Date: Monday 18 February 2019  
Time: 6.00pm  
Meeting Room: Howick Local Board Meeting Room  
Venue: Pakuranga Library Complex  
7 Aylesbury Street  
Pakuranga

Howick Local Board  
OPEN ATTACHMENTS  
ATTACHMENTS UNDER SEPARATE COVER

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TABLE OF CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Auckland Council's Quarterly Performance Report: Howick Local Board quarter two 2018/2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Memo on Skate Park Custodian 2019</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>Coastal erosion issues and options analysis report for Bucklands Beach, Little Bucklands and Cockle Bay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Bucklands Beach, Little Bucklands and Cockle Bay erosion issues and options analysis report prepared by Tonkin + Taylor</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>Feedback on draft Increasing Aucklanders' participation in sport: Investment Plan 2019-2039</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Draft Increasing Aucklanders' Participation in Sport: Investment Plan 2019-2039</td>
<td>49</td>
</tr>
</tbody>
</table>

Note: The attachments contained within this document are for consideration and should not be construed as Council policy unless and until adopted. Should Councillors require further information relating to any reports, please contact the relevant manager, Chairperson or Deputy Chairperson.
Memorandum

To: Howick Local Board
Subject: Barry Curtis skate park custodian
From: Peter Caccioppoli, Senior Activation Advisor, Active Recreation

24 January 2019

Purpose

1. To request a funding increase for the Barry Curtis skate park custodian.

Summary

- Howick Local Board currently provides $51,000 per annum for a skate park custodian service at Barry Curtis Park.
- Parks, Sports and Recreation (PSR) has been working with Skate park Maintenance Services Ltd (SMS), to include new initiatives as part of a new service agreement for the custodian.
- These new initiatives will help to improve and enhance engagement and participation in skateboarding.
- The new service agreement will also include a wage increase in line with the new ‘living wage’.
- PSR requests an increase in LDI funding for the Barry Curtis custodian services, from $51,000 to $65,000 per annum. For the remaining annum an adjusted amount of $7,000 is requested.
- It is proposed that this $7,000 comes from the Parks Response Fund.

Context/Background

2. While PSR have been negotiating the new skate park custodian agreement, the existing level of service has remained, and been funded accordingly to the value of $51,000 per annum.
3. This means that the full increase of $14,000 is not required for FY 17/18, instead, only $7,000 which equates to 6/12 months under the new increased funding allocation.
4. For FY 18/19, and 19/20, the full increase of $14,000 will be required under the agreement.
5. The 2013 agreement between Auckland Council and SMS was for $51,000 per annum to provide:
   - 31 hours of supervision during school terms
   - 42 hours of supervision during school holidays
   - A minimum of 3 events per annum
6. SMS has provided a satisfactory level of service from 2013 to the present day, but in 2017, PSR needed to go through a procurement process to renew the agreement, as all rights of renewal had been exhausted.
7. To improve and evolve the service provided, PSR and SMS agreed during the proposal phase of procurement that a range of new initiatives were to be included as part of the services covered in the new agreement. These include:
   - weekly coaching sessions (aimed at beginners)
- monthly skate club (to increase participation and belonging)
- 'borrow a board' (from a pool of boards stored at the park, already funded).

8. PSR have also considered the increased cost of living, lifting of the minimum wage, as well as the Active Recreation team shifting to a 'living wage' in the period of 2013 – 2018, and believe an increase for service is more than warranted.

Discussion

9. PSR has been, and remains, a strong supporter of funding to support 'human capital' as part of an asset solution, particularly around skate parks as evidenced by the role they play in managing skate park custodians in Clendon, Randwick Park and Howick. Skate park custodians are critical to enabling the council to:

- develop localised and relevant rules and etiquette
- minimise and manage anti-social behaviour
- provide positive role models
- respond quickly to issues, and to make improvements
- create spaces and places that enhance community engagement and placemaking
- support local people to provide local services through local employment
- connect local stakeholders to opportunities for increased local investment.

10. PSR will report on the success of the proposed new activations and ongoing performance of the custodian through the quarterly reporting process. The full quarterly reports will also be made available to the local board.

11. If the increased funding is not approved there will have to be some renegotiation which may result in delays and most likely a decreased level of service. Further, there will be no implementation of the new initiatives outlined above.

Recommendation

12. PSR recommends Howick Local Board allocates $7,000 for FY 18/19 (half year) and $14,000 per annum from there forward to increase the full funding allocation and raise the level of service of the Barry Curtis skate park custodian

13. PSR recommend a 3-year service agreement be put in place with SMS, which will be finalised by end of February 2019.

Next steps

14. If the board agrees to the funding increase, this can be approved by the Chair and Deputy who have delegated authority for minor changes to the Annual Work Programme.

15. PSR staff will then implement a new 3-year service agreement based on the local board decision.
Document Control

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Description</th>
<th>Prepared by</th>
<th>Reviewed by</th>
<th>Authorised by</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/10/17</td>
<td>R1</td>
<td>Draft for presentation</td>
<td>R Reinen-Hamill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/05/18</td>
<td>R2</td>
<td>Preliminary draft</td>
<td>R Reinen-Hamill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13/07/18</td>
<td>R3</td>
<td>Final draft for client</td>
<td>R Reinen-Hamill</td>
<td>P. Quilter</td>
<td>T. Fisher</td>
</tr>
<tr>
<td>6/11/18</td>
<td>R4</td>
<td>Final</td>
<td>R Reinen-Hamill</td>
<td>P. Quilter</td>
<td>T. Fisher</td>
</tr>
</tbody>
</table>

Distribution:

Auckland Council  
Tonkin & Taylor Ltd (FILE)
Table of contents

1 Purpose
  1.1 Scope of works
  1.2 Report layout
1
2 Bucklands and Little Bucklands Beach
  2.1 Setting
    2.1.1 Local orientation and ground levels
    2.1.2 Geology and beach sediments
    2.1.3 Water levels
    2.1.4 Wind
    2.1.5 Wave climate
    2.1.6 Tidal current
    2.1.7 Boat wakes
    2.1.8 Sea level rise
    2.1.9 Existing structures
  2.2 Historic changes
    2.2.1 Bucklands Beach
    2.2.2 Little Bucklands Beach
  2.3 Coastal process summary
    2.3.1 Bucklands Beach
    2.3.2 Little Bucklands Beach
  2.4 Erosion protection options
    2.4.1 Bucklands Beach
    2.4.2 Little Bucklands Beach
2
3 Cockle Bay
  3.1 Setting
    3.1.1 Geology and beach sediments
    3.1.2 Water levels
    3.1.3 Wind
    3.1.4 Wave climate
    3.1.5 January 2018 storm
    3.1.6 Tidal current
    3.1.7 Sea level rise
    3.1.8 Existing structures
  3.2 Historic changes
  3.3 Coastal process summary
  3.4 January 2018 storm damage at Cockle Bay
  3.5 Options
    3.5.1 Extend the existing wall
    3.5.2 Reduce wave reflections from the existing wall
    3.5.3 Screen the wall with a rock groynes and nourish the beach
    3.5.4 Provide a public accessible breakwater to screen the wall and nourish the beach
    3.5.5 Reclamation edge along the stream outlet
    3.5.6 Agreed option (A hybrid approach)
3
4 Summary
5 Applicability

November 2018
Bucklands Beach, Little Bucklands and Cockle Bay - Erosion Issues and Options Analysis
Auckland Council
Executive summary

Auckland Council (AC) commissioned Tonkin + Taylor (T+T) to assess high level potential management options to manage coastal erosion at Little Bucklands Beach, Bucklands Beach and Cockle Bay.

Our scope of work is predominantly to investigate physical work options for Bucklands Beach, Little Bucklands Beach and Cockle Bay to manage the effects of erosion, although we will provide context on inundation risk and sea level rise effects. This is a high level assessment with indicative construction costs to assist in a comparison of options. It does not cover a quantification of hazard and risk, nor other important considerations including consenting, cultural, historical, landscape, environmental matters. Additional detailed studies and investigations will be required to further assess any of the options identified in this report.

Processes

Bucklands Beach and Little Bucklands Beach are set on the edge of a steep and deep channel with strong tidal flows, but is within a relatively low wave energy environment, with the largest waves running parallel to the beach front. The channel location is controlled by the sand mass forming Tahuna Torea Spit on the other side of the channel. Sediment supply to the beach is limited and may largely be from relatively small quantities of biological sources (shell) over time. The backshore is low lying and susceptible to periodic inundation. The backshore has been significantly modified and historic encroachment of the upper beach area has occurred over time with road construction and widening.

Sediment transport is expected to be bimodal, with northerly waves moving sand south and into the channel and the more persistent south-westerlies moving sand to the north. Erosion at the southern end of Bucklands Beach appears to be primarily a function of a localised net northward movement of sand due to the predominant wind generated wave direction from the south-west and a net northerly current, potentially exacerbated by the accretion of the Tahuna Torea Spit and ferry wakes and waves reflecting off the seawall and stormwater outlet. There is also an erosion hotspot at the northern end of the beach south of the boat ramp and upper beach stormwater outfall discharge point. This is likely to manifest during northerly conditions where sand is moved from north to south along the beach. Boat wakes appear to increase the movement of sediment along the beach and sea level rise is likely to increase erosion and inundation likelihoods.

At Little Bucklands Beach the key coastal processes affecting this area are the historic encroachment of the upper beach due to reclamations impounding beach sediment and increasing wave reflection, the reduced supply of sediment from the north resulting from reclamations and stormwater outfall construction around Granger Point. There has also been a southerly movement of sand within the embayment. This is attributed to an increase in sheltering from south-westerly waves by Half Moon Bay Marina. The lower sand levels in the centre of the bay may have reduced toe support for the existing stepped wall and exposing the silty/peaty substrate causing the wall to rotate, requiring ongoing repairs and maintenance.

At Cockle Bay the beach is generally stable. The two key localised process are the wave reflection off the groined stone wall and the stormwater outlet at the southern end of the bay acting as a headland control. As experienced during the January 2018 storm, the wave reflection effect of the vertical wall moves sand away from the northern end of the beach and causes erosion of the shoreline immediately to the south of the wall. The southern stormwater outlet acts as a headland groyne and controls this part of the beach and has allowed the beach to accrete at this location and provide a source of material for sand transfer. Along the stream outlet adjacent to the reclamation
the ad-hoc erosion protection is in poor condition resulting in localised erosion of the reclamation edge.

For all the beaches sea level rise effects are likely to slightly change wave heights and more significantly, direct wave action slightly higher up the beach/seawall face. Inundation and storm surge effects may become more common.

Options

Options for managing coastal erosion at Bucklands Beach with rough order construction costs include:

- Extend seawalls along the remainder of the shoreline ($3M to $5M) (or staging of seawall extension to link with option 1)
- Larger scale beach nourishment with controls ($10M to $14M)
- Enhanced upper beach by narrowing road width and retreating the hard edge ($4M to $6M).

Of these options 1 and 3 are considered the most practical for managing erosion. Inundation is currently a risk and this risk will increase in the future. Options 1 and 3 could be adapted to assist in reducing overtopping during storms (upstand wall around $1.000/linear m) and sea inundation by raising land/road surface to form a more effective inundation bund, with catchment flood management (similar cost order to coastal works).

An interim solution of extending the current seawall southwards (40 m) from the northern end of Buckland Beach to manage erosion point opposite 13 The Parade would cost in the order of $300 to $500K.

Options for managing coastal erosion at Little Bucklands Beach include:

1. Replace existing wall with a new piled wall ($3M to $6M)
2. Beach nourishment with controls ($2M to $3M)
3. Narrow road and locate new piled wall at a more landward location (retreat the line) ($4M to $7M)
4. Combinations (Option 1 and 2: $5M to $9M, Option 2 and 3: $6M to $10M).

Of these options 1 and 2 are considered the most practical for managing erosion. Due to the elevation of the existing land area behind the beach, inundation is not considered a significant risk over the next 50 to 100 years.

Options developed for managing coastal erosion for the open coast at Cockle Bay include:

1. Extend the existing wall ($300K to $350K)
2. Reduce wave reflections off the existing wall ($400K to $450K)
3. Screen the wall with a rock groynes and small scale beach nourishment and extend southern outfall ($1M to $1.5M)
4. Screen the wall with a grouted rock breakwater with small scale beach nourishment and extend southern outfall ($1.8M to $2.1M).

Options for the reclamation edge along the stream outlet are upgrading the existing rock armour revetment or replacing with a timber or grouted rock wall ($150K to $200K).

The agreed solution comprising a combination of options building on the emergency repairs resulting from the January 2018 storm that seeks to reduce wave reflection and extend erosion protection to the south has a construction cost of around $150K.
1 Purpose

Auckland Council (AC) commissioned Tonkin + Taylor (T+T) to develop potential physical management options to manage coastal erosion at Little Bucklands Beach, Bucklands Beach and Cockle Bay. The objective is to integrate local issues and confirm the range of appropriate management options for each beach, and cost estimates of those options with a view to provide the local board with robust information to assist with decision making for future works programming.

1.1 Scope of works

Our scope of work is predominantly investigating physical work options for Bucklands Beach, Little Bucklands Beach and Cockle Bay to manage the effects of erosion, although we will also provide context on inundation risk and sea level rise effects. This is a high level assessment with indicative construction costs to assist in a comparison of options. It does not cover a quantification of hazard and risk, nor other important considerations including consenting, cultural, historical, landscape, environmental matters. Additional detailed studies and investigations will be required to further assess any of the options identified in this report.

1.2 Report layout

This report draws on previous reports prepared by T+T and other reports and information included on https://www.facebook.com/BucklandsBeachesRestorationandUpgradeProject/. This report does not seek to duplicate information included in these reports and information sources. Due to the proximity of Bucklands Beach and Little Bucklands Beach, the site setting and context for these areas are described together while Cockle Bay is described in a separate section. Issues and options are discussed separately for each location.
2 Bucklands and Little Bucklands Beach

2.1 Setting

Tamaki River is a 17 km long tidal inlet that is almost completely drained at low water. The majority of the water flow in this catchment is marine in origin, with only a small contribution from terrestrial catchments. Bucklands Beach is located on the eastern side of the Tamaki Estuary (refer Figure 2-1) extending some 1.2 km northward from Granger Point, a rocky outcrop on the eastern shores of the Tamaki River. Little Buckland Beach is situated in the embayment formed between Granger Point and the East Coast Bay (ECB) cliffs that extend towards Half Moon Bay Marina. The main river channel runs parallel to the beach close to the shore and reaches depths of around 15 m (Chart Datum) off Granger Point due to sand mass forming Tahuna Torea Spit.

![Figure 2-1 Location of Buckland Beach and Little Bucks on the eastern side of Tamaki Estuary with channel depth contours based on DML 2007 survey and the sheltering effect of Half Moon Bay Marina indicated by the red line.](image)

2.1.1 Local orientation and ground levels

The outer reaches of the Tamaki channel are characterised by shallow sand and shell tidal flats and mudstone shore platforms. At high tide, water extends approximately 1.5 km across the Tamaki Channel to Glendowie (Figure 2-1). At low tide approximately 150 m of low angle and relatively uniform mudstone flats are exposed.

