whanganui o Toi –

“The Great Bay of Toi” – in honour of Toi Te Huatahi, the revered Polynesian navigator from whom we descend.

Another tradition attributes the name Te Waitematā (often interpreted as “the waters of the matā [obsidian]”) to Kahumatamomoe, son of Tama Te Kapua of the Te Arawa waka. According to tradition, Kahumatamomoe placed a mauri stone named Te Matā on what is now known as Boat Rock, marking the harbour as a site of spiritual and ritual importance.

Ngaati Te Ata Waiohūa also preserves the story of Tāmaki, daughter of the Ngaati Te Ata Waiohūa rangatira Te Rangikaimata. Renowned for her beauty, Tāmaki is said to have seen her reflection — her mata — in the calm waters of the harbour, giving rise to the name Te Mata o Tāmaki (“the looking water of Tāmaki”). Her legacy lives on in Tāmaki Makaurau – “Tāmaki, desired by many” – a name that reflects both her beauty and the many rangatira who sought her hand in marriage.

Together, these kōrero tuku iho affirm not only our ancestral presence, but also the cultural, genealogical, and spiritual significance embedded in Te Waitematā — a name shaped by our Ngaati Te Ata Waiohūa tūpuna and carried forward by us today.

This connection is further reinforced by our ancestral ties to specific sites along the harbour:

Shelley Beach and St Mary’s Bay are known in our tradition as Te Onemaru o Huatau – “The Sheltered Bay of Huatau,” named after the Waiohūa chieftainess Huatau, daughter of Huakaiwaka and mother of Te Ata-i-Rehia. A respected leader, Huatau oversaw waka landings, launches, and fishing activities along this coastline. This name has also traditionally applied to the foreshore of Te Waitematā, stretching from the present-day Harbour Bridge through to Taurarua (Judges Bay).

Positioned near what is now known as Point Erin, Te Ōka Pā was a significant Waiohūa stronghold. Oral tradition speaks of a time when Waiohūa were so numerous across the region they were likened to being “as numerous as ants.”

Further along the coast is Ōpoutūkeka (Cox’s Bay), named after Poutūkeka, a Ngāti Pou chief and great-great-grandfather of Te Ata-i-Rehia. The area was also known as Tukituki Muka, referencing the flax processing that took place on the northern headlands, supporting the production of muka for weaving, clothing, and rope. It was also a critical Waiohūa waka landing site.

Moving further west again is Te Tokaroa (Meola Reef), known in Waiohūa tradition as Te Ara Whakapekapeka a Ruarangi – “The Jagged Pathway of Ruarangi.” According to traditions, the reef was formed during a conflict between the Ngā Oho brothers Ruarangi and Ohomatakamokamo, following a dispute at Te Ahi-kā-a-Rakataura (Mt Albert). In fleeing, Ruarangi cast rocks into the sea to escape to the North Shore, creating the jagged reef remembered today.

Continuing along the harbour is Te Whau River, which served as a key waka portage route connecting Te Mānuka (the Manukau Harbour) to Te Waitematā. Ngaati Te Ata Waiohūa regularly used this route known as Te Tōanga Waka seasonally, particularly for shark gathering in collaboration with our whanaunga iwi of Te Waitematā.

Ngaati Te Ata Waiohūa maintains a living, intergenerational relationship with Te Waitematā. These waters and surrounding lands are not just remnants of our past — they are active anchors of our cultural identity, values, and worldview. Our connection to Te Waitematā is sacred, enduring, and

alive, carried through the generations by the legacy of our Ngaati Te Ata Waiohua tūpuna and our responsibility as kaitiaki today.

Through hui, Ngaati Te Ata Waiohua shared koorero in relation to portages and key cultural landscapes in relation to Unit 16: Westmere and Herne Bay (acknowledgment of the connection to Te Onemaru o Huatau - 'Huatau's Sheltered beach' St Mary's Bay through portages transversing Unit 16).

Te Onemaru o Huatau - 'Huatau's Sheltered beach' (St Mary's Bay) is small beach near the base of St Mary's Bay Rd, which provided an all tide launch site for waka onto the Waitemata. Huatau is a Te Waiohua ancestor who commanded the fisheries enterprise at Te Onemaru o Huatau in the 17th century, making this area one of great cultural significance to Ngaati Te Ata Waiohua.

Noting the significance of this site to Ngaati Te Ata Waiohua, Ngaati Te Ata Waiohua require effective consultation and collaboration during the planning and implementation process of shoreline adaptation measures within Unit 16 of the Waitemata Harbour West SAP, as well as throughout their entire rohe, so to ensure Ngaati Te Ata can effectively carry out their kaitiaki responsibilities and appropriately manage adaptation measures so to not degrade Ngaati Te Ata sites and their cultural values and association with te taiao.

Effective engagement with Ngaati Te Ata Waiohua will enable the incorporation of Ngaati Te Ata mātauranga and values into adaptation strategies to ensure important sites to Ngaati Te Ata are acknowledged and protected.

Ngaati Te Ata Waiohua aspirations for this area include but are not limited to:

- Maintaining access to the coastline to respect and support Ngaati Te Ata Waiohua whakapapa connections to the area.
- Preventing and/ or mitigating flood risk where possible to preserve the cultural significance of wahi tapu sites in the area, as well as the wider cultural landscape and associated values. The consequences of climate change and rising sea levels have the potential to be destructive for sites of importance to Ngaati Te Ata, as changes threaten not only the physical environment but also Ngaati Te Ata's cultural identity.
- Upholding Ngaati Te Ata Waiohua principles (set out in the table below).

The list below sets out a series of guiding principles provided and advocated for by Ngaati Te Ata Waiohua. Future coastal management strategies across the Waitematā Harbour West SAP area aim to acknowledge and support these principles through implementation, recognising the principles below as the starting point for more meaningful consultation with local iwi groups within the Waitematā Harbour West area:

- | | |
|-------------------|--------------------|
| • Mana Whakahaere | • Tauutuutu |
| • Mana Motuhake | • Whakapapa |
| • Rangatiratanga | • Whakatinanatanga |
| • Mana Tangata | • Kaitiakitanga |

Ngāi Tai ki Tāmaki

The rohe boundary of Ngāi Tai ki Tāmaki includes the area to which this SAP applies to being Waitematā Harbour West. 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 Tamaki.
- 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 Tamaki 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 Ōrākei on various SAP plans within their rohe, including through the development of the Manukau East, Manukau North, and Wai Manawa Little Shoal Bay 'mini' SAP, with the aim of gathering Ngāti Whātua Ōrākei's feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waitematā Harbour West SAP, noting that Ngāti Whātua Ōrākei has expressed interest in specific aspects of the Waitematā Harbour West SAP that relate to their rohe and these are mostly east of the Whau Estuary.

Multiple hui have been undertaken and a cultural statement in response to the SAP programme has been drafted, following is a summary of Ngāti Whātua Ōrākei guiding principles, cultural values and aspirations in response to the Shoreline Adaptation Plan Programme.

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 Ōrākei to input into the implementation of the SAPs for the Waitematā Harbour West area and other SAPs of interest within their rohe.

Marutūāhu Confederation (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 (as shown in Figure 3-1), 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 per Figure 3-2), the SAP team will continue to work collaboratively with the Marutūāhu collective to reflect this statement in future revisions of the Waitematā Harbour West 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.



Figure 3-1: Marutūāhu Collective Iwi areas of interest. (New Zealand Government, 2018)

Ngāti Pāoa

The SAP team is currently working with Ngāti Pāoa on various SAP plans within their rohe, including through the development of the Waiheke and Orakei to Tahuna Torea, with the aim of gathering Ngāti Pāoa feedback on the SAP programme and the individual plans. This ongoing partnership has extended to the development of the Waitematā Harbour West SAP, noting that Ngāti Pāoa has expressed interest in specific aspects of the Waitematā Harbour West 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 Pāoa to input into the implementation of the SAPs for the Waitematā Harbour West area and other SAPs of interest within their rohe.

Ngaati Whanaunga

Over the course of the SAP programme, the SAP team had the opportunity to work with kaitiaki representatives from Ngaati Whanaunga through the development of the Kahawarahi ki Whakatiwai (Beachlands and East), Wai Manawa Little Shoal Bay ‘mini’ SAP, Manukau East, Manukau North and Pahurehure Inlet including the process at which hui were held and koorero was shared. Over the 2024-2025 calendar year the SAP team has deepened their understanding of Ngaati Whanaunga cultural foot print across the Waitematā Harbour West SAP through further hui and koorero with Ngaati Whanaunga, with hui remaining ongoing to support Ngaati Whanaunga to input into plans of interest at a regional scale via the completion of a Cultural Statement

Matauranga shared by Ngaati Whanaunga:

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 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, places of significance that may include nature features such as trees, springs, rivers, or awa²

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

² 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.

- 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:
 - 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:
 - 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 schools²

Further to the principles above, Ngaati Whanaunga seek to be included in any decision-making as part of the SAP kaupapa through:

- Encouraging applicants to consult with Ngaati Whanaunga prior to submitting any application for a Plan Change or resource consent application
- Ensuring plan rules and policies make provision for Ngaati Whanaunga involvement
- Recognising and supporting kaitiaki initiatives. For example, raahui, whakatapuu (cultural tools) as well as monitoring, enforcement and enhancement programmes
- Ensuring staff have read and understand the Ngaati Whanaunga Environmental Management Plan³
- Working with Ngaati Whanaunga to develop appropriate risk and mitigation measures for protecting and enhancing Te Taiao and all cultural sites of significance within and beyond the confines of the Shoreline Adaptation Plan kaupapa.

³³ Ngaati Whanaunga advocates for ongoing recognition, acknowledgement and reference to the Ngaati Whanaunga Environmental Plan. Kaitaitanga is the responsibility of all.

Public access and equity

Ngaati Whanaunga acknowledges the importance of public access to coastal and marine areas but emphasises that access must be balanced with the protection of cultural sites, environmental sustainability, and kaitiakitanga responsibilities, advocated by the following principles:

1. Protection of cultural and environmental values	Public access should not compromise the mauri of Te Taiao or the integrity of wāhi tapu, urupā, mahinga kai, and other taonga. Ngaati Whanaunga advocates for: • Controlled access to wāhi tapu and culturally significant areas, ensuring tikanga and kawa are followed. • Clear guidelines on visitor behaviour to protect ecosystems and species. • The ability to implement rāhui where needed to allow natural recovery of resources.
2. Equitable access for Ngaati Whanaunga	Ngaati Whanaunga expects that access to traditional lands, waterways, and marine areas will prioritise tangata whenua rights, including: • Unrestricted access to mahinga kai areas for customary harvesting • Recognition of tikanga-based management practices in access rules • Collaborative governance ensuring iwi voices shape access policies.
3. Sustainable and managed public use	Ngaati Whanaunga supports responsible public access that aligns with environmental and cultural values, such as: • Designated pathways or boardwalks to minimise ecological damage • Education initiatives to inform the public about kaitiakitanga and responsible behaviour • Limits on commercial or recreational activities that may harm Te Taiao, such as overfishing or unregulated tourism.
4. Expectations for decision-making	Public access policies must: • Be developed in partnership with Ngaati Whanaunga to ensure equity • Reflect Te Tiriti o Waitangi obligations and protect iwi rights • Provide mechanisms for monitoring and enforcement of access rules • Include resourcing for iwi-led management and educational programmes • Te ao Māori worldview: connection to the te taiao.

Climate change, adaptation measures and expectations around engagement

Understanding the impacts of climate change

Ngaati Whanaunga recognises that climate change is already affecting coastal and marine environments. Key impacts include:

- Rising sea levels threatening wāhi tapu, urupā, and coastal communities
- Increased coastal erosion affecting whenua tūpuna and biodiversity
- More frequent and severe storms damaging mahinga kai, ecosystems, and infrastructure

- Changes in ocean temperature and acidity impacting fisheries and traditional food sources.

Kaitiakitanga-based adaptation approaches

To respond to these challenges, Ngaati Whanaunga supports adaptation measures that uphold the mauri of Te Taiao, including:

- **Nature-based solutions:** Restoring wetlands, maintaining mangroves, and using native vegetation to prevent erosion
- **Cultural protection measures:** Identifying at-risk wāhi tapu and developing strategies to safeguard them from climate impacts
- **Sustainable resource management:** Ensuring fisheries, freshwater sources, and other taonga species are managed in a way that adapts to changing conditions
- **Community resilience:** Supporting whānau and hapū in preparing for climate-related risks, including emergency planning and relocation strategies if necessary.

Expectations for decision-making and engagement

Ngaati Whanaunga expects that climate adaptation planning will:

- Be co-developed with iwi, ensuring Te Ao Māori perspectives shape adaptation strategies.
- Recognise and uphold tino rangātiratanga over natural resources.
- Include mātauranga Māori alongside Western science in risk assessments and solutions.
- Provide funding and support for iwi-led climate adaptation projects.
- Ensure that any changes do not further harm cultural and environmental values.

Expectations around engagement on the implementation of Shoreline Adaptation Plans

Early and ongoing consultation	• Ngaati Whanaunga must be engaged before any plans or changes are made, not just after decisions have been drafted • Regular hui and wānanga with iwi representatives to discuss concerns, priorities, and aspirations • Access to all relevant information (i.e. coastal hazard assessments, coastal options assessments) in a timely and transparent way.
Co-governance and decision-making	• Ngaati Whanaunga has a seat at the table for planning, implementation, and monitoring • Decision-making should align with Te Tiriti o Waitangi principles and ensure Māori perspectives shape outcomes • Recognition of mātauranga Māori (traditional knowledge) alongside scientific approaches.
Protection of cultural sites and taonga	• Active identification and safeguarding of wāhi tapu, mahinga kai, and other areas of significance • Support for iwi-led kaitiaki initiatives, including rāhui, ecological restoration, and resource monitoring • Development of cultural protocols for site access, use, and protection.

Clear communication and accountability:	• A formal agreement outlining how engagement will happen and who is responsible • Regular progress updates and opportunities for iwi to provide feedback • Commitment from councils and agencies to honour Ngaati Whanaunga's role as kaitiaki
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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 partnership has extended to the development of the Waitematā Harbour West SAP, noting that many areas and sites across Waitematā Harbour West hold great significance to Ngāti Maru. In Tamaki, 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 an occupation in the Tamaki area began many generations before the coming of the British Crown's occupation and settlements.

Noting that engagement is ongoing, this section of the Waitematā Harbour West SAP will be updated with cultural narrative in future revisions, noting the Ngāti Maru Runanga are yet formalise their Treaty Settlement with the Crown. Additionally, to ensure that engagement with Ngāti Maru Runanga throughout the SAP programme is effective, meaningful and aligned with Te Tiriti o Waitangi / Treaty of Waitangi, during each stage of the Shoreline Adaptation Plan programme Ngāti Maru Runanga will speak to specific guidelines which will need to be followed.

Ngāti Tamaterā

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 Waitematā Harbour West SAP, noting that Ngāti Tamaterā has expressed interest in specific aspects of the Waitematā Harbour West 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 Waitematā Harbour West area and other SAPs of interest within their rohe.

Te Patukirikiri

The SAP team is currently working with Te Patukirikiri on various SAP plans within their rohe, in 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 Waitematā Harbour West SAP, noting that Te Patukirikiri has expressed interest in specific aspects of the Waitematā Harbour West 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 Waitematā Harbour West 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.



3.4 Ecological context

205

Terrestrial
Significant
Ecological Areas



31

Marine Significant
Ecological Areas



6

Biodiversity
Focus Areas



Ecosystems and significant ecological areas

There are 23 indigenous ecosystem types that cover approximately 1,976 ha within this area's boundaries. These include nine forest ecosystems, four wetland ecosystems, one cliff ecosystem, one coastal saline ecosystem, three regenerating ecosystems, and five regional variants, as described by the regional ecosystem classification system (Singers et al., 2017).

The Waitematā Harbour West area contains a large number of Significant Ecological Areas (SEAs), more than other coastal areas in the region. There are 205 terrestrial SEAs and 31 marine SEAs identified under the AUP:OP within the Waitematā Harbour West. Key highlights include:



- The marine area is included within the Hauraki Gulf Marine Park boundaries. The Mōtū Manawa-Pollen Island Marine Reserve, administered by DOC, is also located within this SAP area.
- There are 31 marine SEAs identified under the AUP:OP.



- Numerous freshwater environments feed into the harbour. Many are highly modified within urban areas.



- Coastal forest ecosystems are scattered around this SAP area, with large fragments located on the North Shore and in Paremoremo.
- The Waitematā Harbour West area is characterised by regionally and nationally important coastal avifauna habitat. Areas include Shoal Bay, Tuff Crater, the City of Cork shellbank, Pollen and Traherne Islands, and Meola Reef.
- 205 terrestrial SEAs are in the area.



- The Waitematā Harbour West area encompasses six Biodiversity Focus Areas (BFAs), which are key zones prioritised by Auckland Council for ecological management. These are Little Shoal Bay, Smiths Bush, Kauri Point, Soldiers Bay Sequence, Paremoremo Scenic Reserve, and Pollen Island.



- Taonga species within the area will be informed based on local iwi recommendations, as different hapū and iwi associate with different taonga species.

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 Waitematā Harbour west 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 Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
1	Unit 1 encompasses the western side of Shoal Bay and a variety of saline and terrestrial ecosystems. - There are over 25 avifauna species known to utilise Shoal Bay – at least half of which are threatened (NZTA, 2010). The entire coastal environment of this unit is regarded as regionally ecologically important. - Hillcrest Creek is an estuarine arm of the harbour that transitions into a small wetland system classified as raupō reedland (WL19 – Regionally Endangered) which borders Smiths Bush and Akoranga Reserve. These two reserves contain large fragments of pūriri forest (WF7 – Regionally Critically Endangered), kahikatea forest (MF4 – Regionally Critically Endangered) and taraire, tawa, podocarp forest (WF9 – Regionally Endangered). - Tuff Crater (sometimes referred to as Tank Farm) is a volcanic explosion crater located south of Esmonde Road. The mangrove forest (SA1.2) and saltmarsh (SA1.3) within the crater provide important habitat for a range of avifauna, including red-billed gull (<i>Chroicocephalus novaehollandiae</i>, At Risk – Declining), black shag (<i>Phalacrocorax carbo novaehollandiae</i>, At Risk – Relict), banded dotterel (<i>Charadrius bicinctus</i>, At Risk – Declining) and banded rail (<i>Gallirallus philippensis</i>, At Risk – Declining). - The City of Cork shellbank supports the best example of Stipa-saltmarsh ribbonwood in the Tāmaki Ecological District (ED). This shellbank (as well as the adjacent constructed shellbank) are highly important high-tide bird roosts and nesting areas, particularly for New Zealand dotterel (<i>Charadrius obscurus</i>, At Risk – Recovering) and Caspian tern (<i>Hydroprogne caspia</i>, Threatened – Nationally Vulnerable). - There are important remnants of coastal broadleaved forest (WF4 – Regionally Endangered) that border most of the coastline within this unit – namely within Motorway Buffer Reserve, Stokes Point Reserve, Northcote Reserve, and surrounding the Onepoto Domain. - There is an important ecological sequence present near the Onewa Road Interchange - mangrove forest (SA1.2) grades into coastal broadleaved forest (WF4) which then transitions into large intact remnant forest (Kauri Glen Reserve, Cecily Eady Bush, and City View Reserve).

Summary by SAP unit of Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
2	Unit 2 includes the coastal area between the Birkenhead Ferry Terminal and Soldiers Bay. This unit is highly modified and developed, with coastal cliffs, sandy bays, and contiguous coastal forest mosaics. - The eastern cliff reserves (Hinemoa Park and Brassey Road Reserve) comprise coastal broadleaved forest dominated by pōhutukawa (WF4 – Regionally Endangered). This ecosystem type continues along the coastline to Chelsea Bay Beach. - Chelsea Heritage Park is predominately exotic, however there is a small mosaic of kauri forest (WF10 – Regionally Endangered) and kauri, podocarp, broadleaved, beech forest (WF12 – Regionally Endangered) to the north in Chatswood Reserve. Forest gecko (<i>Mokopiriakau granulatus</i>, At Risk – Regionally Declining) and ornate skink (<i>Oligosoma ornatum</i>, At Risk – Regionally Declining) have been recorded utilising this forested area (Department of Conservation, n.d.). - Kauri Point Centennial Park contains a regionally important remnant of kauri, podocarp, broadleaved forest (WF11 – Regionally Endangered) and a small area of <i>Machaerina</i> sedgeland (WL11 – Regionally Critically Endangered). - Further west, Muriel Fisher Reserve, Kauri Point Reserve and other surrounding parks comprise a mosaic of taraire, tawa, podocarp forest (WF9 – Regionally Endangered), WF10, WF12, and areas of raupō reedland wetland (WL19 – Regionally Endangered). There are several threatened and rare vascular plants found within Kauri Point Reserve. Forest gecko have also been recorded within this forested area (Department of Conservation, n.d.). - Located below these reserves, Soldiers Bay has the only intact ecological sequence of mangroves, saline wetland through to freshwater habitat to mature native forest in the Tāmaki Ecological District (ED). Banded rail, a highly-cryptic wetland bird, has been recorded in the saline vegetation within Soldiers Bay, located below these reserves. - A variety of seabirds and shorebirds are recorded along the coastline of this unit, including royal spoonbill (<i>Platalea regia</i>, At Risk – Naturally Uncommon), Caspian tern (<i>Hydroprogne caspia</i>, Threatened – Nationally Vulnerable), pied shag (<i>Phalacrocorax varius</i>, At Risk – Recovering) and little shag (<i>Microcarbo melanoleucos</i>, At Risk – Relict). Many of these species utilise the Chelsea Ponds adjacent to the Chelsea Sugar Factory and Soldiers Bay.
3	Unit 3 includes the land between the northern banks of Soldiers Bay through to Hellyers Creek Reserve. - The cliffs within this unit are covered in pōhutukawa-dominated coastal forest (WF4). - Odin Place Reserve and Hadfield Street Reserve consist of kahikatea, pukatea forest (WF8 – Regionally Critically Endangered), WF10, and WF11. - There are important ecological sequences from saline vegetation to terrestrial vegetation along Hellyers Creek. A variety of native avifauna, including passerine, coastal and seabird species, have been recorded along the banks of Hellyers Creek. Most notably, white-fronted tern (<i>Sterna striata</i>, At Risk – Declining) and New Zealand pipit (<i>Anthus novaeseelandiae</i>, At Risk – Naturally Uncommon). - Native freshwater fish are found within all watercourses within this unit and Kahika Stream supports populations of giant kōkopu (<i>Galaxias argenteus</i>, Threatened – Regionally Critical) (NZFFD, n.d.).