Council's LIDAR data shows the road level along Bucklands Beach varies between 2 and 2.5 m RL. Road levels increase along Little Bucklands Beach to between 2.5 m and 3.0 m RL (RL is in relation to Auckland Vertical Datum 1946).

Beach profile for Bucklands Beach was obtained from a previous study (GHD, 2006) and from bathymetric surveys carried out by DML in 2007 shown in Figure 2-1. The beach crest is generally...
situated at around 2.0 m RL and the intertidal beach level is around 12% (i.e. around 8.5(H):1(V)). However, the beach level lowers at the southern end of the beach and the intertidal beach flattens to around 6% (or H(16):1(V)).

At Little Bucklands Beach the crest levels are similar and the beach transitions to a wide gently sloping intertidal flat at around -0.5 m RL that extends to the deeper channel. An analysis of historic surveys show the main channel to be reasonably stable on both sides of the channel, although there appears to be some local deepening of the 10 m contour from 1973 to 2002. This deepening may be as a result of increased flows, narrowing of the river channel, changes in sediment supply, or a combination of these factors.

2.1.2 Geology and beach sediments

The basement rock of the hills surrounding Tamaki River is weathered alternating mudstone and sandstone strata of Waitematā Group. These marine sediments were later uplifted to form an ancient Waitematā - Manukau watershed divide that lay between Farm Cove and Point England. The followed several occasions when the lowlands that now fringe this estuarine inlet were inundated by the sea to form a marine strait connecting the Waitematā and Manukau Harbours. During the same period many enormous eruptions in Taupo Volcanic Zone sent huge volumes of volcanic debris down into the low-lying areas south of Auckland to form alluvial terraces and deltas that accumulated swampy deposits many metres thick. All these deposits are now subject to erosion as waves scour the shore (Kermode, 1998).

The shoreline of Bucklands Beach is characterized by undifferentiated beach sand deposit comprising white to dark grey, angular to sub-rounded, very thin, well-sorted to graded beds. An outcrop of hard interbedded sandstone and siltstone separates Bucklands Beach from Little Bucks (Kermode, 1992), known as Grangers Point.

The existing sediment at Bucklands Beach were analysed by GHD (2005) and their results are included in Figure 2.2. Samples were collected at low tide from the low and high tide locations on the beach profile. The beach comprises reasonably uniform sized sand with a D50 of around 0.9 m. The upper beach has a higher proportion of shell.
The intertidal area at the northern end of Little Bucklands Beach is characterised by a thin veneer of soft clays and silts (0 to 0.5 m deep) overlying stiff to very stiff clays (0.5 – 2.9 m deep) followed by stiff fibrous peats at least 2 m thick. Beach sands are present in the southern end of the embayment overlying rock shelf and intertidal silts and clays.

2.1.3 Water levels

2.1.3.1 Tidal water levels

The closest long term tidal station is at the Port of Auckland located some 10 km west of the site (see Table 2-1). The predicted high tide level at the entrance to Tamaki River is some 0.07 m higher than at the Port of Auckland site, so Auckland tide levels can be considered representative for this location.

Table 2-1 Predicted tide levels at Port of Auckland\(^1\) and at the Tamaki River entrance

<table>
<thead>
<tr>
<th>Nominal Level</th>
<th>Water Level RL(^2) (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% AEP storm surge level</td>
<td>2.4</td>
</tr>
<tr>
<td>Highest Astronomical Tide</td>
<td>1.91</td>
</tr>
<tr>
<td>Mean High Water Perigean Springs (MHWPS)</td>
<td>1.67 (1.75 m at entrance to Tamaki River(^2))</td>
</tr>
<tr>
<td>Mean High Water Springs (MHW5)</td>
<td>1.71</td>
</tr>
<tr>
<td>Mean High Water Neaps (MHWN)</td>
<td>1.13</td>
</tr>
<tr>
<td>Mean Sea Level (MSL)</td>
<td>0.15</td>
</tr>
<tr>
<td>Mean Low Water Neaps (MLWN)</td>
<td>-0.81</td>
</tr>
<tr>
<td>Mean Low Water Springs (MLWS)</td>
<td>-1.33</td>
</tr>
</tbody>
</table>

1. Source: New Zealand Nautical Almanac (UNZ, 2016)
2.1.3.2 Storm surge

Storm surge results from the combination of barometric set-up due to low atmospheric pressure, and wind stress from winds blowing along or onshore which elevates the water level above the predicted tide. The combined elevation of the predicted tide and storm surge is known as the storm-tide. Stephens et al (2013) derived extreme sea-level elevations for open-coast locations. Results for a location offshore from Tamaki River entrance (1768474E 5920856N NZTM) for a range of annual exceedance probabilities (AEP) are shown in Table 2-2 and show a 1% AEP value of RL 2.18 m, although it can be seen that the change in storm surge is relatively small between a 5% and 0.5% AEP event (i.e. a difference of just 0.11 m). These levels are similar to the lower parts of the road level along Bucklands Beach and confirm the susceptibility to flooding during storm surge events (see Figure 2-3 which based on LiDAR data suggest a the flood level of around 2.1 to 2.2 m RL.

<table>
<thead>
<tr>
<th>AEP</th>
<th>50%</th>
<th>20%</th>
<th>10%</th>
<th>5%</th>
<th>2%</th>
<th>1%</th>
<th>0.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return Period</td>
<td>2 yr</td>
<td>5 yr</td>
<td>10 yr</td>
<td>20 yr</td>
<td>50 yr</td>
<td>100 yr</td>
<td>200 yr</td>
</tr>
<tr>
<td>Storm-tide Elevation (m RL)</td>
<td>1.93</td>
<td>2.00</td>
<td>2.04</td>
<td>2.09</td>
<td>2.14</td>
<td>2.18</td>
<td>2.20</td>
</tr>
</tbody>
</table>

Figure 2-3 Inundation of The Parade (Source: [https://www.facebook.com/BucklandBeachUpharbour](https://www.facebook.com/BucklandBeachUpharbour))

2.1.4 Wind

The Musick Point weather station provides the closest long term wind dataset for the site. The
station is located approximately 2 km to the north east and is considered to be representative of the wind climate at the site. Figure 2-4 shows the wind rose plot for Musick Point EWS for data from January 2000 to January 2010 (Agent number 18195, operated by ARC and accessed via NIWA Cliffo).

Figure 2-4 shows there are two principal wind directions; from the west to south west sectors approximately 50% of the time, and from north east to east sectors approximately 25% of the time. Maximum wind speeds at Musick Point typically occur from the north east to east sector (Table 2-3), however some sheltering effects to easterlies from the peninsula of Bucklands Beach are expected with the highest wave occurring along the alignment of the estuary channel.

![Wind rose for Musick Point for data 2000 to 2010 (source: NIWA Cliffo)](image)

**Table 2-3 Wind speed frequency (% time)**

<table>
<thead>
<tr>
<th>Direction</th>
<th>Wind speed (m/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-3</td>
</tr>
<tr>
<td>N</td>
<td>2.35</td>
</tr>
<tr>
<td>NE</td>
<td>3.97</td>
</tr>
<tr>
<td>E</td>
<td>7.86</td>
</tr>
<tr>
<td>SE</td>
<td>2.83</td>
</tr>
<tr>
<td>S</td>
<td>4.26</td>
</tr>
<tr>
<td>SW</td>
<td>5.39</td>
</tr>
<tr>
<td>W</td>
<td>10.92</td>
</tr>
<tr>
<td>NW</td>
<td>3.06</td>
</tr>
</tbody>
</table>

**2.1.5 Wave climate**

The wave climate within the Tamaki channel entrance has been previously characterised as being medium energy (T&T, 2012), primarily dictated by locally generated wind waves from the north east and to a lesser extent the north (Figure 2-4). The islands of Rangitoto, Motutapu and Waiheke provide substantial shelter from open coast waves. Wave heights generated inshore of these islands are therefore both depth and fetch limited. Sheltering effects of the surrounding Tamaki channel and Glendowie Spit mean that little swell is developed from other directions.
Waves can super-elevate the mean water level during the breaking process (termed wave set-up) and combined storm-tide plus wave set-up values are included in Table 2-4 based on a location approximately 5 km up the Tamaki River. Based on the analysis of wave heights at Half Moon Bay these are expected to be of a similar order at Bucklands Beach and Little Bucklands Beach.

Table 2-4 Wave heights and combined storm-tide plus wave set-up (Stephens et al., 2013)

<table>
<thead>
<tr>
<th>Event</th>
<th>Significant wave height, H₄ (m)</th>
<th>Combined storm-tide plus wave set-up (m RL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 yr ARI (1% AEP)</td>
<td>0.74</td>
<td>2.35</td>
</tr>
<tr>
<td>50 yr ARI (2% AEP)</td>
<td>0.74</td>
<td>2.32</td>
</tr>
<tr>
<td>10 yr ARI (10% AEP)</td>
<td>0.72</td>
<td>2.20</td>
</tr>
</tbody>
</table>

2.1.6 Tidal currents

Currents are largely confined to the main channel with highest current speeds occurring around mid-tide levels. Tidal currents are an important sediment transport mechanism within estuary river environments. The main tidal channel is located closest to the shoreline at the southern end of Bucklands Beach, adjacent to Granger Point. Currents of up to 1.9 m/s have been measured on the ebb tide in the channel adjacent Half Moon Bay (NZ 5325). While these currents are largely confined to the channel, eddies can form in embayed areas (e.g. Little Bucklands Beach) at higher tide levels that can affect longshore transport processes.

![Figure 2-5 Simplified intertidal secondary flow paths during peak flood and ebb tide based on physical measurements (Source: Bruce Wallace and Partners, 1989)](image)

2.1.7 Boat wakes

Due to the relatively sheltered location, natural waves are generally low and therefore vessel wakes may result in additional waves that have the potential to add to erosion pressures. Investigations were carried out to identify the wave heights generated by vessels (T+T, 2008). Boat wakes within the Tamaki River do provide an increase in wave energy in this reasonably sheltered environment, particularly for the longer period waves. This is illustrated in Figure 2-6 and Figure 2-7 for Bucklands...
Beach, with the first figure showing boat wakes with low ambient wave heights and Figure 2-7 showing boat wakes with a more significant northerly generated wave climate. Little Bucklands Beach is more sheltered both from boat wake effects and northerly storms (see Figure 2-8 that is from the same date as Figure 2-7). It is noted that the speed limit changes from 5 knots to 30 knots at the northern end of Bucklands Beach and it is possible that incoming decelerating vessels may locally affect sediment transport at the northern part of the beach.

Figure 2-6 Bucklands Beach 4 January 2017 showing boat wakes from northerly travelling vessels (Source: Google Earth)

Figure 2-7 Bucklands Beach 24 October 2014 showing boat wakes with a northerly wind generated wave (Source: Google Earth)
The previous investigation (T+T, 2008) showed that high tides were more susceptible to waves of large run up and waves reaching the beach at more oblique angles which has the potential to assist in the alongshore movement of sand. There also appears to be a higher wake generated during north bound vessel movements, possibly due to the vessels being closer to Bucklands Beach. However, it was observed that even south-bound vessel wakes interact with the stormwater outlet at the southern end of the beach, resulting in a north-bound reflected wave. This factor may exacerbate the natural trend of a net northerly trend of sediment movement.

Ferries are not the only generator of boat wakes, with recreational and other craft navigating the Tamaki River were observed to generate similar, but slightly lower wakes. Despite wakes from recreational craft being typically lower than ferries, there relatively higher occurrence may result in them also contributing to wake effects.

2.1.8 Sea level rise

Historic sea level rise in New Zealand has averaged 1.7 ± 0.1 mm/year (Bell, 2012). Climate change is predicted to accelerate this rate into the future. Sea level rise is likely to exacerbate the coastal erosion and inundation hazard.

The Unitary Plan requires that building within the 1% AEP floodplain or 1% AEP coastal storm inundation area plus 1 m sea level rise (Future 1% AEP inundation level) should be subject to a hazard risk assessment considering the type and frequency of event, the type of activity being undertaken and the consequence and potential mitigation measures. Specific freeboard rules and guidance for non-habitable floors is not provided within the Auckland Unitary Plan.

The Ministry for the Environment (MfE, 2017) guidelines on climate change use four sea level rise scenarios based on the Intergovernmental national Panel on Climate Change (IPCC, 2015)
projections of three Representative Concentration Pathway (RCP) emission scenarios. These are the median projections of the RCP 2.6, RCP 4.5 and RCP 8.5, and (RCP 8.5+) the upper end of the 'likely range' (i.e. 83rd percentile) of the RCP 8.5 projection. The latter is primarily for the purposes of stress-testing adaptation plans where the risk tolerance is low and/or future adaptation options are limited, and for setting a SLR for greenfield development or major new infrastructure where the foreseeable risk is to be avoided (MFE, 2017).

The projections of the potential future scenarios (RCP 2.6, RCP 4.5, RCP 8.5 and RCP 8.5+) adjusted to the New Zealand regional scale shown in Table 2-5 give the specific values used for 2070 and 2120. MFE (2017) provide guidance on minimum SLR allowances for planning instruments for the next 100 years. This includes a level of 0.65 m for non-habitable short-lived assets with a need to be at the coast and either low-consequence or readily adaptable, and 1 m for land use planning controls for existing coastal development and asset planning.

Table 2-5 Sea level rise projections from the 1986-2005 baseline for the four emission scenarios (MFE, 2017)

<table>
<thead>
<tr>
<th>Year</th>
<th>RCP 2.6 M</th>
<th>RCP 4.5 M</th>
<th>RCP 8.5M</th>
<th>RCP 8.5+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2070</td>
<td>0.32</td>
<td>0.36</td>
<td>0.45</td>
<td>0.61</td>
</tr>
<tr>
<td>2120</td>
<td>0.55</td>
<td>0.67</td>
<td>1.06</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Note: MSL is the same for both 1986-2005 and 2006-2011 baselines

2.1.9 Existing structures

Existing structures include the stepped stone basalt wall along the southern and northern ends of Bucklands Beach. There are two sections of unprotected shoreline. The first is between the northern seawall and the beach access ramp (approximately 130m long) is not armoured. The other unarmoured section extends approx. 340m south from where the basalt seawall ends at around 30 The Parade. A stormwater outlet extends out of the seawall at the southern end of the beach and a boat ramp and stormwater outlet is present at the northern end.

At Little Bucklands Beach there is a reclamation at Granger Point and seawalls along the northern half and a beach with a grassed backshore area along the southern half. The seawalls consist of sloping rock armour revetments adjacent to the reclamation and a stepped basalt wall that has experienced significant rotation of the wall and associated subsidence of the road reserve landward of the wall.