Summary by SAP unit of Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
4	Unit 4 includes the coastal environment to the south of Hellyers Creek, including Kaipatiki Creek and Birkenhead Domain. • Kaipatiki Creek is a low order, low gradient stream that flows from Eskdale Reserve to the harbour. Giant kōkopu have been recorded within this stream system (NZFFD, n.d.). • Eskdale Reserve is largely classified as kauri, podocarp, broadleaved forest (WF11) with smaller areas of taraire, tawa, podocarp forest (WF9). A wide variety of native avifauna have been recorded within this vegetation (iNaturalist, n.d.). • There are records of copper skink (<i>Oligosoma aeneum</i>, At Risk – Declining) located within Kaipatiki Esplanade Reserve and the Witheford Scenic Reserve (Department of Conservation, n.d.). • To the north of Kaipatiki Creek, there are several indigenous forest remnants located within Nikau Reserve, Arcadia Reserve, Manuka Reserve and Leigh Scenic Reserve – all of which providing suitable habitat for native lizards and passerine birds.
5	Unit 5 encompasses the land to the north of Hellyers Creek to the eastern banks of Lucas Creek. • The northwestern cliffs of Hellyers Creek comprise the following reserves: Hellyers Esplanade Reserve, Redfern Nature Reserve, Kereru Reserve and Dene Court Reserve. These reserves are covered in regenerating and mature native forest, including pōhutukawa-dominated coastal forest (WF4), taraire, tawa, podocarp forest (WF9), and kauri, podocarp, broadleaved beech forest (WF12). This terrestrial vegetation grades into mangrove forest (SA1.2) which lines the and provides feeding habitat for a variety of coastal bird species. Forest gecko and elegant gecko (<i>Naultinus elegans</i>, At Risk – Regionally Declining) can be found within these reserves. • The Greenhithe Wharf has attracted a variety of animals, including leopard seals (<i>Hydrurga leptonyx</i>) and threatened coastal avifauna (iNaturalist, n.d., New Zealand eBird, n.d.). • Te Wharau Creek contains an important ecological sequence from mangrove forest (SA1.2) to kauri, podocarp, broadleaved forest (WF11) which makes up the Lady Phoenix Reserve. • The intertidal area of Lucas Creek contains a diverse array of flora and fauna, including extensive shellfish beds. The mangrove vegetation found along Lucas Creek provides important habitat for threatened, secretive coastal fringe birds.
6	Unit 6 encompasses the land between the western banks of Lucas Creek to the eastern banks of Paremoremo Creek. • The western banks of Lucas Creek are dominated by kauri, podocarp, broadleaved, beech forest (WF12), with smaller areas of taraire, tawa, podocarp forest (WF9) and coastal broadleaved forest (WF4). Coastal broadleaved forest continues to wrap around most of the cliffs in this unit. • Paremoremo Scenic Reserve (the largest native bush reserve on the North Shore) comprises a large remnant of WF12 and areas of fire-induced gumland health (WL1.2 – Regionally Critically Endangered). Gumlands have been greatly reduced in extent due to conversion into pasture and kauri gum mining (Singers et al., 2017). A diverse range of native passerine birds, and lizards are present within this reserve. Torrentfish (<i>Cheimarrichthys fosterae</i>, Threatened – Regionally Vulnerable) have been recorded within the watercourses that run through this reserve.

Summary by SAP unit of Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
7	Unit 7 includes the land to the west of Paremoremo Creek, including a small portion of Riverhead Forest. - Edward Jonkers Reserve comprises regenerating kānuka scrub (VS2 – Regionally Least Concern) which grades into tawa, kohekohe, rewarewa, hīnau podocarp forest (WF13 – Regionally Vulnerable) and a small area of raupō reedland (WL19 – Regionally Endangered). - There are small areas of indigenous forest that wrap around the coastline within this unit – most of which are not located within a Council reserve.
8	Unit 8 includes the western banks of Rangitopuni Stream, the suburb of Riverhead, and the western banks of Brigham Creek. - There is minimal indigenous vegetation within this unit, with the exception of mangrove forest lining the estuaries (SA1.2) and regenerating kānuka forest (VS5 – Regionally Least Concern) near a boat landing (named The Landing) near Riverhead Point Drive. - Threatened avifauna, including Caspian tern (<i>Hydroprogne caspia</i>, Threatened – Nationally Vulnerable) and little black shag (<i>Phalacrocorax sulcirostris</i>, At Risk – Naturally Uncommon), are recorded within the upper reaches of the Rangitopuni Stream (New Zealand eBird, n.d.).
9	Unit 9 includes the eastern banks of Brigham Creek to the Upper Harbour Motorway. - Mangrove scrub lines the coastline within this unit. - A large number of avifauna are recorded at Waimarie Beach, including South Island pied oystercatcher (SIPO; <i>Haematopus finschi</i>, At Risk – Declining), white-fronted tern, and Caspian tern.
10	Unit 10 is a small area which just covers Herald Island. - Most of which has been developed with the exception of an area of pōhutukawa treeland (CL1 – Regionally Vulnerable) on the northern end of the island. The southern border of the island is also covered in coastal broadleaved forest (WF4). - Caspian tern and other coastal birds are recorded at the Herald Island Wharf and along Christmas Beach.
11	Unit 11 encompasses the coastal environment to the south of the Upper Harbour Motorway to Mānutewhau Creek. - The marine environment surrounding the Upper Harbour Motorway consists of estuarine sand and small areas of mangrove forest (SA1.2). Threatened coastal birds have been recorded around the bridge and at the Hobsonville Point Ferry Terminal, including Caspian tern and bar-tailed godwit (<i>Limosa lapponica</i>, At Risk – Declining) (New Zealand eBird, n.d.). - There is a small chenier-type shell banks (SA1.5) located along Limeburners Bay which supports a variety of coastal avifauna (New Zealand eBird, n.d.). - There is an important ecological sequence to the south of the Hobsonville Marina; mangrove forest (SA1.2) grades to saltmarsh – sea rush oioi (SA1.3) which transitions to raupō reedland (WL19) to coastal broadleaved forest (WF4).

Summary by SAP unit of Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
12	Te Atatū Peninsula, West Harbour and Te Atatū South make up Unit 12. - There are several large estuarine arms of the harbour within this unit, including Te Wai o Pareira / Henderson Creek, the Whau River and several smaller streams. - There are a series of small shellbanks in the marine area to the north of Te Atatū Peninsula which are considered a major roosting area for coastal birds. - The eastern coastline of Te Atatū Peninsula holds thousands of records of avifauna, including shore plover (<i>Thinornis novaeseelandiae</i>, Threatened – Nationally Critical), SIPO, variable oystercatcher (<i>Haematopus unicolor</i>, At Risk – Recovering), and red knot (<i>Calidris canutus</i>, At Risk – Declining) (New Zealand eBird, n.d.). These species appear to congregate along Waimanu Bay and the Harbour View Beach Reserve which comprises mangrove forest (SA1.2), salt marsh (SA1.3), and ashell banks (SA1.5).
13	Unit 13 includes the eastern banks of the Whau River, as well as Traherne and Pollen Islands. - The coastal-marine area is included within the Motu Manawa-Pollen Island Marine Reserve which is administered by DOC (Department of Conservation, 2024). - Pollen Island is a 13 ha island with a long shell barrier beach bank (SA1.5) located around the seaward side. This island is recognised as high valuable habitat for wetland birds, including banded rail, shorebirds, including New Zealand dotterel, and seabirds, including white-fronted tern. - Whau River is bordered by intact areas of mangrove forest (SA1.2) which grades into a thin strip of coastal broadleaved forest (WF4) along Saunders Reserve and the Kurt Brehmer Walkway. A variety of freshwater fish, including torrent fish, have been recorded within the upper reaches of this river (NZFFD, n.d.). - Marine mammals, including leopard seals, have been occasionally spotted within the Whau River and on its banks.
14	Unit 14 includes a small area of land which encompasses the Northwestern Motorway Interchange, the suburb of Waterview, and Te Auaunga Awa/Oakley Creek. - Te Auaunga Awa/Oakley Creek is the longest urban awa in the Auckland isthmus and stretches approximately 15 km (Puketāpapa Local Board, 2016). The section of Oakley Creek within this unit is mostly surrounded by planted vegetation, with some areas of regenerating native bush (VS5 – Regionally Least Concern). The river and riparian environments support a variety of native lizards, birds, and freshwater fish. - The coastal area surrounding Waterview is predominately covered in mangrove forest (SA1.2) and is included within the boundaries of the Motu Manawa-Pollen Island Marine Reserve. This intertidal habitat is utilised by a variety of avifauna, including seabirds, shorebirds and waders.

Summary by SAP unit of Waitematā Harbour West vulnerable ecological features and values	
Unit	Summary of ecological features and values
15	The coast of Unit 15 is lined with pōhutukawa-dominated coastal broadleaved forest (WF4). - There is a chenier-type shellbank (SA1.5) located adjacent to Eric Armishaw Reserve (this coastal area is also known as Illingworth Beach). This shellbank is surrounded by intact mangrove scrub (SA1.2) and saltmarsh (SA.13). This saline vegetation belongs to a larger Biodiversity Focus Area (BFA; Pollen Island BFA) and is recognised as highly valuable habitat for wetland birds and shorebirds, including several threatened species. Spotless crane (<i>Zapornia tabuensis</i>, At Risk – Declining), banded rail, fernbird (<i>Poodytes punctatus</i>, At Risk – Declining), white-fronted tern, New Zealand dotterel and SIPO are just some of the many species that have been recorded here (iNaturalist, n.d.). - The marine area is not included within the boundaries of the Motu Manawa-Pollen Island Marine Reserve (as discussed above).
16	Unit 16 includes the suburbs of Westmere and Herne Bay. - Coastal broadleaved forest (WF4 – Regionally Endangered) is found around the cliffs within this area all the way up to the Harbour Bridge – hosting ancient pōhutukawa individuals. - A wide range of coastal avifauna utilise the bays and intertidal areas within this unit, including pied stilt, Caspian tern and white-fronted tern (iNaturalist, n.d.; New Zealand eBird, n.d.). - Royal spoonbill (<i>Platalea regia</i>, At Risk – Naturally Uncommon) have been reported feeding in the intertidal area adjacent to Cox’s Bay Park. - Meola Reef is a basalt volcanic flow that extends over two km into the central Waitematā Harbour. Mangrove forest (SA1.2) covers the landward edge of the reef, while the outer reef is dominated by oysters in the intertidal zone and kelp in the subtidal zone (Foley & Shears, 2019). The reef and surrounding environment offer feeding, roosting, and breeding habitat for coastal avifauna. South Island pied oystercatcher (SIPO) have been found to utilise the Western Springs College sports fields and Meola Reef Reserve as roosting areas (iNaturalist, n.d.).

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 Waitematā Harbour West SAP coastline, opportunities for nature-based solutions will be factored into decision making in implementation.



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

Waitematā Harbour West has a population of approximately 199,600 people (Statistics New Zealand, 2018). The median age is 36 which is the same as the regional average of 36. Within the Waitematā Harbour West area, 59% of the population identify as being of New Zealand European ethnicity which is slightly higher than the regional proportion of 56% (Statistics New Zealand, 2018). Other ethnicities include Māori (12%), Asian (26%), Pacific Peoples (13%), Middle Eastern, Latin American, and African. The Māori population (12%) in this area is close to the Auckland regional proportion of 11%.

Most of the SAP area can be characterised as suburban, with the exception of Whenuapai (Unit 9), Riverhead (Units 7 and 8), and Paremoremo (Unit 6), which include a mix of rural land and more recent higher density urban developments. The area may urbanise further with higher density housing as future development plans progress. Areas such as Hobsonville (Unit 11) and Whenuapai (Unit 9) have seen extensive urban development in recent years. Compared to other units, Te Atatū South (Unit 12) and Avondale (Unit 13) have high residential populations as well as industrial uses.

Small town centres are located in most units and provide amenities and services for the surrounding communities such as small shops, cafes and schools. Larger town centres are predominantly located in Avondale, Henderson, and New Lynn within the western units (Units 12 and 13). In the southernmost units (Units 14-16), they are situated around Point Chevalier and Herne Bay. In the northern units (Units 1-2), Northcote and Birkenhead are the primary locations for these centres. These are characterised by a higher density of retail and hospitality venues, including numerous eateries. A key retail hub within the area is located in Unit 13, which is the Lynn Mall Shopping Centre which services the wider community (Kiwi Property, 2024). While supermarkets, medical clinics, schools and other public amenities are generally widespread throughout the SAP area, they are less prevalent in Riverhead (Unit 8), Paremoremo (Unit 6), and Whenuapai (Unit 9).

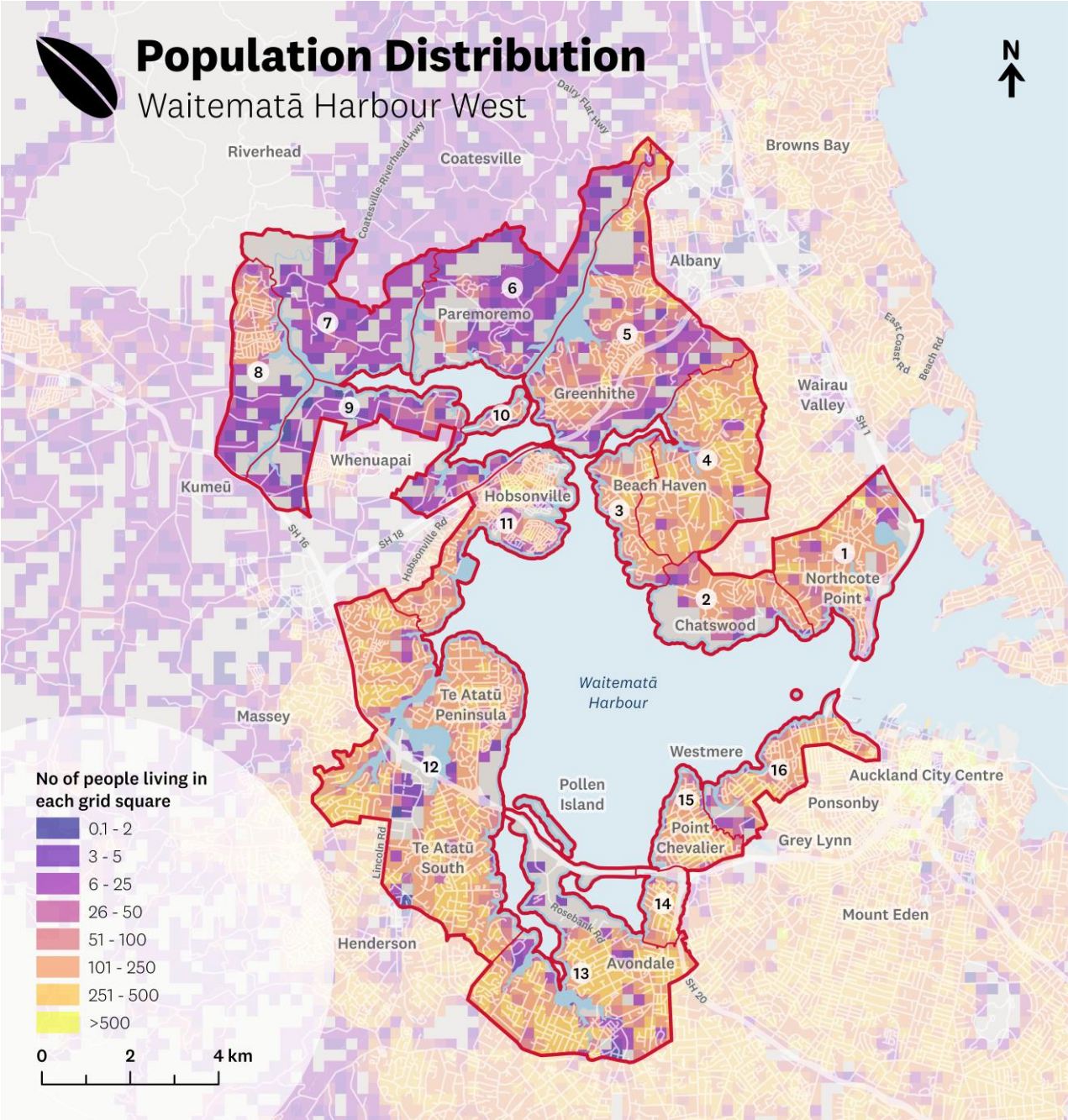


Figure 3-2: Population distribution Waitematā Harbour West

Community groups and organisations

A desktop review identified 88 active community organisations within the Waitematā Harbour West SAP area. Key organisations include Point Chevalier Lions, ratepayers' groups, RSAs, and various community groups such as Residents' Associations, community trusts, and ratepayers' associations distributed throughout the SAP area.

In addition, a diverse array of sports and recreation groups are present. These include air/sea scouts, tennis, cricket, rowing, boating, sailing, Girl Guides, football, rugby, golf, and bowling clubs. While these groups are spread throughout the SAP area, they are more densely concentrated in Units 1, 2, 3, 13, 15 and 16. A number of these groups are situated directly adjacent to the coastline, either in coastal parks (such as Ken Maunder Park and Cox's Reserve) or are based out of boating sheds and other marine-based club rooms / facilities.

Eight environmental groups have been identified as operating within the SAP area (noting this information was obtained through a desktop review and is not considered an exhaustive list). These groups actively engage in promoting regeneration, sustainable development, and resilience within their catchments. Organisations include Predator Free Westmere, Greenhithe Ecology Network, and St Lukes Environmental Protection Society.



Policy

Understanding the regulatory and policy context applicable to the area helps us understand previously expressed issues by the communities, as well as their values, objectives and aspirations. The following are key plans and documents of relevance to the Waitematā Harbour West SAP development. 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):

- Albert-Eden Open Space Network Plan (2018)
- Asset-specific asset management plans (various including Auckland Transport, Stormwater Asset Management Plan, Watercare Services, Open Space Strategic Asset Management Plan, and Community Facilities Strategic Asset Management Plan)
- Auckland Council Long Term Plan 2024 – 2034 (Auckland Council, 2024)
- The Auckland Plan 2050 (Auckland Council, 2018)
- Auckland Sport and Recreation Action Plan (Auckland Council, 2017)
- Auckland Unitary Plan 2016
- The Hauraki Gulf Marine Park Act 2000 (New Zealand Government, 2000)
- Henderson Implementation Plan 2014-2040 (Auckland Council, 2014)
- Henderson-Massey's Parks and Open Space Network Plan (Auckland Council, 2015)
- Marine and Coastal Area (Takutai Moana) Act 2011 (MACAA)

- Tāmaki Makaurau Recovery Plan (Auckland Council, 2023)
- Te Atatū South Plan (Auckland Council, 2019)
- Thriving Communities Strategy Ngā Hapori Momoho (Auckland Council, 2022b)
- Upper Harbour Open Space Network Plan 2018 (Auckland Council, 2018)
- Waterview Precinct Plan (2013)
- Whau Open Space Network Plan 2017 (Auckland Council, 2017).



Community use

The Auckland Plan and associated strategies anticipate substantial growth across the Waitematā Harbour West area, with numerous key projects underway or planned particularly in Units 1 and 16. Areas of West Auckland are zoned as Future Urban in anticipation of increased population growth in areas such as Whenuapai and Redhill, and major developments are underway in Te Atatū Peninsula and Henderson (Units 12 and 13). Key planned initiatives include wastewater upgrades, new community hubs, enhanced public spaces, and improved transport corridors to support this urbanisation and allow for sustainable development.

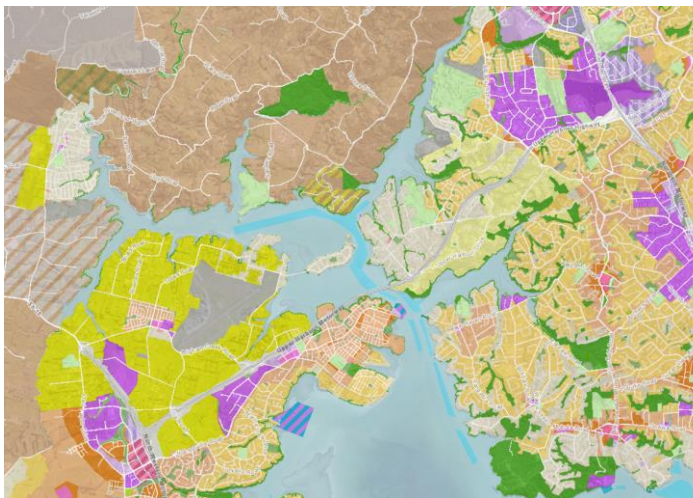


Figure 3-3. Zoning (AUP(OP) for Waitematā Harbour West Units 1 – 11.

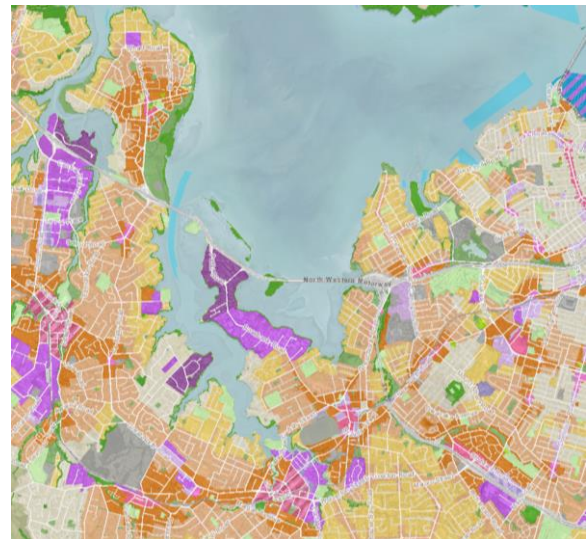


Figure 3-4. Zoning (AUP(OP) for Waitematā Harbour West Units 12 – 16.