2.2 Historic changes

2.2.1 Bucklands Beach

As part of our previous investigations (T+T, 2008) we reviewed the historic aerial photographs supplied by local residents and a number of previous authors. From this data we can see that the beach has remained more or less in the same position, although there has been an encroachment of the beach area by progressive widening and formalising of the road reserve and development of the reclamation and the progressive construction of seawalls and short groynes.

We have compared historic bathymetric charts and have shown that there is relatively minor changes observed from that analysis. We have also compared a 1947 aerial photograph with the 2007 aerial to assess the visual location of the spit (refer Figure 2-9) that also show relatively modest changes.
This comparison shows the spit has been reasonably stable over the last 60 years but its location enabling the forcing of flow against Bucklands Beach means that it may well be a contributor to erosion at the southern end of the beach. In mid 1990s the seawall at the southern end of Bucklands Beach was extended in a northerly direction (coastal permit 9066), and there has been some incremental maintenance to repair undermined footings. Small scale beach nourishment (coastal permit 41405) has also been undertaken at the end of the seawall in 2006 and 2011 to provide additional sand buffer along the footing to prevent undermining of the seawall.

The review of historic data suggests a seaward encroachment of development including road widening and progressive hardening of the coastal edge through the construction of rock walls has been the dominant factor of decreasing beach width, but this is likely to be exacerbated by boat wakes changing net transport patterns and the natural environmental changes to the spit and accretion within the Tahuna Torea area on the western side of the estuary.

At the northern end of Bucklands Beach the existing basalt seawall was extended in a southerly direction in 1997 (coastal permit 20430). The seawall extension is likely to have located the end effects further south and also contributed to impoundment, losses where beach sediment behind the wall no longer adds to the beach face sediment budget, exacerbating the erosion effects for unprotected shorelines as evident by the ongoing erosion that has occurred at the southern end of this seawall. The shoreline opposite 13 The Parade has been temporarily sandbagged to prevent undermining of the road.

2.2.2 Little Bucklands Beach

The most significant changes to Little Bucklands Beach began with the reclamation of the road reserve which took place in the early 1960's followed by stormwater outlets at the southern end of the beach. Half Moon Bay Marina was constructed in the 1980's. Earthworks at the reclaimed land area north of the subject wall and rip-rap revetment were undertaken circa 1991 and works to extend the seaward face of the footings of the original wall occurred circa 2000 (coastal permit 8144). The southern section of the wall (68 to 72 The Parade) has been added in response to shore erosion circa 2000, including extensions to the wall foundations (coastal permit 23436) (T&T, 2014).
Based on an inspection of the historic and current photographs it is evident that the majority of the sand has moved to the southern end of the beach. This can be attributed to the seawall, stormwater outlet and reclamations at Granger Point stopping the southerly movement of sand from Bucklands Beach. The Half Moon Bay Marina reduces the south westerly wind generated waves moving sand from the southern end of the beach to the centre (refer Figure 2-1 for an indication of the shadow zone). The loss of sand in the central part of the beach may have had an effect on the wall stability at this location, with the loss of sand effectively removing toe support for the wall.

![Figure 2-10 Comparison of Little Bucklands Beach from around 1959 and 2015 (Source: AC GIS Viewer)](image)

2.3 Coastal process summary

2.3.1 Bucklands Beach

Bucklands Beach is on the edge of a steep and deep channel with strong tidal flows but is within a relatively low wave energy environment, with the largest waves running parallel to the beach front. The channel location is controlled by the large volume of sand on the western side of the channel. Sediment supply to the beach is limited and may largely be from relatively small quantities of biological sources (shell) over time. This source might be reduced over recent decades due to poor water quality.

The backshore is low lying and susceptible to periodic inundation. The backshore has been significantly modified and historic encroachment of the upper beach area has occurred over time with road widening and extensions. There are also a series of shore perpendicular structures, such as
groynes, boat ramps and outfalls that create local obstructions to alongshore sediment transport, creating areas where sand may accrete with associate erosion in the lee of the structure. Due to the bimodal nature of the wave climate, the location of these areas of accretion and erosion are likely to change from time to time, depending on the persistency of the wind/wave direction.

There is a southerly sediment transport pathway at the northern part of Bucklands Beach, but evidently there is less sediment arriving at the northern end of Bucklands Beach than the energy available to transport it southwards. This creates a sediment deficit at the northern end. The erosion at the unprotected portion of the northern end of the beach is therefore likely to be a combination of reduced sediment supply, encroachment and impoundment loss affecting the movement of sediment from the upper to the intertidal beach, storage along the beach due to the various shore perpendicular structures, as well as local end effects at the end of the seawall.

Along the main extent of the beach, sediment transport is expected to be bimodal, with northerly waves moving sand south and into the channel and the more persistent south-westerlies moving sand to the north.

Erosion at the southern end of Bucklands Beach appears to be primarily a function of a localised net northward movement of sand due to the predominant wind generated wave direction from the south-west and a net northerly current flow, potentially exacerbated by the accretion of the Tahuna Torea Spit and ferry wakes and waves reflecting off the seawall and stormwater outlet.

Boat wakes appear to increase the movement of sediment along the beach and sea level rise (historic and ongoing) is likely to increase erosion and inundation likelihoods.

2.3.2  Little Bucklands Beach

Little Bucklands Beach is south-westerly facing and is situated in the embayment formed between Granger Point and Half Moon Bay Marina. It is separated from the main river channel by a relatively flat intertidal and sub-tidal shelf. Due to the shelf it experiences less direct tidal flows, although eddies may assist in the transport of finer sediments on the lower intertidal shelf. However, it does experience moderate wind generated wave energy at high tide due to the alignment of the river channel from Point England to Little Bucklands Beach and the predominant south-westerly winds.

The beach has experienced encroachment of the upper beach due to reclamations associated with the coastal road impounding beach sediment and increasing wave reflection. It is also likely that there has been a reduced supply of sediment from the north resulting from reclamations and stormwater outfall construction around Granger Point.

Within the embayment, the construction of Half Moon Bay Marina may have created a more sheltered area at the southern end of the beach, reducing the frequency of sand transported to this area being returned to the centre of the beach. There is also likely to be localised effects associated with stormwater outfall and sands flushed out to the intertidal area.

Sea level rise effects are likely to slightly change wave heights and more significantly, direct wave action slightly higher up the beach/seawall face. Inundation and storm surge effects may become more common.

It is noted that there are larger scale geotechnical issues associated with the soft ground conditions that the retaining walls supporting the road are located on and that these geotechnical issues may have been exacerbated by the erosion of beach sediment from the centre of the bay.

2.4  Erosion protection options

The following options are for preventing land loss due to erosion from the sea. They do not address inundation risk fully, although the effectiveness of the solutions on addressing both is discussed.
2.4.1 Bucklands Beach

Options for managing coastal erosion at Bucklands Beach include:
1. Extend seawalls along the remainder of the shoreline
2. Larger scale beach nourishment with controls
3. Enhanced upper beach by narrowing road width and retreating the hard edge.

2.4.1.1 Extended seawall

This option involves the construction of a near vertical or steeply sloping seawall along the remainder of the reserve where no seawalls are currently located (approximately 400 m). It is assumed that this structure would be a grouted rock wall, similar to the existing walls at either end of the beach (see Figure 2-11). The seawall could be constructed in stages to manage expenditure (for example an initial 40m extension to northern seawall to manage current hot spot area opposite 13 The Parade as indicated in Figure 2-12). However, this is also likely to result in the transfer of effects to the end of the new seawall end point, so until all the wall was complete there will be an ongoing risk of shoreline erosion at the unprotected coastal edge.

![Figure 2-11 Existing stepped seawall at northern end of Bucklands Beach](image-url)
The new seawall would need to be adequately founded taking into account expected ongoing lowering of the beach and climate change effects and could also include an upstand wall to locally reduce wave overtopping effects. However, due to the generally low levels along the roadway (2 to 2.5 m RL), it is currently susceptible to flooding and this will only increase in frequency and extent with sea level rise. An upstand wall along the new wall would not adequately prevent inundation as has been evident along Tamaki Drive but would limit localised wave overtopping. To integrate flood inundation protection with erosion protection there would need to be additional modification of existing walls and consideration of access points through the wall to the foreshore to improve the structure’s ability to reduce coastal flooding effects. However, these modifications may also increase catchment based flooding effects and would also need to be designed not to unduly exacerbate flooding from rainfall events.

While this option may be effective in preventing landward retreat for the design life of the wall, it will be less likely to provide an effective long term strategy for inundation, particularly considering ongoing sea level rise.

Rough order construction costs for a 400 m long new seawall, including a 0.5 m high upstand wall extending an additional 400 m and localised modifications for maintaining boat ramp access, suggest costs could range between $3M and $5M for the erosion aspects of this option. Approximate costs for an initial 40 m extension as shown in Figure 2-12 would be in order of $300K to $500K.

While not within the scope of this report, we note that there would be substantially higher costs if a more comprehensive treatment to inundation was included that included raising land levels to form an inundation barrier/bund and the provision of flood pumps and drainage for pluvial (rainfall) events on the catchment.

2.4.1.2 Large scale beach nourishment

Large scale beach nourishment involves adding sand along around 620 m of the shoreline between the stormwater outlet at the southern end of Bucklands Beach and the boat ramp at the northern end (refer Figure 2-13). Based on a 10 m increase in beach width the sand volume required is between 120 and 150 m³ per linear metre due to the large water depth present off the beach (i.e. between 74,400 and 93,000 m³). To address the current erosion issue that is north of the boat ramp...
an additional 75 m$^3$ per linear metre could be placed along the 150 m of shoreline south of the groyne field. The lesser volume in this location being due to the generally more seaward profile to the north of the boat ramp. This increases the total imported to between 86,000 and 105,000 m$^3$.

It is assumed that five to six groynes would be required to hold the placed sand in the main beach area south of the boat ramp, and these would be at around 150 m centres and would be constructed using rock armour around a rock core. No additional controls would be placed along the nourished area to the north of the ramp. For this volume of sand we have assumed it would come from the consented source in the outer Hauraki Gulf and that it would be pumped ashore from barges after the groynes were constructed, although consideration of effects on navigation would need to be worked through with the existing users of the channel. There will also be navigation markers and consideration of navigation requirements that may add costs as well as landscape and modifications to stormwater outlets and access ways. It is noted that this may address the erosion issue, but does not provide treatment for inundation. This could involve an 0.5 m upstand wall along the 1 km shoreline behind the beach at a cost of around $1000 per linear metre, which would improve sea inundation risk by reducing overtopping from some storm waves, but as discussed in the previous section, this not provide a comprehensive solution to inundation and would result in complex access issues.

Rough order construction costs for a groyne and nourishment suggest costs could range between $10M and $14M for the erosion aspects of this option and partial treatment of inundation, with substantially higher costs if a more comprehensive treatment to inundation was included that included flood bunds and pumping facilities described in the previous section.

![Diagram of beach nourishment with groynes](image)

**Figure 2.13** Large scale beach nourishment with groynes

### 2.4.1.3 Enhanced upper beach

An enhanced upper beach would be achieved by providing room for the existing beach to adjust to natural processes. This could be achieved by making the road one way (south bound) from Wharf Road to Devon Road, closing the north bound (seaward) lane and creating a traffic flow loop down Wharf Road, along Hattaway, Devon and returning southward along The Parade (Figure 2.14). The road infrastructure along the southbound lane would be removed to create an additional 10 m wide beach and reserve area without further encroachment into the Coastal Marine Area.
This option would require consideration of the edge treatment of the realigned beach and possibly require small scale top-up/s of sand to increase the crest elevation of the beach. It would also necessitate the removal of the existing pines, with alternative planting further landward.

The option would need a review of the reserve widths and parking provision on the eastern side of the Parade, close consideration of the continued use of the beach ramp access as well as options to raise the road and parking levels on the eastern side of The Parade to make access more resilient to future flood events and the possible provision of additional angle parking along Hattaway Avenue to offset some of the lost parking opportunities along The Parade. The process could also be extended north as shown in Figure 2-14.

Rough order construction costs this option could range between $3M and $5M for the erosion aspects of this option, with higher costs (at least double) anticipated if a more comprehensive treatment to inundation, increasing the elevation of the road, addressing access and catchment flooding issues created by the effective bund and providing additional parking requiring modification to Hattaway Avenue was included.

2.4.2 Little Bucklands Beach

Options for managing coastal erosion at Little Bucklands Beach include:

1. Replace existing wall with a new piled wall
2. Beach nourishment with controls
3. Narrow road and locate new piled wall at a more landward location (revert the line)
4. Combinations (Option 1 and 2 or Options 2 and 3).

2.4.2.1 Replace existing wall

The foundations of the existing wall are not adequately founded to prevent rotation of the wall, and settlement and retrofitting is not practical. Therefore around 200 m of the wall would need to be replaced with a new well-founded wall. This could either be a new vertical wall, or utilise the
existing stepped structure, rebuilt on a sub-surface structure comprising piles with a capping beam to retain a similar appearance and functionality of the existing wall.

![Diagram of rebuilt wall with piled foundations](image)

*Figure 2-15 Schematic of a rebuilt wall with piled foundations*

Additional investigations are required to refine the design, including an assessment of liquefaction risk, as the previous investigations did not extend beyond the peat deposits. A rough construction costing has been carried out based on a 200 m long wall and total height including foundations of 8 m and is in the order of $3M to $6M.

### 2.4.2.2 Beach nourishment with controls

Providing a beach at the northern end could assist in preventing the wall rotation by providing a sand toe. However, this would need structural controls to prevent the southerly migration of sand and it is anticipated that this could include an offshore reef/breakwater in the centre of the bay and a breakwater adjacent to the boat ramp to assist in wave sheltering (Figure 2-16). The offshore reef/breakwater could be a formed concrete structure similar to the structure at Point England Beach, or a rock armour mound similar to that used at Torpedo Bay. The breakwater adjacent to the boat ramp could be a grouted rock wall on piles and a pile cap. Sand volumes would be in the order of 6,000 to 9,000 m³. There is a risk of the placed sand increasing global settlement along the wall and this would need to be assessed during the next stage of design refinement and this may necessitate some additional structural works to support the road to underpin the wall.
While sand sources could come from the outer Hauraki Gulf, it may be possible to source sand from an adjacent source in the Tamaki River. A visual inspection was made as part of this study of the sand suitability at the end of the spit and along the adjacent intertidal flats to the south of the spit (see Figure 2-17). The sand at the end of the spit comprised largely clean shell and coarse sand with no visible organic content. This sand is likely to be suitable for beach nourishment. However, on the intertidal flat the sand was significantly siltier and had a high organic content, including small shell fish, snails and worms and is not recommended for beach nourishment.