There are seven local boards within the SAP area: (Waitematā, Albert-Eden, Henderson-Massey, Upper Harbour, Kaipātiki, Waitematā, Rodney and Whau). Key development aspirations for these local boards include the following outcomes:

- Develop accessible and safe pathways and cycleways near key roads, reserves and parks
- Manage rapid population growth and address climate change through waterway restoration and stormwater management
- Advance projects such as the Te Whau Path

- Create an urban eco-centre for "liveable growth" in Henderson
- Enhance the rapid transport network and future-proof flood-prone areas
- Support community hubs for employment and social interaction
- Improve wastewater connections
- Restore the mauri of Meola Reef and Creek
- Honor Māori heritage in the area.



Community buildings / assets

A non-exhaustive summary of social infrastructure across the Waitematā Harbour West coastline, which may be located on Auckland Council-owned land or other landholdings identified by the community, is listed below. 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, reflecting the need to understand how the community use and value the area including:

- Auckland Prison, also known as Paremoremo Prison (Unit 6) and a number of police stations
- Medical centres, including general practitioners and Waitākere Hospital (Unit 12)
- Trusts Stadium Arena (Unit 12): A multi-purpose venue that hosts sports events, concerts, and community activities
- Auckland Zoo (Unit 16), which is home to a diverse range of exotic animals and focuses on conservation efforts
- Museum of Transport and Technology (Unit 16): Museum facilities showcasing technological advancements and a range of cars, trams and planes
- Sports facilities, public pools and fields across the SAP area including Olympic Park, Ken Maunder Park, Moire Park, Seddon Field, Onepoto Domain and Cox's Reserve
- Westpark Marina in Hobsonville (Unit 11): Provides boat access to the Waitematā Harbour
- Auckland University of Technology Akoranga Campus (Unit 1).



Emergency services, facilities or key infrastructure

In the Waitematā Harbour West area, numerous large-scale projects are either underway or planned. These are primarily within Units 1 and 16. The following list summaries the key projects which will be undertaken within the SAP area that have potential to change how communities interact with the coastal space:

- **Waitematā Harbour Connections:** A new connection across Waitematā Harbour (i.e. a tunnel or bridge) has been proposed (NZ Transport Agency, 2024). The preferred option would increase access for communities located in Unit 1 and 16 and there is likely to be significant impacts during the construction stage (NZ Transport Agency, 2024).

- **Whenuapai and Red Hills** have been identified as key areas for population growth as outlined in the Auckland Future Development Strategy. Te Atatū Peninsula and Henderson have been identified as major development locations / investment priorities (Units 12 and 13).
- **Te Tupu Ngātahi Supporting Growth Business Case:** Plans include provisions for walking and cycling, road upgrades, new rapid transport corridors, bus interchanges, and a new interchange at Brigham Creek in Whenuapai (Unit 9). Safety upgrades will also extend up into Riverhead (Unit 8) and Hobsonville (Unit 10) (Te Tupu Ngatahi Supporting Growth, 2023).
- **Numerous Eke Panuku developments** around Northcote (Unit 1) to support the community, including development of a new multi-purpose community hub, new town centre and a green corridor that connects the town centre, schools and homes (Eke Panuku Development Auckland, n.d.). There are also plans for a community hub and town square upgrades in Avondale (Unit 13).
- **Central Interceptor:** New Zealand's largest wastewater project, a 16.2 km tunnel running under Auckland City and Manukau Harbour, including work at Pt Erin Park (Watercare, 2024) (Unit 16).
- **Te Whau Pathway** (Units 12 and 13): construction of a new shared path from New Lynn to Te Atatū (Te Whau Pathway Project, 2024).
- **Te Ara Hauāuru – Northwest Busway**



Landscape features and character

Portions of the SAP area are scheduled as Outstanding Natural Landscapes (ONL), High Natural Character (HNC) areas, and/or Outstanding Natural Features (ONF). There are eleven ONFs, seven HNCs and two ONLs identified within the Waitematā Harbour West SAP area. These areas contribute to the natural character of the coastal environment and are identified under the AUP:OP. Listed below are locations designated as outstanding natural features or landscapes. These may hold significant community and regional values associated with their preservation and appreciation (Auckland Council, 2016a).

- | | |
|--|---|
| • Tank Farm volcano (ONF, Unit 1) | • Harbour View Pleistocene terraces (ONF, Unit 12) |
| • The Shoal Bay chenier shell spits (ONF, Unit 1) | • Pollen Island (HNC/ONF, Unit 13) |
| • Onepoto explosion crater (ONF, Unit 1) | • Traherne Islands (ONF, Unit 13) |
| • Kauri Point (HNC, Unit 2) | • Mudflats (ONF, Unit 13) |
| • Fitzpatrick Bay (HNC, Unit 2) | • The Point Chevalier Waitematā Group sedimentary structures (ONF, Unit 15) |
| • Oruamo Creek (HNC, Unit 5) | • Meola Creek (ONF, Units 15 and 16) |
| • Several sections of Lucas Creek (HNC/ONL, Unit 6) | • Watchman Island off the coast from Herne Bay (HNC, Unit 16) |
| • Paremoremo Escarpment (ONL, Units 6 and 7) | • Meola Reef (Te Takaroa) (ONF, Unit 16) |
| • Te Atatū Pleistocene plant beds (ONF, Unit 12) | |
| • Lowtherhurst Reserve Kauri Stand in Massey near Upper Waitematā Harbour (HNC, Unit 12) | |

There are also a significant number of features listed as heritage sites or features under the Auckland Unitary Plan (AUP:OP) (Auckland Council, 2016a). These include historic buildings, plaques, and middens.

The Waitematā Harbour West area is home to 269 historic heritage sites of significant historical value. Unit 16 contains six sites listed as Category A, recognised for its outstanding significance well beyond its immediate environment under Schedule 14 of the Auckland Unitary Plan (Auckland Council, 2016a). Heritage features are identified at a unit and stretch level in Volume 3. Engagement with 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 in order 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 Waitematā Harbour West SAP ran in parallel to the development of the Weiti Estuary to Devonport SAP and was open from 2 August – 26 September 2024. To capture a diversity of demographics, a range of events and engagement opportunities were utilised, including both in-person and online engagement. These are summarised in Figure 3-5 below. Feedback was received via the ‘AK have your say’ survey, social pinpoint and email submissions. Refer to the community engagement report for full details of the feedback received and to Volume 1 for more on the methodology used to plan and undertake community engagement.

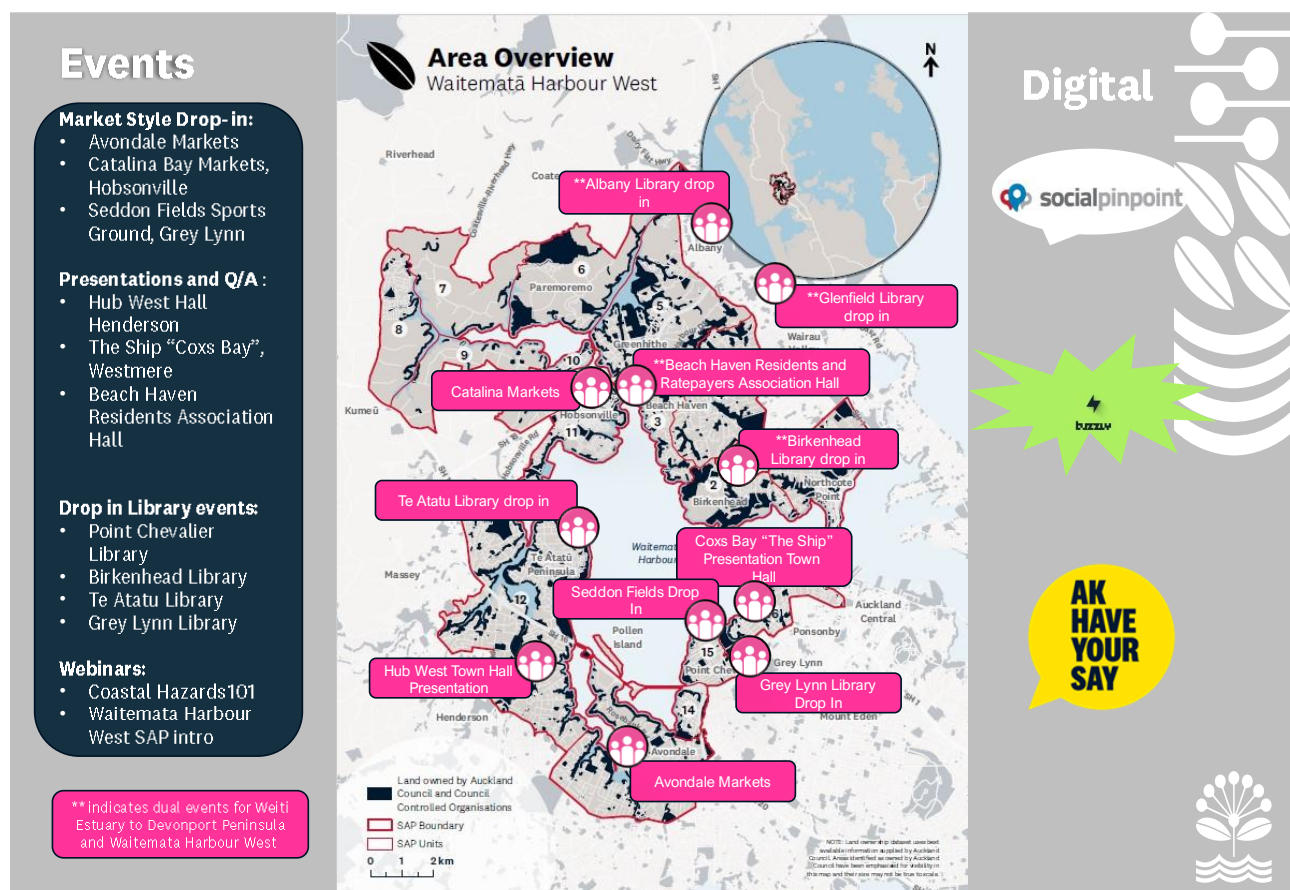
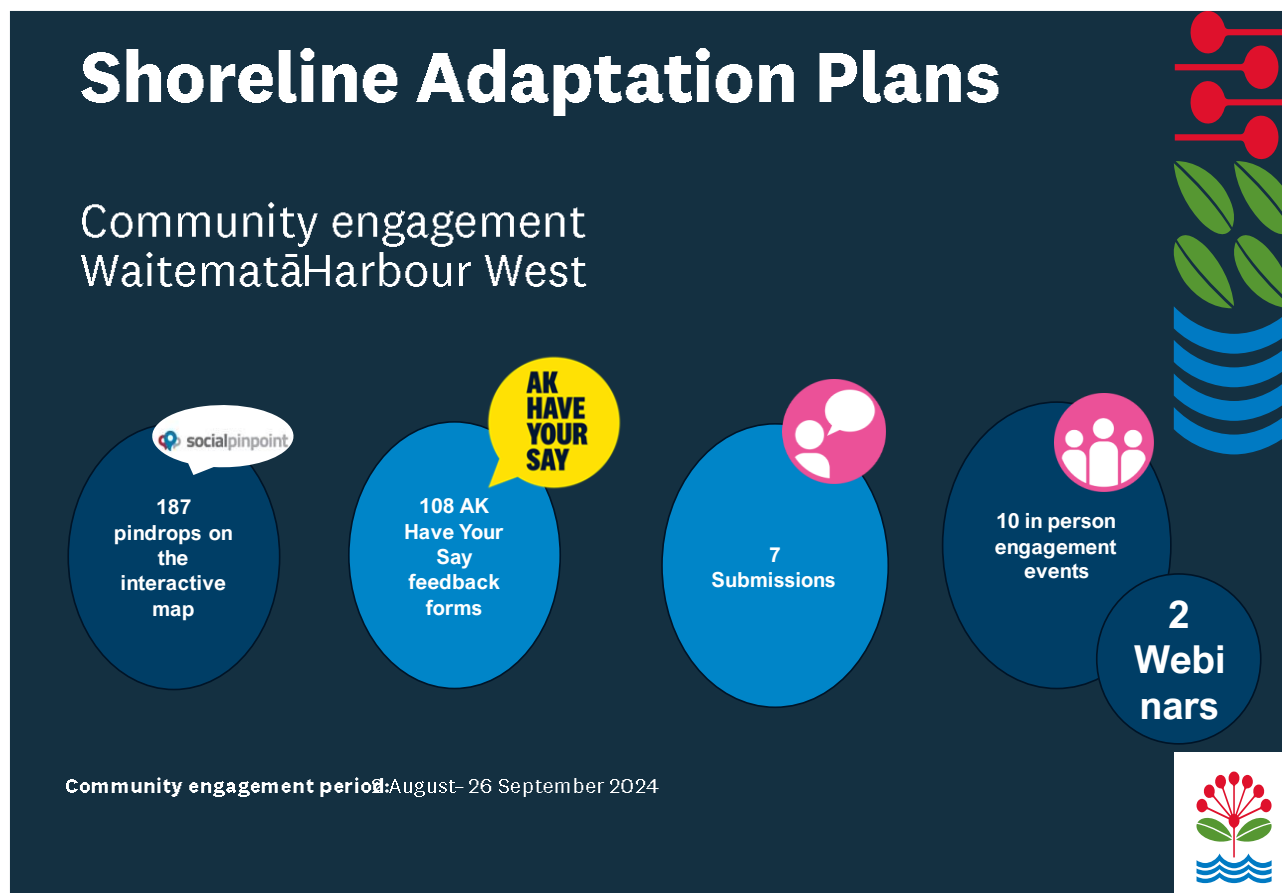