Two alternative locations that may be worth further investigation include the ebb tide spit to the south of Tahuna Torea spit and the channel bar. No investigations have been carried out for the ebb tide spit, but this area is likely to comprise coarser sediment as it is within the channel areas where tidal flow are strong. The channel bar was previously investigated by T+T (1996). The results of this assessment showed that there is the potential to utilise sand and shell excavated from a limited area at the entrance to Tamaki River for beach nourishment. However, the dredged sand would have a wider grading with more fine and coarse sediments. The fine sediments are likely to winnow out and the larger shell fragments will end up at the top of the beach. The fining process is likely to have the most potential visual impacts, with a turbid fringe evident for a period after the nourishment. However, with this option there is also the potential benefit of improved navigable depth.

Any of the possible sand sources discussed would require additional investigations and assessments. Excavation would require resource consent for excavation and disturbance and there is no guarantee that consents will be granted. The design assessment would also need to include geotechnical investigations to consider potential settlement effects of the additional load on the foreshore regarding the wall stability and global settlement.
Based on an imported sand rate and unit costs from the Point England Beach project where sand was sourced from the existing consented source in the outer Hauraki Gulf, costs for the beach and controls are in the order of $2M to $3M. This includes a provision of $500,000 for work on the existing wall, but as noted above, costs will be dependent on the findings of the geotechnical investigations.

2.4.2.3 Narrow road and locate new pile wall more landward

This option is basically the same as option 1 but with narrowing the road to provide a greater extent of intertidal beach. Moving the shoreline landward at this location will not increase the likelihood of additional sand forming or being exposed as the foreshore has eroded to the muddy basement and there is no sand at this location. The costs for this option is likely to be slightly higher than the first option due to the requirements to manage existing services and for increased traffic controls. Construction costs for this option are in the order of $4M to $7M.

2.4.2.4 Combination

Combinations include combining a rebuilt seawall with beach nourishment and controls (i.e. Option 1 and 2), or on includes moving the seawall more landward and adding sand to raise the foreshore (i.e. Option 2 and 3). There is no significant saving in the design of the wall, so this option effectively adds the costs of the individual options.
3 Cockle Bay

3.1 Setting

Cockle Bay is a north east facing beach situated between two headlands. The beach is some 350 m long and the intertidal flats are situated at around 0.5 m RL. The beach is backed by a wide grass reserve and parking area with the top of beach level at around 2.3 m RL. There is a wider reserve including a playground and picnic area at the northern end with an elevation of around 2.8 m to 3 m RL that has tipped rock protection along the stream mouth (refer Figure 3-1) and a near vertical grouted rock wall armouring the reclamation along the open coast (refer Figure 3-2). There are a number of large pōhutukawa along the reserve. Several stormwater outlets discharge through the beach, with the largest outfall situated at the southern end (refer Figure 3-3).

Figure 3-1 Cockle Bay reserve along stream outlet showing undermining and erosion along the edge

Figure 3-2 Grouted rock seawall along seaward edge of the reclamation at the northern end of Cockle Bay
3.1.1 Geology and beach sediments

The coastal topography is essentially that of a comparatively recently submerged area of low relief, modified subsequently by erosion to give the coastal outlines of the present day. Along the Waitemata Group terrain from Tamaki River to Omana Beach this has resulted in the development of even lines of sheer cliff fronted by extensive wave cut platforms. The results of the selective erosion along the lines of cliffs with the formation of pocket beaches with zones of marked contortion of the sandstone strata and in the cutting of small sea caves along fault lines or in the weaker members of highly tilted strata (Firth, 1930).

Similar to other east facing beaches along the Howick ward, the upper intertidal and subaerial beach comprises largely shell fragments with a fine sand intertidal and subtidal system.

3.1.2 Water levels

3.1.2.1 Tidal water levels

The closest long term tidal station is at the Port of Auckland located some 10 km west of the site (see Table 2-1). The predicted high tide level along Cockle Bay is some 0.06 m higher than at the Port of Auckland site, so Auckland tide levels can be considered representative for this location.

3.1.2.2 Storm surge

Stephens et al (2016) derived extreme sea-level elevations for open-coast locations. Results for a location offshore from Howick Beach for a range of annual exceedance probabilities (AEP) are shown in Table 3-1 and show a 1% AEP value of RL 2.18 m, although it can be seen that the change in storm surge is relatively small between a 5% and 0.5% AEP event [i.e. a difference of just 0.11 m]. This is the closest output point to Cockle Bay and can be considered representative for this location.
Table 3-1 Open coast storm-tide elevations (tide + storm surge) offshore of Howick Beach (Stephens et al, 2016)

<table>
<thead>
<tr>
<th>Return Period</th>
<th>50%</th>
<th>20%</th>
<th>10%</th>
<th>5%</th>
<th>2%</th>
<th>1%</th>
<th>0.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 yr</td>
<td>1.94</td>
<td>2.00</td>
<td>2.05</td>
<td>2.09</td>
<td>2.14</td>
<td>2.18</td>
<td>2.20</td>
</tr>
<tr>
<td>5 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 yr</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.1.3 Wind

The Musick Point weather station provides the closest long term wind dataset for the site (refer Figure 2-1). Cockle Bay, like all the beaches along the east coast of Howick Ward is a lee coast, sheltered from the predominant wind directions. However, there are still high winds from the easterly to northerly sectors.

3.1.4 Wave climate

Waves are typically fetch and depth limited events. The most frequent wind and wave direction is from the east-northeast occurring approximately 11% of the time. The most exposed fetch is from the east with a fetch length of approximately 22 km. Figure 3-4 shows the wave height distribution for a significant storm with a constant wind speed of 20 m/s. Stephens et al. (2016) calculated a 1% AEP wave height of 2.01 m off Howick Beach in deeper water (refer Table 3-2).

![Figure 3-4 Significant wave height for 20 m/s north-easterly wind within Tamaki Straight at MHWS](image)

Table 3-2 Nearshore wave heights and combined storm-tide plus wave set-up (Stephens et al., 2016)

<table>
<thead>
<tr>
<th>Event</th>
<th>Significant wave height, $H_s$ (m)</th>
<th>Combined storm-tide plus wave set-up (m RL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 yr ARI 1% AEP</td>
<td>2.01</td>
<td>2.44</td>
</tr>
<tr>
<td>50 yr ARI 2% AEP</td>
<td>1.98</td>
<td>2.39</td>
</tr>
<tr>
<td>10 yr ARI 10% AEP</td>
<td>1.87</td>
<td>2.25</td>
</tr>
</tbody>
</table>
The nearshore wave climate is influenced by the wide intertidal shelf. The shelf levels generally restrict the wave climate to depth-limited conditions. There is greater potential for higher waves to impact on the foreshore during elevated water levels. Similarly, at lower water levels the nearshore wave height is lower. Wave heights in the nearshore will be in the order of 0.6 times the water depth. With an intertidal level of 0.5 m RL this suggests the maximum significant wave height at the coast is in the order of around 1.2 m.

3.1.5 January 2018 storm

On 5th January 2018, a subtropical storm generated 4-6 m waves and winds of up to 120 km/hr on Auckland’s open east coast. The storm coincided with a 3.6m CD “king tide” event (HT at 10:47am). This predicted water level was augmented by a storm surge. The combination of these weather variables translated into measured water level of 4.138 m CD or around 2.4 m RL (measured at the Ports of Auckland tide gauge) at 9:31am suggesting around 0.54 m storm surge and levels in excess of the 100 year return period event. This weather event resulted in erosion, inundation and damage to roads, beaches and coastal structures across the Auckland region.

3.1.6 Tidal currents

Due to the wide and shallow intertidal area, tidal currents are less significant than wave and wind induced currents.

3.1.7 Sea level rise

Sea level rise is discussed in Section 2.1.8.

3.1.8 Existing structures

There is a protected reclamation at the northern end of the beach and a large stormwater outlet at the southern end. The grouted rock wall at the northern end of the beach has been extended southward due to erosion of the beach and backshore that has occurred at the southern terminus of the wall.

3.2 Historic changes

Based on the 1959 aerial photograph (Figure 3-5) the original shoreline extended through to the northern stream, but the reclamation was in place by 1996. It is likely that the ephemeral stream discharge at the southern end that was replaced with the stormwater outlet which increased discharges as the catchment became more developed.

The grouted rock wall around the reclamation was extended southward by 20m in 1999 (coastal permit 22383) due to erosion at the southern end of the wall. A further 14 m extension was construction in 2002 (coastal permit 26830 & 26831).

3.3 Coastal process summary

Based on visual monitoring, the beach is generally stable, although fluctuations in beach volume are evident from 2002 to 2012. The two key localised processes are the wave reflection off the grouted stone wall and the stormwater outlet at the southern end of the bay acting as a headland control. The wave reflection effect of the vertical wall can be clearly seen in Figure 3-6 and this moves the sand from the northern end of the beach. The current consented treatment for this issue is to transfer sand from the southern end of the beach to the northern end (coastal permit 24321). The southern stormwater outlet acts as a headland groyne and controls this part of the beach and has allowed the beach to accrete at this location and provide a source of material for sand transfer.
Figure 3-5 Aerial photograph from 1959 (Source: AC GIS viewer)

Figure 3-6 Wave reflection off seawall 4 January 2017 (Source: GoogleEarth)
3.4 January 2018 storm damage at Cockle Bay

The storm on the 5th January resulted in elevated water levels and nearshore wave heights of approximately 1m (based on observation made of residents). Due the reflective nature of the seawall wave heights were amplified causing waves to “double up” and achieve heights of up to ~2m (see Figure 3-7) above the crest of the seawall during high tide. The combination of wave action and elevated water levels facilitated erosion to the beach and reserve immediately to the east of the seawall terminus. Approximately 2-3m of reserve was cut back toward the road and this extended for a ~30m along the beach frontage (see Figure 3-8). As a consequence of erosion at this section of the beach, Auckland Council assets were displaced and a pōhutukawa tree was completely undermined exposing its entire root system. Additional storm related effects included, the lowering of sand levels on the beach, the end section of the existing seawall was damaged and top soil was removed from the top of the seawall exposing the roots of the pōhutukawa trees that habitat the narrow strip of reserve immediately behind the seawall and seaward of the road (Shelly Beach Parade).

As an emergency response, Auckland Council placed rock armour (rip rap) to protect the newly eroded shoreline and reduce any additional risk to nearby infrastructure and also allowed the rehabilitation of the exposed pōhutukawa tree (Figure 3-9). This initial response allowed a holistic management approach to be developed which would address both short term and medium term drivers.

![Figure 3-7 Observed waves heights in front of the seawall at Cockle Bay (phot taken 10:37am 5th January by Mr Barry Woods)](image-url)
Figure 3-8 Erosion at Cockle Bay. Damage occurred to area adjacent to existing seawall (photos Jarrod Walker)

Figure 3-9 Erosion protection being constructed at Cockle Bay
3.5 Options

The main issue requiring treatment is the wave reflection effects off the vertical wall around the reclamation affecting the open coast shoreline. The second area is the reclamation edge along the stream mouth that is eroding (see Figure 3-1).

At the time of drafting this report a range of options for Cockle bay were suggested. These options are outlined below as a record of this discussion. However, following the January 2018 storm, consultation with Auckland Council’s Coastal and Geotechnical Service Team, the Howick Local Board and Cockle Bay Residents a hybrid approach was developed for Cockle Bay.

Preliminary options included:

1. Extend the existing wall
2. Reduce wave reflections off the existing wall
3. Screen the wall with a rock groyne and small scale beach nourishment
4. Screen the wall with a grouted rock breakwater with small scale beach nourishment.

3.5.1 Extend the existing wall

Returning the vertical wall along the beach edge to the point where wave reflection effects are reduce will provide protection to the land area. Based on the wave reflection patterns on Figure 3-6 this would require an extension of around 80 m and the wall would need to be situated along the grass edge to ensure a beach was present in front of the wall extension to reduce wave reflection from easterly generated waves. This option will not improve the beach at this position, but will reduce edge effects from the wall to a point where wave action is more perpendicular to the beach. It is possible that a set of stairs along the extension may be useful to enable access from the reserve to the foreshore. The cost of this option is in the order of $500,000 to $600,000.

3.5.2 Reduce wave reflections from the existing wall

Rock armour dissipates wave energy through the voids in the rock and therefore has a lower wave reflection coefficient than a near vertical wall. This is demonstrated in Figure 3-10 which shows a sloping rock wall reflecting between 60% and 90% of incident wave energy depending on the height of sea level in front of the beach. In the Cockle Bay situation, reflection is likely to be closer to 100% due to the vertical nature of the wall. Placing rock armour in front of the existing vertical wall reduces wave reflection to between 20% and 60%, although to be most effective the rock armour needs to extend above the high water level and have a sufficient berm width to reduce wave reflection, otherwise the impermeable wall can still reflect a reasonable amount of wave energy. This can be seen in Section 2, with the reflection increasing from around 30% to 60% when water levels exceed the crest of the armour.
Based on the existing storm tide levels reaching around 2.5 m RL (refer Table 3-2) this means that the rock armour energy dissipation would need to extend nearly to the full height of the existing wall which is set at around 2.8 m RL to reduce, but not eliminate wave reflection to around 20% to 40%. This means that wave reflection processes would still occur, but with less energy, meaning that the existing sand transfer could be more effective.

The rock revetment would have an elevation of around 2.6 m RL, have a berm width of 2 m before sloping at 2(H):1(V) to the seabed, similar to Section 3 in Figure 3-10. It would be located along the 110 m of existing vertical wall and would extend up to 8 m seaward of the toe of the existing wall. We are aware that the intertidal platform has soft areas which may indicate the original location of the stream outlet, so assuming founding at 0 m, some 1 m below the existing foreshore level. The cost of this option is in the order of $400,000 to $450,000.

3.5.3 Screen the wall with a rock groynes and nourish the beach

The key issue at Cockle Bay is the wave reflection of the reclamatation at the northern end of the bay. This option provides a sheltered environment to enable a beach to form in this area. The potential for this to occur has been assessed using spiral beach theory. The existing diffraction point for the original beach alignment was checked and was confirmed to be the northern headland. A new diffraction point to create a curved embayment in front of the reclaimed edge. This would require a construction of a groyne to form the sheltered environment and sand would then be placed to form a beach (see Figure 3-11). The proposed beach would add to the amenity of the reserve that otherwise does not have direct beach access. The groyne could be constructed from rock armour or by a timber wall with rock armour along the seaward edge to reduce wave reflection and reduce the occupation of the structure and the volume of rock required. The nourishment would require 1,100 m$^3$ of sand proposed to be imported. An extension to the southern outfall could also be considered.
that would help confine sand to the main beach, but would also limit sand bypassing the headland. The construction cost for this option is in the order of $1M to $1.5M.

![Figure 3-11 Concept sketch of a groyne screening the existing wall and a small scale nourishment along the reclamation edge](image)

### 3.5.4 Provide a public accessible breakwater to screen the wall and nourish the beach

This option is similar to the one described in the section above, but the lower groynes structure has been replaced with a formalised grouted basalt breakwater with a walkway/promenade along the top, similar to that used to form the beach at Windsor Reserve, Devonport. We also propose to extend the southern outlet and form a more natural looking concrete outfall structure. The construction risks at this location relate to the soft ground conditions and the requirement of the structure to be well founded. This will need to be confirmed during consent level investigations. The indicative construction costs for the works are in the order of $2M to $2.5M.

### 3.5.5 Reclamation edge along the stream outlet

The reclamation edge from the existing footbridge to the outlet of the stream is around 35 m long. This area requires either a grouted rock wall, timber piled wall or a properly designed sloping rock armour revetment. The rock armour revetment would most closely match the remnants or rock armour placed along the edge and would form a sloping edge that would not create a vertical fall height from the reserve to the stream outlet. The costs for this option are in the order of $150,000 to $200,000.

### 3.5.6 Agreed option (A hybrid approach)

This agreed option combines various components of the draft options described above and seeks to address the main issue affect Cockle Bay being the reflection of waves off the seawall, particularly the seawall section adjacent to the playground.

This hybrid option, shown in Figure 3-12, includes:

1. Retaining temporary rock revetment in place and extend
2. Place rock armour bund (as opposed to a revetment that would occupy a larger area) along existing seawall to dissipate wave energy
3. Restack existing stream training groyne via current consent (22383)
4. Place rock armour along stream bank via current consent (22383)
5. Sand transfer over the top of the rip rap wall via current consent (24321).

The indicative budget estimate for these tasks is around $150K.
4 Summary

Auckland Council (AC) commissioned Tonkin + Taylor (T+T) to assess high level potential management options to manage coastal erosion at Little Bucklands Beach, Bucklands Beach and Cockle Bay.

Our scope of work is predominantly investigating physical work options for Bucklands Beach, Little Bucklands Beach and Cockle Bay to manage the effects of erosion, although we will provide context on inundation risk and sea level rise effects. This is a high level assessment with indicative construction costs to assist in a comparison of options. It does not cover a quantification of hazard and risk, nor other important considerations including consenting, cultural, historical, landscape, environmental matters. Additional detailed studies and investigations will be required to further assess any of the options identified in this report.

Processes

Bucklands Beach and Little Bucklands Beach are set on the edge of a steep and deep channel with strong tidal flows, but is within a relatively low wave energy environment, with the largest waves running parallel to the beach front. The channel location is controlled by the sand mass forming Tahuna Torea Spit on the other side of the channel. Sediment supply to the beach is limited and may largely be from relatively small quantities of biological sources (shell) over time. The backshore is low lying and susceptible to periodic inundation. The backshore has been significantly modified and historic encroachment of the upper beach area has occurred over time with road construction and widening.

Sediment transport is expected to be bimodal, with northerly waves moving sand south and into the channel and the more persistent south-westerlies moving sand to the north. Erosion at the southern end of Bucklands Beach appears to be primarily a function of a localised net northward movement of sand due to the predominant wind generated wave direction from the south-west and a net northerly current, potentially exacerbated by the accretion of the Tahuna Torea Spit and ferry wakes and waves reflecting off the seawall and stormwater outlet. There is also an erosion hotspot at the northern end of the beach south of the boat ramp and upper beach stormwater outfall discharge point. This is likely to manifest during northerly conditions where sand is moved from north to south along the beach. Boat wakes appear to increase the movement of sediment along the beach and sea level rise is also likely to increase erosion and inundation likelihoods.

At Little Bucklands Beach the key coastal processes affecting this area are the historic encroachment of the upper beach due to reclamations impounding beach sediment and increasing wave reflection, the reduced supply of sediment from the north resulting from reclamations and stormwater outfall construction around Granger Point. There has also been a southerly movement of sand within the embayment. This is attributed to an increase in sheltering from south-westerly waves by Half Moon Bay Marina. The lower sand levels in the centre of the bay may have reduced toe support for the existing stepped wall and exposing the silty/peaty substrate causing the wall to rotate, requiring ongoing repairs and maintenance.

At Cockle Bay the beach is generally stable. The two key localised process are the wave reflection off the groined stone wall and the stormwater outlet at the southern end of the bay acting as a headland control. As experienced during the January 2018 storm, the wave reflection effect of the vertical wall moves sand away from the northern end of the beach and causes erosion of the shoreline immediately to the south of the wall. The southern stormwater outlet acts as a headland groyne and controls this part of the beach and has allowed the beach to accrete at this location and provide a source of material for sand transfer. Along the stream outlet adjacent to the reclamation
the ad-hoc erosion protection is in poor condition resulting in localised erosion of the reclamation edge.

For all the beaches sea level rise effects are likely to slightly change wave heights and more significantly, direct wave action slightly higher up the beach/seawall face. Inundation and storm surge effects may become more common.

Options

Options for managing coastal erosion at Bucklands Beach with rough order construction costs include:

1. Extend seawalls along the remainder of the shoreline ($3M to $5M), this could be undertaken in stages
2. Larger scale beach nourishment with controls ($10M to $14M)
3. Enhanced upper beach by narrowing road width and retreating the hard edge ($4M to $6M).

Of these options 1 and 3 are considered the most practical for managing erosion. Inundation is currently a risk and this risk will increase in the future. Options 1 and 3 could be adapted to assist in reducing sea inundation, but would also need to consider access and pluvial flooding within the catchment area with costs for inundation management expected to be in a similar cost order.

Options for managing coastal erosion at Little Bucklands Beach include:

1. Replace existing wall with a new piled wall ($3M to $6M)
2. Beach nourishment with controls ($2M to $3M), and potentially some structural support to road)
3. Narrow road and locate new piled wall at a more landward location (retreat the line) ($4M to $7M)
4. Combination of Option 1 and 2 ($5M to $9M)
5. Combination of Option 2 and 3 ($6 to $10M).

Of these options 1 and 2 are considered the most practical for managing erosion. Due to the elevation of the existing land area behind the beach, inundation is not considered a significant risk over the next 50 to 100 years.

Options for managing coastal erosion for the open coast at Cockle Bay included:

1. Extend the existing wall ($500K to $600K)
2. Reduce wave reflections off the existing wall ($400K to $450K)
3. Screen the wall with a rock groyne and small scale beach nourishment and extend southern outfall ($1M to $1.5M)
4. Screen the wall with a grouted rock breakwater with small scale beach nourishment and extend southern outfall ($2M to $2.5M).

Options for the reclamation edge are upgrading the existing rock armour revetment or replacing with a timber or grouted rock wall ($150K to $200K).

The agreed management option, with a budget estimate of $150K, includes:

1. Keep in place and undertake a small extension to rip rap
2. place rock armour along existing seawall
3. restack existing stream training groyne
4. place rock armour along stream bank
5. Sand transfer over the top of the rip rap wall.
5 Applicability

This report has been prepared for the exclusive use of our client Auckland Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd

Report prepared by: Authorised for Tonkin & Taylor Ltd by:

Richard Reinen-Hamill Tim Fisher
TECHNICAL DIRECTOR - COASTAL PROJECT DIRECTOR

RRH
p:\1004488\working\material\20170929.rrh.report.v4.docx
References


Firth, C.W., (1930). The geology of the north-west portion of Manukau County, Auckland. Auckland University College, 29th May 1930.


Draft

Increasing Aucklanders’ Participation in Sport

Sports Investment Plan 2019 – 2039

January 2019
About this document

Rapid growth and social change are changing the face of Auckland.

This creates an opportunity to build a stronger, more diverse and inclusive society where people feel they belong – a vision for Auckland expressed in the Auckland Plan.

Community sport is a key part of this vision. It can bring people together in both organised and casual environments, improving the health, social and cultural outcomes for Aucklanders.

Increasing Aucklanders’ Participation in Sport: Sports Investment Plan 2019-2039 reflects a desire to increase the number of Aucklanders who participate in and benefit from sport. Aucklanders: more active, more often.

Currently, it’s not easy for everyone to participate in sport and is made harder by a shortage of facilities in the existing network. There are specific groups who are not involved in any kind of sport or have consistently low levels of participation. Our research shows there is a direct link between lack of access to facilities and low participation. This plan aims to remedy this.

The core principle driving the plan is equity-based investment to improve access and outcomes for all. This means different levels of investment will be made to bridge gaps in supply (e.g. facilities) and to increase participation by targeting specific groups. Investment is directed where there is need to achieve good outcomes for all Aucklanders.

The new investment strategy uses a people-centric approach focusing on:

• communities with low sport participation rates
• increasing participation in emerging and ethnically diverse sports
• sustaining popular sports with high participation rates

Changes to the way people participate and play sport, as well as the sports they play are all factors driving different kinds of demand on a network of aging, traditional, code-based sporting facilities.

Our new approach to investing in sport is a shift from bespoke, individualised facilities and programmes to partnership models building an affordable, fit-for-purpose network of sports facilities for all Aucklanders to enjoy.

Policy objectives

Through this document Auckland Council seeks to achieve the following policy objectives:

• ensure that all Aucklanders participate in sport, by targeting communities of greatest need and addressing disparities
• deliver a broader range of programmes, services and facilities that better respond to the diverse needs of Auckland’s communities
• address growth and changing community needs through regular assessments of, and changes to, programmes, services and facilities to maximise participation.
Increasing Aucklanders’ Participation in Sport: Sports Investment Plan 2019 - 2039

Sport is important to Aucklanders

73% of adults participate in sport and recreation each week.

90% of young people participate in sport and recreation regularly.

71% of Aucklanders would like to play more sport.

Auckland Council invests in sport because it delivers a range of health, social and economic benefits (roughly $1.76 billion each year) for our communities and for Aucklanders.

Investing in sport has a number of challenges

Auckland’s population is rapidly growing and changing, so is the demand for sport. There is evidence showing people are participating in different types of sport and recreation activities, in different formats.

<table>
<thead>
<tr>
<th>Young Adults</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPETITIVE SPORTS OR ACTIVITIES ONLY</td>
<td>12%</td>
</tr>
<tr>
<td>BOTH</td>
<td>3%</td>
</tr>
<tr>
<td>NON-COMPETITIVE SPORTS OR ACTIVITIES</td>
<td>63%</td>
</tr>
<tr>
<td>NON-PARTICIPANT</td>
<td>5%</td>
</tr>
</tbody>
</table>

In addition, sport investment is facing growing budgetary and land supply constraints. The existing network of Auckland Council sports facilities is ageing and we have identified supply gaps in some areas of Auckland. (Source: SportNZ)

Not all Aucklanders have the same opportunities to access sport

- There is inequity across different gender, age and ethnic groups, and for people living with disabilities.
- Certain demographic groups such as Pacific and Asian residents have lower than average participation rates.

The new investment plan for sport

This plan sets out Auckland Council’s new approach to plan for growth and the changing preferences of Auckland’s diverse population.

We want to increase participation in community sport...

Our goal is to make Aucklanders ‘more active, more often.’

We will do so by providing fit-for-purpose programmes, services and facilities that cater for the greatest number of people.

We have set aside $120 million in the Long-term Plan to fund regional and sub-regional sports facilities. This is on top of the $1 billion already allocated to sport and recreation.

With the new plan, there will be a new investment approach...

Key Shifts

We will be making several key shifts to the way we currently invest in sport. Central to these key shifts is a people-centric approach, targeting those who do not have adequate access and opportunities.

Investment principles

New investment will be driven by four principles:

- accountability
- equity
- financial sustainability
- outcome-focused.

Investment framework

Every new investment will go through a decision-making framework that will deliver value for money, robustness, consistency and transparency.

What does it mean for Aucklanders?

Sport investment will target three different groups of people:

1. I already play sport.
   - “I already play sport.”
   - There will be more fit-for-purpose facilities and programmes to keep me actively involved in sport.

2. “I play a new sport.” (like futsal)
   - Currently there are limited opportunities to play but in the future there will be more fit-for-purpose facilities and programmes that cater to new and emerging sports like mine.

3. “I do not currently participate in sport.”
   - “I do not currently participate in sport.”
   - Auckland Council will create more opportunities and make it easier for me to take up sport.

Collaboration and partnerships to deliver the best outcomes for Aucklanders

The scale of investment required means Auckland Council cannot work alone.

We have consciously aligned with our sport sector partners Sport New Zealand and Aktive. New investment will seek collaboration and partnerships to build on the existing investment by the sport sector, volunteers, local communities and private investors.
## The key shifts

### Current challenges

<table>
<thead>
<tr>
<th>Key shift 1</th>
<th>Investment decisions seek to achieve multiple objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TODAY</strong></td>
<td>Focus Auckland Council investment on community sport – where it can add the most value</td>
</tr>
</tbody>
</table>

- The demand for sport in Auckland is growing and changing, while the existing facilities are ageing.
- Limited budget focused on mainly traditional sports and in response to demand rather than need.
- Invest mainly in single-purpose facilities without a systematic approach to cater for the different needs of communities.
- Auckland Council needs a more structured and strategic approach to invest in sport.

### This means...

- The only objective for our investment is increasing participation in community sport.
- Funding will be split between three key groups:
  - participants in high-participation sports
  - participants in emerging sports
  - those who are currently inactive or have a low participation rates e.g., Pacific and Asian communities.
- Participants in new sports will not compete for funding with traditional sports. New programmes and services will seek to get inactive Aucklanders engaged in sport.
- We will achieve this goal by focusing our investment on fit-for-purpose facilities, programmes and services.
  - We will prioritise multi-sports facilities over bespoke facilities to cater for the largest number of people possible.
  - We will prioritise facilities that will meet the changing needs of our diverse communities.
  - We will use a robust investment decision-making framework driven by four investment principles: accountability, equity, outcome-focused and financial sustainability.
Introduction

Auckland is growing and changing rapidly and so is the demand for sport.

The plan is our response to stakeholders’ requests to take a more structured approach to deliver better outcomes for all Aucklanders through sport.

It reflects our commitment to the principles of Te Tiriti o Waitangi/the Treaty of Waitangi by providing opportunities through participation in community sports to connect, socialise, learn and celebrate Māori identity and culture.

It is based on a series of Auckland Council decisions, substantial research, evaluations and engagement feedback from 21 local boards, four advisory panels, 40 sports clubs and organisations and 121 public submissions.