Figure 3-5: Community engagement feedback

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



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

Who did we hear from

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

- Submissions were primarily from individuals with 7 community groups and organisations providing a response and several more engaging directly through in-person events and communications.
- Gender: A slightly higher percentage of males (50%) than females (47%) responded to the ‘Have your Say’ survey, with 3% saying ‘other gender’.
- Ethnicity: A significant portion (63%) in this area say the ethnic group they belong to is Pākehā /NZ European, with 5% Indian, 4% Māori, 3% Asian, 2% Pasifika, and 13% who “Other”.
- Age Group: Those who responded are more likely to be aged 45-64 or 65+. As seen in the graph below, 74% of respondents are aged 45 or over.



Community uses/ values

Respondents are asked, “when thinking about the coastal areas they use in the Waitematā Harbour, which values matter the most to them. The most popular values centred around being able to enjoy coastal habitats/fauna and flora, recreation, swimming, and water sports; access to the water and a “sense of connection” to the coast.

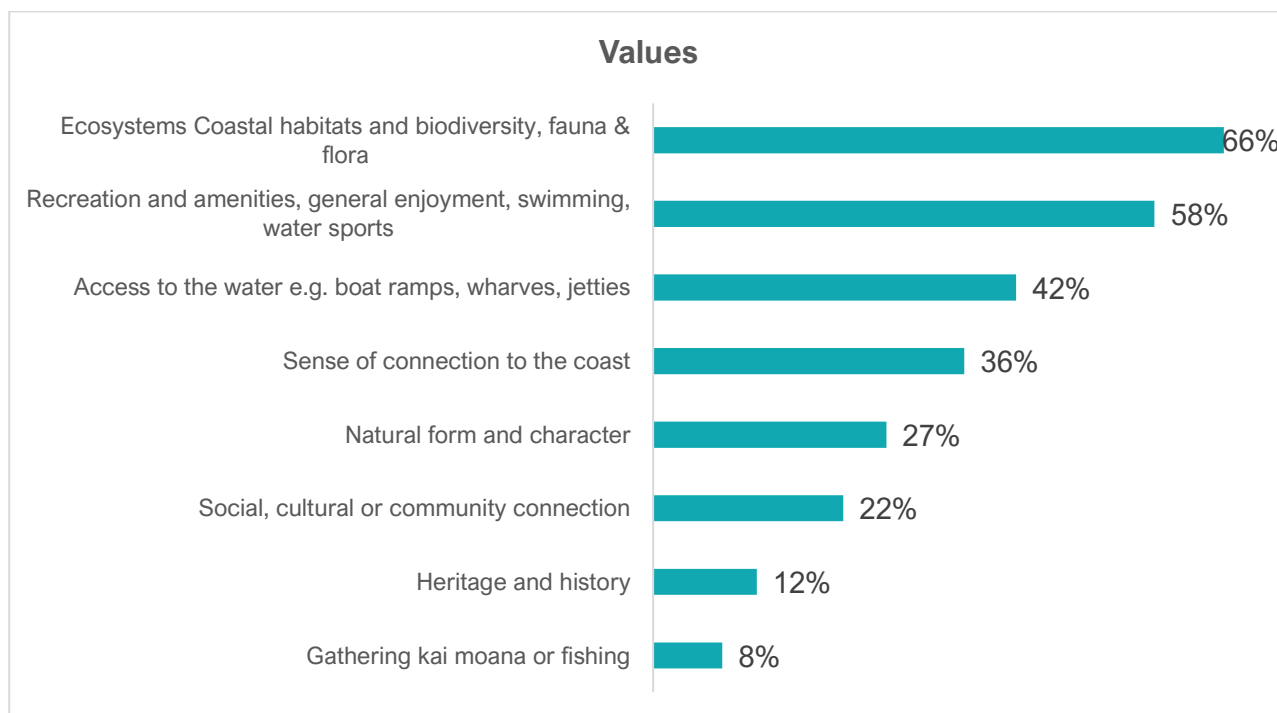


Figure 3-6: When thinking about the coastal areas you use in the Waitematā Harbour, what values matter the most to you?
Source: AK Have Your Say Waitematā Feedback Form. (select up to three) (Sample = 106)

As represented in the graphic above, the most mentioned values included being able to enjoy ecosystems, coastal habitats/fauna and flora (66%), recreation, swimming, and water sports (58%); access to the water, e.g. boat ramps, wharfs, jetties (42%) and a “sense of connection” to the coast (36%).

Uses, access and frequency

Half (50%) of those who responded said they most often go to the coast by cycling or walking, with 43% using a private vehicle. Very few (1%) said they use public transport to get to the coast.

Over half (52%) said they visit the coast daily or “most days”; 91% visit the coast at least once a month.

Activities – Waitematā Harbour

Activities enjoyed were quite varied across the various units within the Waitematā Harbour covering passive recreation, water-based activities, open-water activities, walking / cycling and nature-watching, etc. Overall, the three most popular were:

- Walking or running on the beach, walkways or roads, e.g. for exercise, dog walking, etc (67%)

- Nature watching, e.g. watching birds, marine mammals etc (59%)
- Passive recreation, e.g. sitting, relaxing, picnicking, sunbathing (55%).



Community cultural values / comments

Responses highlighted:

- Respect and incorporate Māori cultural and spiritual values in coastal management plans
- Maintain natural coastal features and historical sites for future generations.



Community values of ecosystems and impacts of climate change

Reoccurring themes across the wider harbour included:

- Improve water quality by reducing pollution, stormwater runoff, sediment, and sewage discharge
- Promote natural regeneration through revegetation of coastal and cliff areas and planting of native species
- Protect ecosystems and biodiversity, including shellfish and marine habitats, to restore ecological balance
- Utilise mangroves strategically to reduce erosion while balancing ecosystem needs
- Incorporate nature-based solutions to mitigate climate change impacts, such as flooding and coastal erosion
- Plan for rising sea levels by enhancing estuarine vegetation and creating resilient parkland with saline-resistant surfaces
- Minimize artificial structures such as seawalls except where necessary to protect vital infrastructure.



Community experience of hazards / concerns

Coastal erosion was the most common concern cited by respondents across the seven reported units. Other concerns were rainfall flooding/ flooding from extreme events, coastal storm events and sea-level rise, as seen in the graph below. These insights are identified in Volume 3 in relation to each unit area.

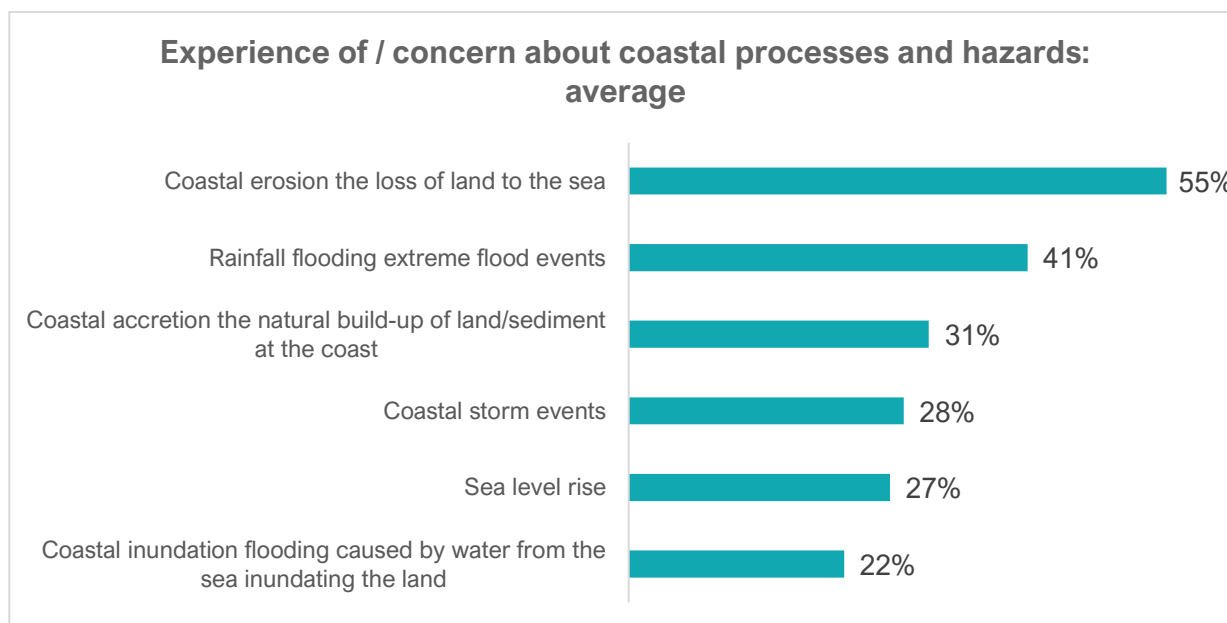


Figure 3-7: Which coastal processes or coastal hazards have you experienced or are most concerned about? Source: AK Have Your Say Waitematā Feedback Form. (select up to three). Average across Units 1-4; Units 11-12 and Unit 15 (average sample = 13)