Glossary

<table>
<thead>
<tr>
<th>Sport</th>
<th>Recreation</th>
<th>Sport facility</th>
<th>Community sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>A physical activity that is competitive, organised and involves the observation of rules and may involve either team or individual participation.</td>
<td>General or informal physical activity (for example, walking, swimming or kayaking in the sea).</td>
<td>A piece of infrastructure vital to competition and practice of a sport (for example, golf course, hockey, turf, outdoor/indoor court, sports field or softball diamond).</td>
<td>Includes play (age and stage appropriate development opportunities for young people), active and outdoor recreation, and competitive sport taking place through clubs and events (including talent development). Community sport does not include passive recreation such as gardening or elite (international) competition.</td>
</tr>
</tbody>
</table>
## Chronological timeline for developing the plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Mar—Apr 2016 Workshops with all 21 local boards.</td>
</tr>
<tr>
<td>2016</td>
<td>20 Jul 2016 Consultation and feedback summary report. [CP2016/12144]</td>
</tr>
<tr>
<td>2017</td>
<td>14 Mar 2017 Environment and Community Committee made in-principle decisions on a number of changes to current investment mechanisms for sports facilities investments, after considering evaluation results. [CP2017/00192]</td>
</tr>
<tr>
<td>2017</td>
<td>20 Jul 2017 Parks, Recreation and Sport Committee approved key components of the plan, modify the primary outcomes, principles, focus and scope of sports facilities investment. [CP2016/12613]</td>
</tr>
<tr>
<td>2017</td>
<td>4 Apr 2017 Environment and Community Committee agreed to develop an outcome measurement tool for sport investment modelled on the Treasury’s Cost Benefit Analysis Model and to pilot the tool. [CP2017/03041]</td>
</tr>
<tr>
<td>2018</td>
<td>Dec 2018 Approval of the draft plan by the Environment and Community Committee.</td>
</tr>
<tr>
<td>2019</td>
<td>Early 2019 Anticipated final approval from the Environment and Community Committee.</td>
</tr>
<tr>
<td>2019</td>
<td>Feb—Jun 2018 Engagement with local boards and workshops with a political working group on the key components of the draft plan.</td>
</tr>
<tr>
<td>2019</td>
<td>Early 2019 Public consultation on the draft plan.</td>
</tr>
</tbody>
</table>
Section 1

Why we invest
1.1 Why do we invest in sport?

Auckland is experiencing rapid population growth and social change. We have a diverse population which brings many differences in values, lifestyles, demands for goods and services, and expectations of civic engagement and democracy.

Auckland Council invests in sport to provide Aucklanders with opportunities to participate in society and develop a sense of belonging in Auckland. We have the largest Pacific and Asian populations in the country. These groups also have the lowest participation rates. For health and social reasons, encouraging participation in sport can have tangible benefits for the whole community.

By removing barriers and creating better access to sport opportunities, Auckland will be one step closer to eliminating disparity and disadvantage as well as fostering healthy lifestyles and wellbeing for all Aucklanders.

It directly contributes to Focus Area 7 of the Auckland Plan 2050’s ‘Participation and Belonging’ outcomes – ‘Recognise the value of arts, culture, sports and recreation to quality of life. It is also relevant to achieving:

• direction 1 “Foster an inclusive Auckland where everyone belongs”
• direction 2 “Improve health and wellbeing for all Aucklanders by reducing disparities in opportunities”.

The multiple benefits achieved through increased sport opportunities and participation will contribute to other Auckland Plan outcomes such as:

• ‘Māori identity and wellbeing’ - by helping to advance Māori wellbeing
• “home and places” - by providing public spaces that are inclusive, accessible and contribute to urban living
• ‘opportunity and prosperity’ - by providing employment and business opportunities.

This plan sets out Auckland Council’s investment approach in sport to achieve these goals. It is a direct response to the vision ‘Aucklanders more active, more often’ set out in the Auckland Sport and Recreation Strategic Action Plan 2014-2024.
Participation in sport has multiple benefits

There is overwhelming evidence showing participation in sport leads to a wide range of benefits for individuals and the community. Our future sport investment will consider the extent of increase in participation and the impact of that increase in terms of health, education, social and economic benefits. We will prioritise projects with the highest aggregate benefits. The table below summarises the benefits in four broad categories.

<table>
<thead>
<tr>
<th>Physical activity, health and wellbeing</th>
<th>Social and community benefits</th>
<th>Education outcomes and skills development</th>
<th>Economic development</th>
</tr>
</thead>
<tbody>
<tr>
<td>The health benefits of sport and recreation activities are clear – they are substantial, population-wide and particularly important to older people. People who regularly participate in physical activity have reduced risks of both mental and physical illness. It's estimated that inactivity cost Auckland $179 billion of health-related expenditure, $233 billion of lost human capital and $10 billion of other costs in 2010.</td>
<td>Most people participate in sport and recreation activities for enjoyment (98%) and social reasons (52%). Organised sport and recreation activities draw individuals and diverse groups of people together, fostering cooperation and strengthening social ties. These connections provide a sense of belonging and create networks that sustain local communities.</td>
<td>Participation in sport or recreation helps improve education outcomes for children and young people. There is evidence of improved cognitive skills (think, read, learn, remember, reason and pay attention) and psychological benefits such as enhanced self-esteem and self-confidence which leads to improved educational behaviour and attainment.</td>
<td>The sport and recreation sector accounts for 2.4% of regional gross domestic product (GDP) – $41.015 million in 2009. There are approximately 11,943 people working in the industry, 5,553 in related occupations and 212,182 volunteers. International events, such as the World Masters Games 2017, contributed approximately $37 million to Auckland’s GDP. Such events provide an opportunity to reinforce and enhance Auckland’s brand image as an attractive destination to visit and live.</td>
</tr>
</tbody>
</table>

Investment in Sport and Te Ao Māori

Te Tiriti o Waitangi/the Treaty of Waitangi is our nation’s founding document and recognises the special place of Māori in New Zealand. Auckland Council is committed to engaging and working with Māori in ways that are consistent with the Treaty Principles. This includes supporting delivery of services by Māori for Māori, based on Te Ao Māori values and practices.

We acknowledge the special role of Māori in decision-making, to build lasting reciprocal relationships and improve physical activity outcomes for Māori. This will be achieved through working in partnership with iwi and appropriate organisations.
1.2 How does this plan fit within the wider context?

This plan sets out Auckland Council’s approach to regional investment in sport.

It sits within the context of the council’s wider community facilities network and operates in accordance with the Local Government Act 2002 and the Reserves Act 1977.

In the budgetary context, this plan will guide the council’s investment decisions in sport and inform the budgetary processes particularly:

- with decisions on the indicative figures and timing for sports projects during the 10-year budget process (the long-term plan process)
- to assist and prioritise sports projects against other proposals by comparing all possible costs, benefits and trade-offs. Such information will assist the annual budget process in determining the timing, duration and scale of sports projects in local board agreements and in the council’s services and infrastructure plans.

Other complementary processes and documents include:

- **Auckland’s Sports Facilities Priorities Plan 2017-2027**
  - A sector-led plan to clearly communicate their priorities for investment to Auckland Council, investors and potential partners.
  - Development of this plan was facilitated by Aktive, Sport NZ and Auckland Council with input from over 80 regional and national sport organisations, sports trusts and major facility providers.
  - A panel of experienced sector representatives, set up by Aktive, will meet to review and identify high priority projects for future investment, using the agreed evaluation and prioritisation criteria in the plan.

- **Facilities Partnerships Policy**
  - The policy guides how Auckland Council will enter into and manage partnerships for sports facilities. The policy sets out the strategic context, principles, the models and investment tools for decision-making, evaluation and monitoring facilities partnerships.

- **Auckland Sport and Recreation**
  - To discuss investment priorities and partnership opportunities.
How does the plan relate to other Auckland Council documents?

**Unitary Plan**
- Auckland Sport and Recreation Strategic Action Plan
- Parks and Open Spaces Strategic Action Plan
- Toi Whāti: Arts and Culture Strategic Action Plan
- Thriving Communities Strategic Action Plan
- I am Auckland - Children and Young People's Strategic Action Plan
- Māori Plan for Tāmaki Makaurau

**Auckland Plan**
- Increasing Aucklanders’ Participation in Sport: Sports Investment Plan 2019 - 2039
- Open Space Provision Policy
- Community Facilities Network Plan
- Tākaro – Investing in Play

**Local Board Plans**
- Auckland Council land assets
- Local and regional facilities
- Local and regional services

**Long-term Plan**
- Annual Plan
- Local board agreements

**Community-led**
- Community Occupancy Guidelines
- Community Grants Policy
- Facility Partnerships Policy
- Auckland Council-led
- Auckland Council facilities
- Auckland Council services

**Market-led**
- Procurement Policy
- Unsolicited Proposals Policy
- Strategic Partnerships Policy

**Section 1 Why we invest**

**Outcomes**
- Vision:
  - what is the vision?
  - what outcomes and benefits are we working towards?
  - what will success look like?

**Vision:**
- what is the vision?
- what outcomes and benefits are we working towards?
- what will success look like?

**Outcomes:**
- what specific outcomes do we want for different populations, sectors, places, activities?
- what is our role in delivering them?

**Investment:**
- what should Auckland Council invest in, and where, to deliver these outcomes?
- what are the priorities, to address needs and gaps?

**Options:**
- will we deliver the outcomes by providing land, facilities or services, or a combination?
- how will we allocate:
  - capex (for assets)
  - opex (for everything else)

**Mechanisms:**
- how will we enable the community and the market to deliver the outcomes, alongside direct Auckland Council provision?
Collaborating with others to achieve outcomes

Working with the sector
Achieving sport outcomes requires collaboration from all parties.
We will use this plan to guide our work with others and new investment decisions from the sport sector, private investors and communities.
We have already made considerable efforts to align processes and strategic priorities with our sport sector partners. The focus on community sport and increasing participation aligns with the strategic directions of Sport New Zealand and Aktive Strategic Plan 2015-2020.
1.2 Why now?

The plan will enable Auckland Council to better respond to the changing population and address current challenges.

**Challenges**

- **Rapid population growth**
  - Auckland’s population is growing by 1.5% annually. It is expected to increase by 1 million in the next 30 years.

- **Changing community needs**
  - The makeup of Auckland will be different in the future, including:
    - more older people and more children under 14 years of age
    - more people of Asian, Pacific and Māori ethnicity
    - more people born overseas.

- **Disparity of access to sport opportunities**
  - Not all Aucklanders enjoy the same access to sport. There is a direct relationship between access and participation. To achieve our goal of increased participation, we need to target low participation areas or population groups and improve access to sport.

- **Ageing facilities**
  - Auckland Council has a vast network of sports facilities including over 250 sports parks and indoor courts in varying states of ‘fitness’.

- **Unstructured investment**
  - Investment in sports facilities tends to be ad hoc and reactive, based on dispersed or incomplete information.

**Effect on provision**

- **Demand will exceed supply**
  - The growing population places increasing pressure on existing sports facilities.

- **Sports facilities and programmes need to adapt**
  - The changing demographic profile means some existing facilities and programmes may no longer meet the needs of communities.
  - There are new sports, new ways of participating and less club-based activity.

- **There is significant financial pressure to bridge the gap**
  - The financial pressure to meet the supply shortage is substantial due to limited budget and land supply constraints. The costs are likely to grow rapidly over time, meaning a more targeted approach is required.

- **Maintenance costs are increasing**
  - The cost of maintaining and renewing current facilities will increase as they age.

- **Lack of focus on outcomes**
  - Investments aren’t targeting the highest need.
How will we invest and how do we know the plan is working?

This page presents the logic for Auckland Council’s sport investment and the key shifts we will make to address the key challenges. Further details of what the key shifts mean in practice are provided in Parts 2 and 3.

**Problem**

50%

The demand for sport in Auckland is growing and changing, while the existing facilities are ageing.

40%

Not all Aucklanders have the same opportunities to play sport.

10%

Auckland Council needs a more structured and strategic approach to invest in sport.

**Key Shifts**

1. **Key shift 1**
   - Undertake a people-centric approach with a particular focus on:
     - supporting communities with low participation rates
     - increasing participation in emerging sports
     - sustaining popular sports with high participation rates

2. **Key shift 2**
   - Prioritise investment to focus on increasing participation in community sport and provision of core infrastructure.

3. **Key shift 3**
   - Invest in a range of assets and services to cater for the needs of communities.

4. **Key shift 4**
   - Make structured, evidence-based investment based on clear principles.

**Benefit**

70%

Increase Aucklanders’ participation in sport by adopting an evidence-based and outcome-focused approach to sports investment.

30%

Improve value for money and efficiency by adopting an investment framework to guide decision-making.

**KPIs**

- **KPI 1 (participation):** Increase the number of adult Aucklanders who are physically active weekly.
- **KPI 2 (participation):** Increase the proportion of children between 5 and 18 years of age who participate in three hours or more of organised sport and recreation each week.
- **KPI 3 (participation):** Increase participation of community groups with the lowest participation rates:
  - people in high socio-economic deprivation areas, particularly Pacific Peoples
  - Asian communities, particularly young women
  - women generally.
- **KPI 5 (delivery):** Increase services and the number of sports facilities delivered in geographic areas with an identified supply shortage.
- **KPI 6 (delivery):** Increase the pace of renewing and upgrading ageing sports facilities.
- **KPI 7 (quality decisions):** Improve the number of investment decisions guided by the investment framework.
- **KPI 8 (quality decisions):** Approve investment projects that adopt the Cost and Benefit Model (CBAx) to track realisation of community benefits over time.

**Rationale**

- This is an outcome indicator that shows how sport participation changes across the Auckland region.
- This is an outcome indicator that shows how sport participation of young people changes across the Auckland region.
- This is an outcome indicator that shows how sport participation across different demographic groups changes across the Auckland region.
- This is an output indicator that shows how quickly Auckland Council could address community needs in areas with the greatest need.
- This is an output indicator that shows how efficiencies improve the quality of ageing facilities.
- This is an activity indicator that shows whether investment decisions are evidence-based.
- This indicator tracks how successful an investment is in achieving good outcomes.

**Data source**

- New Zealand Health Survey (Ministry of Health) - repeated annually.
- Active NZ Survey (Sport NZ) - reported annually with data collected continuously.
- Active NZ Survey (Sport NZ) - reported annually with data collected continuously.
- Data from Auckland Council’s operations unit - data collected continuously and subject to periodic audits.
- Data from Auckland Council’s operations unit - data collected continuously and subject to periodic audits.
- Data from Auckland Council’s democracy services - data collected continuously and subject to periodic audits.
- Data from Auckland Council’s democracy services - data collected continuously and subject to periodic audits.

**Attachments**

Attachment A

Item 18

A list of key performance indicators (KPIs) will be used to track progress of the plan over time. The KPIs were selected using five criteria - specific, measurable, achievable, relevant and timely.
Section 2
What we invest in
We will increase participation in community sport by investing in fit-for-purpose services, programmes and facilities, and focus on core infrastructure.

Our investment decisions will be equitable, outcome-focused, financially sustainable and accountable.

2.1 What are the outcomes we seek from sport investment?

We will invest to increase the level of community sport participation in Auckland.

This requires us to take a people-centric approach to meet the needs of our various communities.

The participation outcome directly aligns with Auckland Sport and Recreation Strategic Action Plan 2014-2024 to enable ‘more Aucklanders living physically active lives through participation in informal physical activity, recreation and sport.’

We will target participation in three areas:

1. Enabling participation of low-participant communities.
   - Investment in this area will increase the number of active people by targeting sedentary population groups and/or communities with low participation rates.
   - These people need more support as they have higher health risks.
   - Improved health and social benefits from increased participation of these community groups is much greater than for people who are already active.