Community values and aspirations

Values for the future

Respondents were asked, when considering overall how they access and use the Waitematā Harbour coastal areas, and what they value about them, what type of values they'd like to see maintained, enhanced, or restored in the coastal areas. A broad range of values, aspirations and suggestions were provided. The main themes and topics mentioned were:

- Community and recreational opportunities:
 - Develop amenities such as parks, sitting areas, and access points for activities, e.g. swimming, kayaking, and fishing
 - Maintain safe and clean coastal areas for families, with facilities such as boat ramps, beaches, and play areas
 - Support maritime culture and local traditions, including preserving wharves and enabling boat maintenance.
- Preservation vs. development:
 - Limit overdevelopment along coastlines to preserve natural beauty and public access
 - Focus on ecological values, historical preservation, and community well-being instead of housing intensification.
- Council and community involvement:
 - Ensure Council actively supports and invests in ecological restoration and infrastructure
 - Recognize and collaborate with community groups involved in restoration efforts.

Aspirations for the future

Respondents were also asked if they had any aspirations specifically for access, facilities or uses at the coast in the Waitematā Harbour area. Key themes are shown below.

The most mentioned were more pathways / better access, including improvement of boat ramps, consulting the community / maintaining community spirit, and improvement of water quality.

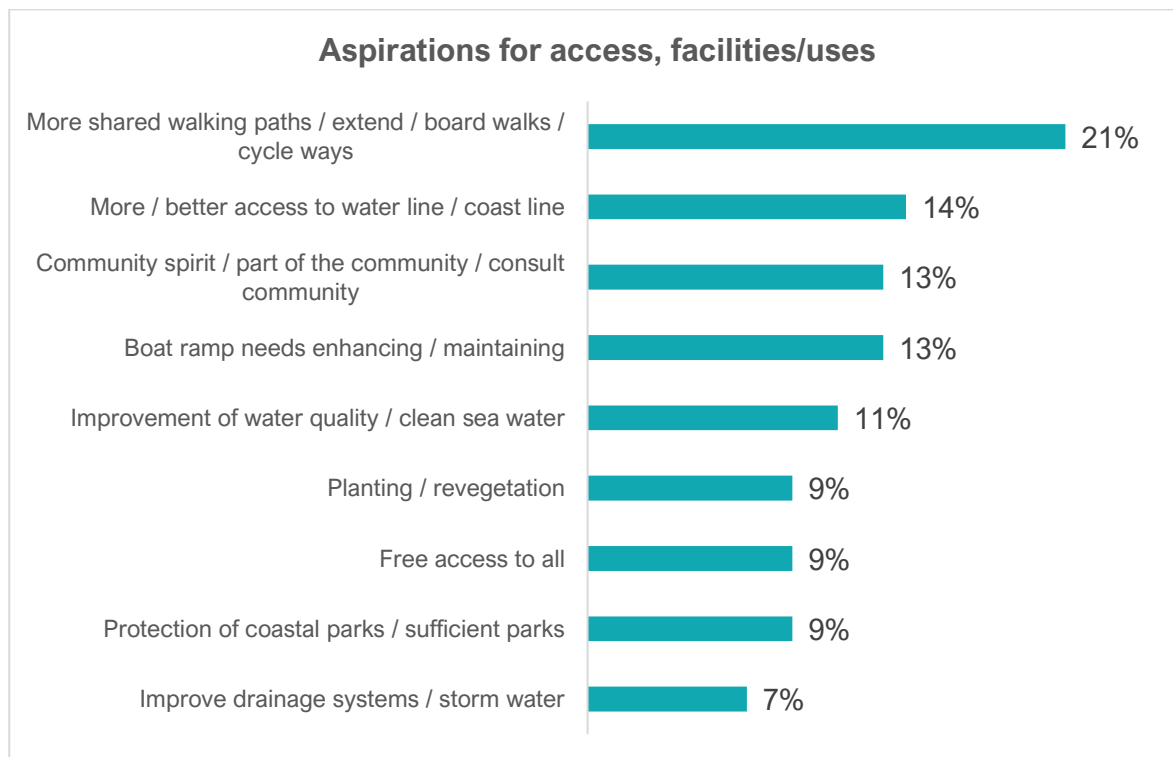


Figure 3-8: Do you have any aspirations for access, facilities or uses at the coast in the Waitematā Harbour SAP area in the future? Source: AK Have Your Say Waitematā Feedback Form. (Sample = 56)



Community suggestions for management and feedback on strategies

Among the units for which quantitative results were available (Units 1 – 4; Units 11-12 and Unit 15), on average across these seven units, 64% of respondents were in support of the proposed adaptation strategies, while 23% were unsure or other, and 13% did not support the proposed strategies. Comments provided for each coastal area expressing aspirations, changes and concerns, were identified and considered in the development of the final strategies and pathways.

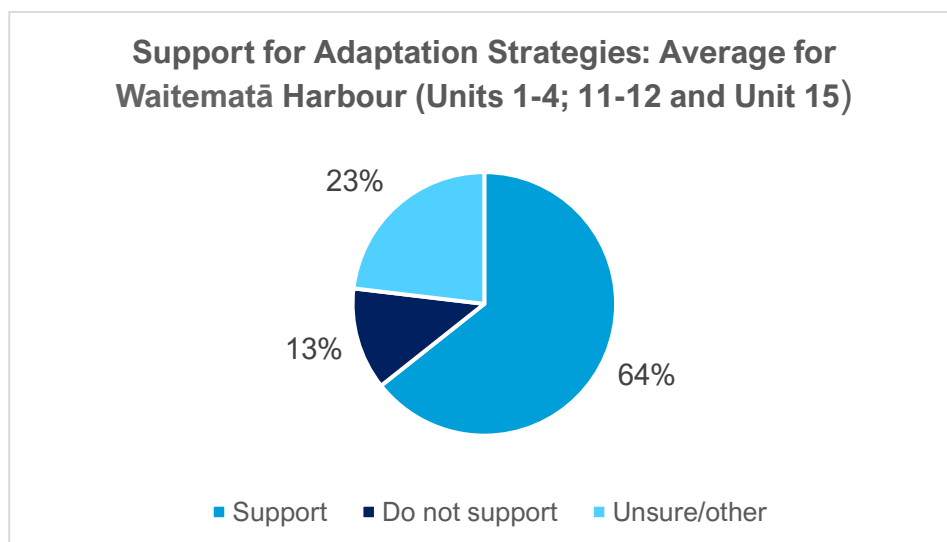


Figure 3-9: What is your opinion of the adaptation plans over the short, medium and long terms? Source: AK Have Your Say Waitematā Feedback Form. Average across Units 1-4; 11-12 and Unit 15 - average sample = 16 respondents

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 Waitematā Harbour West SAP area

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

Coastal connections, use and access	- Coastal access is maintained and improved to provide access to coastal areas for growing and current communities, and future generations. - Access along coastal areas provides for recreational enjoyment of coastal areas in a manner which responds to and does not compromise the ecological and cultural features of a coastal area.
Social and cultural	- Iwi, communities and stakeholders are central to and lead conversations, assessment of options and implementation actions and decision making in relation to adaptation in coastal areas. - 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	Risk to critical transport networks, valued coastal walkway and access points is proactively addressed to minimise the loss of access for communities during and following hazard events.
Environmental	Local natural environments, water quality and amenity of the Waitemata Harbour acknowledging the connection of catchments to coast and the opportunity to improve natural environments.

4

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:

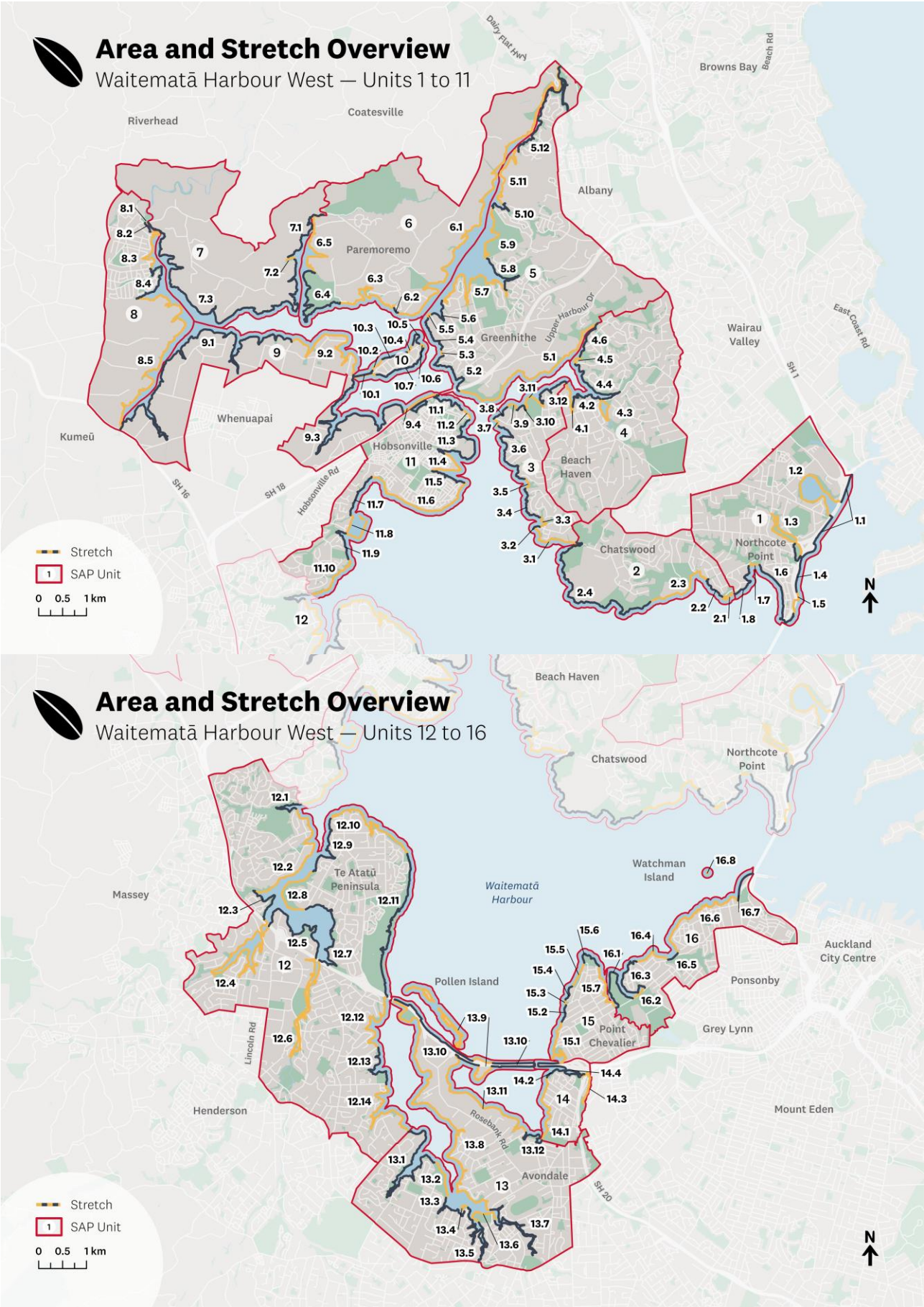
- Low (climate) change – sea-level rise
- Moderate (climate) change – sea-level rise
- High (climate) change – sea-level rise.

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:

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



Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
1 – Northcote	1.1 Busway, Barrys Point Road & Onewa	Protect	Protect	Protect
	1.2 Te Kōpua a Matakamokamo Tank Farm/ Tuff Crater Reserve	Maintain	Maintain	Maintain
	1.3 Onepoto Domain and Onepoto Stream catchment	Maintain	Protect	Protect
	1.4 Northcote East (Stafford Park)	Maintain	Adaptation priority	Adaptation priority
	1.5 Sulphur Beach and Gold Hole	Protect	Protect	Adaptation priority
	1.6 Te Onewa Pā / Stokes Point and Halls Beach	Maintain	Maintain	Maintain
	1.7 Wai Manawa Little Shoal Bay	Protect	Protect	Protect
	1.8 Needles Eye Point	No action	No action	No action
2 – Birkenhead to Kauri Point	2.1 Birkenhead Wharf and Hinemoa Reserve	Protect	Protect	Protect
	2.2 Birkenhead West	No action	No action	No action
	2.3 Chelsea	Maintain	Maintain	Maintain
	2.4 Kauri Point	Maintain	Maintain	Maintain
3 – Beach Haven	3.1 Soldiers Bay	No action	Maintain	Maintain
	3.2 Island Bay (Wharf)	Protect	Protect	Adaptation priority
	3.3 Hadfield Beach (reserve)	Maintain	Maintain	Adaptation priority
	3.4 Beach Haven South	No action	No action	No action
	3.5 Charcoal Bay	Maintain	Maintain	Maintain
	3.6 Beach Haven Central	Maintain	Maintain	Maintain
	3.7 Beach Haven Wharf and Hilders Reserve	Protect	Protect	Adaptation priority

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	3.8 Beach Haven North (to Rambler Crescent)	No action	No action	No action
	3.9 Tui Park	Maintain	Maintain	Maintain
	3.10 Beach Haven (Gazelle to Cresta Avenues)	No action	No action	No action
	3.11 Shepherds Park	Maintain	Maintain	Maintain
	3.12 Shepherds Park and East	Maintain	Maintain	Maintain
4 – Birkdale, Glenfield and Bayview	4.1 Hellyers Park Reserve	Maintain	Maintain	Maintain
	4.2 Kahika Point	Maintain	Maintain	Maintain
	4.3 Kaipātiki Creek	Maintain	Maintain	Maintain
	4.4 Hellyers Creek Inlet	No action	No action	No action
	4.5 Manuka Road Boat Launching	Maintain	Maintain	Maintain
	4.6 Bayview South	Maintain	Maintain	Maintain
5 – Upper Harbour and Greenhithe	5.1 Oruamo / Hellyer Creek	No action	No action	No action
	5.2 Greenhithe: Marae Road	Maintain	Maintain	Maintain
	5.3 Rahui Road	Protect	Adaptation priority	Adaptation priority
	5.4 Greenhithe: Rame Road	No action	No action	No action
	5.5 Rame Road Boat Access	Protect	Adaptation priority	Adaptation priority
	5.6 Greenhithe Coastal Reserves	Maintain	Adaptation priority	Adaptation priority
	5.7 Greenhithe North	No action	Maintain	Adaptation priority
	5.8 Te Wharau Creek	Maintain	Maintain	Maintain
	5.9 Schnapper Rock (Memorial Cemetery)	No action	No action	Maintain
	5.10 Schanpper Rock North Wharepapa	Maintain	Maintain	Maintain

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	5.11 Golf Course and North	No action	No action	No action
	5.12 Lucas Creek (Albany Village)	Maintain	Maintain	Maintain
6 – Lucas Heights and Paremoremo	6.1 Lucas Heights	No action	No action	No action
	6.2 Attwood Reserve Wharf	Protect	Protect	Protect
	6.3 Chatham Reserve and West	No action	No action	No action
	6.4 Sanders Reserve	Maintain	Maintain	Maintain
	6.5 Paremoremo West	No action	No action	No action
7 – Riverhead Rural	7.1 Pareremo Creek West	No action	No action	No action
	7.2 Edward Jonkers Coastal Connection	Maintain	Maintain	Maintain
	7.1 Riverhead Rural south	No action	No action	No action
8 – Riverhead West	8.1 Rangitopuni Stream (north of Coatesville Riverhead Highway)	Maintain	Maintain	Maintain
	8.2 Riverhead Historic Heritage	Protect	Protect	Protect
	8.3 Riverhead Village North	No action	No action	No action
	8.4 Riverhead Village South	Maintain	Maintain	Maintain
	8.5 Brigham Creek	No action	No action	No action
9 - Whenuapai	9.1 Brigham Creek to Karaka Road (Kotutuku inlet)	Maintain	Maintain	Maintain
	9.2 Karaka Road to Herald Island	Maintain	Maintain	Maintain
	9.3 Herald Island Causeway South	No action	No action	No action
	9.4 Reclamation and Highway	Protect	Protect	Protect
10 – Herald Island	10.1 Herald Island Causeway and Kingsway Reserve	Protect	Protect	Protect
	10.2 Island North West	No action	No action	No action

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	10.3 Landing Reserve (Herald Island north/west)	Maintain	Adaptation priority	Adaptation priority
	10.4 Christmas Beach	Protect	Adaptation priority	Adaptation priority
	10.5 Island North	No action	No action	No action
	10.6 Herald Island Wharf	Protect	Protect	Protect
	10.7 Herald Island South (Ferry Landing & Kowhai)	Maintain	Adaptation priority	Adaptation priority
	10.8 Herald island Causeway South (same as 10.1 above)	Protect	Protect	Protect
11 – Hobsonville and West Harbour	11.1 Hobsonville North to Wharf Area	Maintain	Maintain	Maintain
	11.2 Hobsonville Wharf	Protect	Protect	Protect
	11.3 Catilina Bay & Te Onekiritea Point	Maintain	Maintain	Maintain
	11.4 Orion Point	No action	No action	No action
	11.5 Nimrod inlet	Maintain	Maintain	Maintain
	11.6 Scotts Road South	Protect	Protect	Protect
	11.7 Limeburners Bay	Maintain	Maintain	Maintain
	11.8 Wisely Road, West Harbour Hobsonville	No action	No action	No action
	11.9 West Harbour Marina	Protect	Protect	Protect
	11.10 Waipareira Bay (Luckens Point & Beach)	Maintain	Maintain	Maintain
	11.11 West Harbour	Maintain	Maintain	Maintain
12 – Henderson and Te Atatū	12.1 Moire Park, Massey	No action	No action	No action
	12.2 Massey South	Maintain	Maintain	Maintain
	12.3 Massey East	Maintain	Maintain	Maintain

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	12.4 Te Wai-o-Pareira / Henderson Creek	Maintain	Maintain	Maintain
	12.5 Āria / The Concourse	Maintain	Maintain	Adaptation priority
	12.6 Henderson	Maintain	Maintain	Maintain
	12.7 Gloria Park and South	Maintain	Maintain	Maintain
	12.8 Taipari Strand	Protect	Protect	Adaptation priority
	12.9 Te Atatū West	No action	No action	Maintain
	12.10 Te Atatū North (walkways)	Maintain	Maintain	Adaptation priority
	12.11 Te Atatū East (Eastern side of pen)	Maintain	Maintain	Adaptation Priority
	12.12 Whau River Inlet	No action	No action	Maintain
	12.13 Te Atatū South	Maintain	Maintain	Maintain
	12.14 Glendene	No action	Maintain	Maintain
13 – Whau and Rosebank	13.1 Wairau Creek Glendene	Maintain	Maintain	Maintain
	13.2 Kelston Archibald	Protect	Protect	Adaptation priority
	13.3 Kelston Lynwood	Maintain	Maintain	Maintain
	13.4 Queen Mary Reserve	Maintain	Maintain	Maintain
	13.5 New Lynn	Maintain	Maintain	Maintain
	13.6 Ken Maunder Park	Maintain	Maintain	Adaptation priority
	13.7 Avondale	Maintain	Maintain	Maintain
	13.8 Rosebank West	Maintain	Maintain	Maintain
	13.9 Motu Manawa / Pollen Island/ Traherne Island	No action	No action	No action
	13.10 Highway	Protect	Protect	Protect
	13.11 Rosebank East	Maintain	Maintain	Maintain

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	13.12 Avondale – Eastdale	Maintain	Maintain	Maintain
14 - Waterview	14.1 Waterview West	Maintain	Maintain	Maintain
	14.2 Waterview North	Maintain	Maintain	Adaptation priority
	14.3 Te Auaunga / Oakley Creek	Maintain	Maintain	Maintain
	14.4 State Highway and Waterview Reserve North	Maintain	Maintain	Maintain
15 – Point Chevalier	15.1 Eric Armishaw Street to Michael Avenue	Maintain	Adaptation priority	Adaptation priority
	15.2 St Michaels to Raymond	No action	No action	No action
	15.3 Raymond Reserve	Protect	Protect	Protect
	15.4 Harbour View Road South	No action	No action	No action
	15.5 Point Chevalier Beach	Protect	Protect	Protect
	15.6 Coyle Park	Maintain	Adaptation priority	Adaptation priority
	15.7 Waititiko Meola Creek West	Maintain	Maintain	Maintain
16 – Westmere and Herne Bay	16.1 Meola Reef Reserve / Te Tokaroa (Meola Creek Waititiko)	Maintain	Maintain	Maintain
	16.2 Motions Creek Waiorea and East (Seddon Fields & Auckland Zoo)	Maintain	Maintain	Maintain
	16.3 Westmere west (Weona-Westmere Path and Garnet Road End)	Maintain	Maintain	Adaptation priority
	16.4 Westmere East (Rawene ROAD to West End Road)	No action	No action	No action
	16.5 Coxs Bay	Protect	Protect	Adaptation priority
	16.6 Herne Bay and Home Bay (Cox’s Bay Esplanade to Masefield Beach Reserve)	Maintain	Maintain	Maintain

Unit	Stretch	Climate change scenario/adaptation strategy		
		Low	Moderate	High
	16.7 Point Erin & Harbour Bridge and SH1 West	Protect	Protect	Protect
	16.8 Te Kākāwhakaara / Watchman Island	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 Waitematā Harbour West 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.

5

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