2. Increasing participation in emerging sports with high growth potential.
   - Investment in sports that are likely to grow rapidly will help meet the needs of future communities. In particular, it could mean providing support for:
     - traditional Māori sports which have potential to increase participation and wellbeing (for example, Kio Rahi)
     - sports played by growing ethnic populations (for example, Kaabbadi).

3. Sustaining or increasing participation in high-participation sports.
   - We will continue to support popular sports that appeal to a number of Aucklanders. The focus of the investment will be to build on existing sector capacity.
   - Sports with high participation rates are likely to have small percentage growth but the actual increases in the numbers of participants are large.
What is happening now?

Current investment in sports often aims to achieve a range of health, social and economic goals as well as an increase in participation. It also tends to target spatial- or code-specific needs. Such an approach can spread limited resources too thin. It also runs the risk of not catering to the needs of communities, in particular people who currently do not play sport.

Consultation

Feedback from the local boards, sports sector and public showed strong support for investment to be based on improving outcomes. There is also strong support to target Auckland Council investment in areas where it can add most value.

Such an approach would set a clear direction to other sports partners and help to align investment.

When asked what types of sports facilities the council should focus on, feedback supported emerging sports with high growth potential, popular sports and sports that appeal to particular groups with low participation rates.

Public submissions showed 66% supported prioritisation for emerging sports and 45% supported investment in sports that target certain cohorts.

Feedback also suggested prioritisation based on whether the investment would:

- increase overall sports participation rates
- increase participation of certain age groups
- address the needs of the population
- respond to the level of deprivation and funding gaps

The change we’re making

Council investment will move away from a geographic or code-specific approach to a single focus on sport participation with three target areas.

This focus will manage Auckland Council’s finite resources and better respond to community needs. It will provide certainty and send a clear signal to the sector about the council’s intentions over the long term. The decision to focus on participation outcomes was made by the Parks, Sports and Recreation Committee on 20 July 2016.

TODAY

Limited budget focused on mainly traditional sports and in response to demand rather than need.

TOMORROW

Future investment will take a people-centric approach to increase participation:

- Emerging sports
- High participation sports
- Low participation communities

Key shift 1
2.2 What is the scope and focus of our sports investment?

The primary focus is community sport. The intention is to ensure Auckland Council investment provides for the greatest number of people possible and meets the changing needs of the community.

The figure below illustrates where community sport sits in the sport continuum. The size of circles indicates the level of participation at each stage.

Progression of skills

- **Explore**
  - Babies and toddlers
  - Learn elementary skills such as crawling, standing and walking.

- **Fundamental**
  - Preschool children
  - Develop basic skills such as running, throwing and jumping.

- **Learn**
  - School children
  - Develop more refined skills, learn the rules of games and positive attitudes towards sport and recreation.

- **Participate**
  - Young people and adults in clubs and local games
  - Participate in organised sport and training. Players might be motivated by multiple factors such as enjoyment, performance and challenges.

- **Perform**
  - Players in regional and national competitions
  - Identify and develop talent in sports.

- **Excel**
  - Athletes in international competitions
  - Achieve excellence in one sport and compete at a world-class level.

We will provide a basic level of provision of fit-for-purpose sports facilities and programmes to support community sport.

We will prioritise investment in core sport infrastructure and ancillary infrastructure required for safe and sanitary public access.

We will not prioritise investment in sports facilities that are already funded or incidental infrastructure that delivers private benefits to small groups of users. Exceptions will be made if applicants can demonstrate increased sports participation or increased use of a core facility.

**Purpose**
- Core infrastructure: Infrastructure that is central to sport participation.
- Ancillary infrastructure: Infrastructure that enables safe and sanitary access for participants and spectators.
- Incidental infrastructure: Infrastructure that is not required for sports participation but exists for social and management purposes.

**Example**
- Courts, fields, playing surfaces and lighting.
- Toilets, changing rooms, equipment storage and car-parking.
- Clubrooms and administration facilities.
What is happening now?

Auckland Council currently invests in a combination of local, regional and high performance sports facilities, as well as a range of ancillary and incidental infrastructures. This reflects the different priorities of individual legacy councils across Auckland and doesn’t have a clear, strategic focus for the region.

This risks diluting the council’s efforts and resources, and duplicating investments of other organisations such as Regional Facilities Auckland.

Consultation

Feedback showed strong support from local boards, the public and the sport sector for Auckland Council to target investment where it will increase community participation in sports.

When asked what types of facilities council should invest in, local boards suggested core sports facilities are most important, followed by ancillary and incidental facilities.

In addition, high performance facilities are not a focus but the council should not completely rule them out.

The change we’re making

Our future investment in sport will primarily focus on community sport and target core and ancillary infrastructure.

Community sport is considered to be an area where Auckland Council investment is most needed. The focus on community sport will ensure a basic level of access to facilities and a mixture of programmes and services. This will encourage participation and cater for the diverse needs of the Auckland community.

TODAY

Make investment decisions to achieve multiple objectives

TOMORROW

Focus Auckland Council investment on community sport – where it can add the most value

Key shift 2

Setting the scope and focus does not mean exclusion of investment in certain types of sports facilities. Rather, it means Auckland Council will prioritise to avoid spreading funding too thin and focus investment in areas where investment can add most value and achieve the best outcomes.

TODAY

Invest mainly in single-purpose facilities without a systematic approach to cater for the different needs of communities

TOMORROW

Invest in a range of facilities, services and programmes to increase participation

Key shift 3
2.4 What are our investment principles?

Auckland Council’s future investment in sports facilities and programmes will need to meet four investment principles. These principles will be used during the decision-making process to ensure our investments are well-balanced. They are:

1. **Equity**  
   (40% of assessment)
   - Auckland Council’s investment in sports should ensure equity of outcomes across the population regardless of age, gender, ethnicity, socio-economic status or where people live.
   - This is the most important investment principle as it addresses disparities and targets communities of greatest need. Investment in groups with the lowest access to sports opportunities will be prioritised. This may mean allocation or reallocation of funding to overcome inequality.

2. **Outcome-focused**  
   (30% of assessment)
   - There needs to be a clear ‘line of sight’ between each investment and the outcomes. This will ensure each investment achieves maximum benefit for the communities it serves. Each investment needs to have:
     - **strategic alignment** – a clear understanding of how each investment contributes to outcomes set out in this plan, the Auckland Sport and Recreation Strategic Action Plan and local board plans.
     - **robust outcome measurement process** – ensuring there is an established monitoring and reporting process in place to demonstrate performance against clearly defined goals.

3. **Financial sustainability**  
   (20% of assessment)
   - Investment decisions need to be financially sustainable in the long run. This means being:
     - **financially viable** – ensuring there are means to cover major capital expenses and ongoing operating costs. This also means having clarity about who (for example, Auckland Council, community, or corporate) is responsible for ensuring the financial viability of sports facilities and programmes and what the expectations are.
     - **affordable for the public** – the investment decisions need to consider public accessibility and long-term affordability.

4. **Accountability**  
   (10% of assessment)
   - Auckland Council has responsibility to act in the best interest of the Aucklanders. Sports investment should be:
     - **efficient and effective** – every public dollar invested should represent value for money and deliver the greatest return.
     - **transparent and consistent** – investment decisions should be as transparent and consistent with sufficient information, clear decision-making criteria and outcomes.
What is happening now?

Auckland Council is facing difficult investment choices. We need to balance investment in sport for various target groups and multiple locations with variable effects on sport participants, organisations and local communities. This is the nature of a rapidly growing, dynamic and diverse city.

The change we're making

Our future sports investment proposals will align with our four investment principles: accountability, equity, financial sustainability and outcome-focused.

Decision-makers will use the four principles to weigh up and manage multiple investment projects. The investment principles will help ensure future Auckland Council investment decisions are well-balanced and prioritise investment proposals.

Applying the four principles will also be a way of prioritising funding proposals, especially when there are financial constraints:
The equity principle explained

Equity has the highest weighting of all the investment principles. This page provides further information about what equity means in the context of sport investment and how it differs from equality.

Both equity and equality are strategies to ensure fairness. When applied they mean two different investment approaches:

**Equity is: meeting differences to get the same outcome**

*Equity* is ensuring every Aucklander has the same access by targeting sporting opportunities to meet people's needs.

This could mean providing a basic level of provision to most people and additional support for certain groups to encourage greater participation rates.

*For example:*

Person C currently has lower access compared to Person A and Person B. To achieve the same outcome and increased participation, Person C will receive more support from Auckland Council.

**Equality is treating everyone the same**

*Equality* is providing the same level of sporting opportunities to everyone, everywhere.

This could mean providing the same sports facilities or programmes to everyone regardless of existing provision of services and facilities.

*For example:*

Persons A, B and C currently have different access to sports facilities and programmes. To achieve equality, they will receive the same support from Auckland Council.

Illustration credit: Interaction Institute for Social Change / Artist: Angus M CGIre.
Current inequity and inequality

Currently there are different types of inequity and inequality occurring across the sports facilities network in Auckland Council.

Inequity in people's access to sport

Auckland is home to a diverse range of people. When everyone is different, what fairness and success look like differs too.
Providing the same access (equality) to everyone regardless of individual needs is likely to lead to inequity of outcomes.

Inequality across sports codes

There are differences in the level of support Auckland Council provides to sports codes, partly due to different historical arrangements made by legacy councils.
The types of council support also differ. For example, some sports codes might currently receive direct funding, while others access council land and buildings at a peppercorn rental.

Inequality across geographical areas

Different areas in Auckland have different levels of access to sports facilities and programmes, mainly due to the decisions made by legacy councils.
There are also differences in current funding allocations across Auckland, based on factors such as population, land size and social deprivation.
Section 3
How we will work
3.1 The investment framework

Section 2 of this plan sets out Auckland Council’s model for sport investment in the future. This section provides the investment framework to ensure future decisions align with that model.

The investment framework will ensure structured, evidence-based investment in the future, as set out in Key shift 4.

**TODAY**

Some investment decisions are isolated and reactive with gaps in information such as the costs, benefits and alternatives

**TOMORROW**

Make structured, strategic investments based on evidence to improve efficiency, effectiveness and outcome-delivery

**Key shift 4**

Auckland Council will answer a set of critical questions before investing:

<table>
<thead>
<tr>
<th>Whether to invest?</th>
<th>How to invest?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the community needs?</td>
<td>4. Is there a partnership opportunity?</td>
</tr>
<tr>
<td>2. Does it align with Auckland Council’s strategic priorities?</td>
<td>5. What investment mechanisms should be used?</td>
</tr>
<tr>
<td>3. Does it have Better Business Cases?</td>
<td>6. Who makes decisions?</td>
</tr>
<tr>
<td></td>
<td>7. How to report and monitor outcomes?</td>
</tr>
</tbody>
</table>

The next few pages explain, question by question, how the framework will work in practice.
What does it look like in practice?

In this section we use three fictional scenarios to demonstrate how the investment framework could be applied in practice. We put each scenario through the investment framework in the following pages.

Scenario 1: A sub-regional multisport facility
Three indoor sports clubs (gymnastic, badminton and boxing) have outgrown the Auckland Council community hall they currently hire for training.
They are in a fast-growing suburb of Auckland with a high proportion of new migrants. Their combined membership has more than doubled in the last five years.
The three clubs have jointly approached the council for $10 million to build a multisport facility.
The new facility will be a purpose-built indoor facility. It will have a flexible floor layout to be used by different indoor sports.
The concept design shows the new facility will be large enough to cater for sub-regional demand for indoor sports and allow for future expansion.

Scenario 2: School netball courts
A high school wants to extend its netball courts from two to six courts to accommodate recent growth in student numbers.
The new courts can be used for both training and competition during school hours.
The school has approached Auckland Council to co-fund the new courts. It suggested additional lighting would allow the local community to play social games in the evening.
Auckland Council has evidence showing increasing community demand for extra court hours in the local area but has been unable to acquire new land to build new courts.

Scenario 3: Activation of a community house
A community group has approached Auckland Council to lease a large room in the local community house owned by the council. The room has been empty for a while because the roof is leaking.
The community group proposed fixing the roof and converting the room into a table tennis room. It has raised most of the funding from the local community but may need a small amount of funding from the council.

In real life, assessment of proposals may not necessarily follow a linear process but we will seek to answer every question in the framework before making an investment decision.

The breadth and depth of information analysed will be proportional to the level of investment and how complicated the proposal is. This will be defined by a number of factors such as:

- scope and benefits of the project
- Auckland Council’s experience and track record of delivering similar projects
- level of engagement and partnerships with customers / communities required to enable any change
- level of risks and efforts required to manage the risks
- funding sources (whether the majority is provided by multiple external organisations).

For low level, low complexity investments, investors and decision-makers could undertake a scaled down approach. As the value and risk profile increases, investment decisions need to be informed by comprehensive analysis.
Whether to invest?

Quality decision making is based on analysis of all available information and weighing a range of options.

Question 1:
What are the community needs?

All sports investment proposals will undergo a needs assessment. It will explore what is happening in a geographic area or community of interest to determine whether any change or intervention is required, either non-facility or facility.

A needs assessment is critical to distinguish ‘wants’ from ‘needs’ ensuring a facility or programme development will be fully utilised. Needs can be quantified through research and evidence and will stand the test of time. Wants are often opinion-based and will change over time.

Questions to consider:

What is the current state of provision – current facility/programme use, catchment, conditions?

Will the project meet the needs of the local community now and in the future – demographic profile and changes?

Question 2:
Strategic alignment

A brief ‘pass/fail’ assessment to ensure the investment proposal aligns with Auckland Council’s strategic priorities and outcomes.

Questions to consider:

Is there strong alignment with:

• the outcomes, principles and scope in this plan
• Sports Facilities Priorities Plan
• Auckland Sports and Recreation Strategic Action Plan
• Auckland Plan 2050
• any relevant local plans.

Question 3:
Better Business Cases (BBC)

Detailed assessment of the strategic, economic, commercial, financial and management case for the investment proposal.

Questions to consider:

Can the project demonstrate:

• a strategic case illustrating the need for a change, strategic fit and business needs
• an economic case to show value for money
• a commercial case to show that the investment will be commercially viable
• a financial case to prove the investment will be affordable within available funding
• a management case to show the investment will be achievable and can be successfully delivered.

The change we’re making

The assessment process will help ensure future investment in sport is evidence-based and focused on outcome delivery and good practice.

We expect to see significant improvements in the quality of Auckland Council’s investment decisions in the future and increased consistency and transparency.

* Working examples and templates for needs assessment, strategic assessment, Better Business Cases and Cost Benefit Analysis are provided on the Auckland Council website.
What does it look like in practice?

Scenario 1:
A sub-regional multisport facility

Question 1:
What are the community needs?

Questions to consider:

- What is the current state of provision – current facility use, catchment, conditions?
- Will the project meet the needs of the local community now and in the future - demographic profile and changes?

Question 2:
Strategic alignment

Questions to consider:

Alignment with this plan

Investment outcomes

- Will the proposal increase participation?
- Will it increase participation in:
  - community groups of low participation?
  - emerging sports?
  - high participation sports?
- Is the increase in participation likely to bring wider health, social, economic benefits to the local community?

Scope and focus

- Is the facility catering for community sport?
- Is the facility fit-for-purpose and does it provide basic provision?
- What will the facility provide?
  - core infrastructure
  - ancillary infrastructure
  - incidental infrastructure.
- Demonstrate project alignment with:
  - the accountability principle (10%)
  - the equity principle (40%)
  - the financial sustainability principle (20%)
  - the outcome-focused principle (30%)

Also consider alignment with:

- Sports Facilities Priorities Plan
- Auckland Sport and Recreation Strategic Action Plan
- Auckland Plan 2050.

Section 3: How we will work

Question 3:
Better Business Cases

Questions to consider:

- What is the strategic case? (a more detailed assessment of the strategic alignment analysis conducted in Phase 1)
- Is the project value for money? (economic case)

Cost-benefit analysis:

- Who is the target community?
- What are the costs and benefits the project seeks to deliver for the target community?
- What are the costs and benefits of the alternative options for the target community?
- How will the intended costs, benefits and outcomes be monitored over time?
- How can the intended benefits be linked to Auckland Council’s strategic outcomes?
- Is it commercially viable? (commercial case)
- Is it affordable? (financial case)
- Does it have a sound governance structure and can it be delivered successfully? (management case).
How to invest?

Question 4: Is there a partnership opportunity?

Auckland Council is not always the sole investor in sports. Depending on the nature, type and purpose of investment, we might choose to: a) directly invest; b) partner; or c) invest in others to provide sports facilities.

Auckland Council as the principal investor in sport

Auckland Council is most likely to be the principle investor when the sport investment is risky or has a significant social element. This type of investment tends to be under-invested by the private sector. Without support from the council or central government agencies, there could be inadequate access and low quality facilities.

Auckland Council as a partner in sport investment

Auckland Council is most likely to partner and co-invest in sport to deliver benefits that are shared by multiple organisations. This type of investment tends to be large in scale and is likely to lead to shared agreements to co-own, co-deliver and/or co-manage sports facilities and programmes.

Auckland Council having a supporting role in sport provision

Auckland Council also invests with others to provide sporting opportunities. This type of investment is likely happen when the sport sector is already established. In this case, the investment will focus on building existing sector capacity and provide support in areas which the council can add most value.

Details on how to determine the role of Auckland Council in sport investment projects are provided in the Facilities Partnerships Policy.

The change we’re making

Auckland Council is committed to working collaboratively with the sport sector and the community to provide better access to sports opportunities. To do so, we need to consider our role before investing to ensure efficient use of the budget and council resources in areas where it can make the biggest difference.

What does it look like in practice?

Auckland Council as the principal investor

Auckland Council is likely to be the principal investor in Scenario 1 as the investment is likely to bring significant social benefits and tend not to attract private investors.

We would work with the three indoor sport clubs to explore all possible funding options, either from Auckland Council or from other investors, before making a final decision.

Auckland Council as the a partner

Auckland Council is likely to form a facility partnership with the school to co-deliver the new courts.

Once the courts are built, the council will have a long term agreement with the school to ensure public access.

To enter into a facility partnership, the project will need to go through a separate assessment process set out in the Facilities Partnerships Policy.

Auckland Council having a supporting role

Auckland Council is likely to provide a supporting role if significant efforts have been made by the community group.

In addition to a lease and a community grant, Auckland Council might also offer capability-building advice to the community group.
How to invest?

Question 5: What investment mechanisms should be used?

Auckland Council uses several mechanisms to invest in sport:

- **When Auckland Council is the principal investor**
  - Provision and management of sports facilities and programmes
  - Direct financial contribution for capital and/or operating costs

- **When Auckland Council supports others**
  - Use of Auckland Council land and/or buildings
  - Leadership, governance, coordination support, technical advice

- **When Auckland Council partners with others**
  - Partnership agreements

Different mechanisms create different incentives and support sport participants, community and sport organisations in different ways. Determining the appropriate mechanism should be based on several factors such as:

- the scale and nature of investment
- the needs of the delivery organisations and the roles of other partners
- the needs of the target community group or area
- the expected benefits and alignment with outcomes of this plan
- consistency with the relevant Auckland Council plans (for example, open space network plans, Community Facilities Network Plan)
- consistency with legislation (such as the Local Government Act 2002 and the Reserve Act 1977).

Question 6: Who makes the decisions?

Auckland Council has two complementary but distinct decision-making bodies with responsibilities for sports facilities investment:

- **The Governing Body**
  - Focuses on region-wide strategic and investment decisions
  - Decides where and when the council will invest in the sports facilities and programmes network to address gaps and respond to growth.
  - Develops regional policies and strategies.
  - Sets budgets for major facility and programme investments or upgrades through the long-term plan process.
  - Governs regional facility partnership relationships, funding or lease agreements and performance reporting.

- **Local boards**
  - Make most decisions on local parks, open spaces, sports facilities and activities
  - Set outcomes and priorities for local sport investment through local board plans.
  - Identify local sports facility and programmes needs and advocate for investment through the long-term plan process.
  - Govern local and sub-regional facility partnership relationships, funding or lease agreements and performance reporting.
  - May work together to support facilities that benefit several local board areas.
What does it look like in practice?

Scenario 1: A sub-regional multisport facility

Investment mechanisms

Auckland Council might want to build the proposed facility using the Sport and Recreation Facilities Investment Fund. See A1

A1: Sport and Recreation Facility Investment Fund

<table>
<thead>
<tr>
<th>Application</th>
<th>Applicants will need to show:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• a needs assessment that demonstrates the community’s needs for the proposed facility.</td>
</tr>
<tr>
<td></td>
<td>• strategic alignment with:</td>
</tr>
<tr>
<td></td>
<td>- the investment outcomes and principles stated in this plan</td>
</tr>
<tr>
<td></td>
<td>- the priorities stated in the Sports Facilities Priorities Plan.</td>
</tr>
<tr>
<td></td>
<td>• better business cases that demonstrate the economic, financial, strategic, commercial and management cases of the project</td>
</tr>
<tr>
<td></td>
<td>• a cost and benefit analysis that demonstrates:</td>
</tr>
<tr>
<td></td>
<td>- the project is value for money</td>
</tr>
<tr>
<td></td>
<td>- the input, output, intermediate outcomes of the project, and the links to the strategic outcomes the project aims to achieve</td>
</tr>
<tr>
<td></td>
<td>- performance measures to monitor progress over time and methods to collect data.</td>
</tr>
</tbody>
</table>

| Assessment | Staff will assess the applications based on the depth, breadth and quality of information provided in the applications. |

| Decision-making | The Governing Body will make final decisions based on staff recommendations. Results of various assessments will be presented by staff in a summary table, supplemented by detailed tables of each assessment in the appendices. |

| Investment | Once approved by the Governing Body, staff will work with the applicants to form a funding agreement, based on the input, output, intermediate outcomes, strategic outcomes and performance measures stated in the application. |

| Monitoring | Staff will conduct regular reviews to ensure performance measures are met over time. Information about the input, output, and intermediate outcomes will be collected over time to demonstrate progress towards strategic outcomes. The information will also be used to improve the effectiveness of the investment and help Auckland Council to articulate the benefits of the Sport and Recreation Investment Fund to the public and investors. |
## What does it look like in practice?

### Scenario 2: School netball courts

**Investment mechanisms**

The school could form a facility partnership with Auckland Council. See A2

The partnership might include:

- a regional grant
- an ongoing agreement to ensure public access (for example, Community Access Scheme. See A3

### A2: Facility partnerships

For sport facility partnerships, the applicants will need to show strategic alignment with the investment outcomes and principles stated in this plan. Applicants will also need to meet requirements stated in Facility Partnership Policy.

### A3: Community access scheme

#### Application

Applicants will need to show:

- a needs assessment that demonstrates the scheme will meet a known or identified geographic gap in the provision of the Auckland Council recreation facilities.

- Strategic alignment with:
  - the investment outcomes and principles stated in this plan
  - other priorities set out in the scheme's guidelines.

- A cost and benefit analysis that demonstrates:
  - the project is value for money
  - analysis of public/private benefits
  - the input, output, intermediate outcomes of the project, and links to the strategic outcomes the project aims to achieve
  - performance measures to show the objectives have been met and methods to collect data.

#### Assessment

Staff will assess the application based on the depth, breadth and quality of information provided in the applications.

#### Decision-making

The Governing Body will make the final decision based on staff recommendations. Results of various assessments will be presented in a summary table, supplemented by detailed tables of each assessment in the appendices.

#### Investment

Once approved by the Governing Body, staff will work with the applicants to form a funding agreement, based on the input, output, intermediate outcomes, strategic outcomes and performance measures stated in the application.

#### Monitoring

Staff will conduct regular reviews to ensure performance measures are met over time. Information about the input, output and intermediate outcomes will be collected over time to demonstrate progress towards strategic outcomes. The information will also be used to improve the effectiveness of the investment and help Auckland Council to articulate the benefits of the Community Access Scheme to the public.
## What does it look like in practice?

### Scenario 3: Activation of a community house

#### Investment mechanisms

The community group could apply for:
- a community grant. See A4
- a community lease. See A5

Alternatively Auckland Council could undertake the renewal work itself. See A6

### A4: Community Grants

#### Application

Applicants will need to show:

- strategic alignment with:
  - sport and recreation priorities set out in the local plan
  - the investment outcomes and principles stated in this plan.

- a cost and benefit analysis that demonstrates:
  - the project is value for money
  - the input, output, intermediate outcomes of the project
  - an intervention logic diagram demonstrating the connections with Auckland Council’s strategic priorities and outcomes
  - performance measures to show the objectives have been met and methods to collect data.

#### Assessment

Staff will assess applications based on the quality of information provided in the applications.

#### Decision-making

Local boards will make final decisions based on staff recommendations.
Results of various assessments will be presented by staff in a summary table, supplemented by detailed tables of each assessment in the appendices.

#### Investment

Funding will be provided to community groups once their applications are approved by the local board.

The applicants will need to fill in an accountability form which will specify the input, output, intermediate outcomes and the strategic outcomes of the project.

#### Monitoring

Staff will conduct regular reviews of the accountability forms to ensure performance measures are met over time.

Information about the input, output, and intermediate outcomes will be collected over time to demonstrate progress towards strategic outcomes. The information will also be used to improve the effectiveness of the investment and help Auckland Council to articulate the benefits of community grants.
### What does it look like in practice?

**Scenario 3:**
Activation of a community house

#### A5: Community leases

<table>
<thead>
<tr>
<th>Application</th>
<th>Applicants will need to show:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• a needs assessment that demonstrates the lease will meet community's needs now and in future.</td>
</tr>
<tr>
<td></td>
<td>• strategic alignment with:</td>
</tr>
<tr>
<td></td>
<td>- sport and recreation priorities set out in the local plans</td>
</tr>
<tr>
<td></td>
<td>- the investment outcomes and principles stated in this plan.</td>
</tr>
<tr>
<td></td>
<td>• a cost and benefit analysis including:</td>
</tr>
<tr>
<td></td>
<td>- the input, output, intermediate outcomes of the lease</td>
</tr>
<tr>
<td></td>
<td>- an intervention logic diagram demonstrating the connections with Auckland Council’s strategic priorities and outcomes</td>
</tr>
<tr>
<td></td>
<td>- analysis of public/private benefits for each lease</td>
</tr>
<tr>
<td></td>
<td>- analysis of opportunity costs to Auckland Council for each lease (such as the underlying land value, alternative use of the land and building)</td>
</tr>
<tr>
<td></td>
<td>- assessment of potential service level changes before and after leasing</td>
</tr>
<tr>
<td></td>
<td>- performance measures to monitor progress over time and methods to collect data.</td>
</tr>
</tbody>
</table>

| Assessment | Staff will assess the application based on the depth, breadth and quality of information provided in the applications. |
|           | Additional assessment will be undertaken by the staff to consider factors such as land status, the open space provision in the local area and impact on current service provision. |

| Decision-making | Local boards will make the final decision based on staff recommendations. |
|                 | Results of various assessments will be presented in a summary table, supplemented by detailed tables of each assessment in the appendices. |

| Investment | Once approved by the local boards, staff will work with the applicants to form a lease agreement, based on performance measures stated in the applications. |

| Monitoring | Staff will conduct compulsory annual reviews to ensure performance measures are met over time. |
|           | Utilisation data will be collected for both core activities and other uses (shared use, sub-leasing, hireage and commercial activities such as cafés and bars). |
### What does it look like in practice?

#### Scenario 3: Activation of a community house

#### A6: Auckland Council asset renewals

<table>
<thead>
<tr>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants will need to show:</td>
</tr>
<tr>
<td>- a needs assessment that demonstrates the facility is still needed to meet local demand.</td>
</tr>
<tr>
<td>- strategic alignment with:</td>
</tr>
<tr>
<td>- the investment outcomes and principles stated in this plan</td>
</tr>
<tr>
<td>- sport and recreation priorities set out in the local board plans.</td>
</tr>
<tr>
<td>- a cost and benefit analysis that demonstrates:</td>
</tr>
<tr>
<td>- the project is value for money</td>
</tr>
<tr>
<td>- analysis of public/private benefit</td>
</tr>
<tr>
<td>- the input, output, intermediate outcomes of the project, and links to the strategic outcomes the project aims to achieve</td>
</tr>
<tr>
<td>- performance measures to show the objectives have been met and the methods used to collect the data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff will assess the proposed renewal project against other renewal projects based on the results of the needs assessment, strategic alignment and CBAx.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decision-making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local boards will make the final decision based on staff recommendations.</td>
</tr>
<tr>
<td>Results of various assessments will be presented in a summary table, supplemented by detailed tables of each assessment in the appendices.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once approved by local boards, staff will commence the renewal work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance of the renewed asset will be monitored over time with performance measures. Information about the input, output, and intermediate outcomes will be collected over time to demonstrate progress towards strategic outcomes. The information will also be used to improve the effectiveness of the investment and help Auckland Council to articulate the benefits of asset renewals to the public.</td>
</tr>
</tbody>
</table>
How to invest?

Question 7:  
How to report and monitor outcomes?

Every sport investment in the future will adopt the outcome measurement tool throughout the investment cycle to monitor progress.

The outcome measurement tool is based on the cost benefit analysis model used in the previous assessment stage and an intervention logic model to link the specific investment to Auckland Council's strategic outcomes it aims to achieve.

The outcome measurement tool will be used as the basis to set performance measures and reporting requirements for each investment. Over time, robust and consistent measurement of outcomes will allow us to measure and analyse the aggregate benefits of sport investment and its contribution to the Auckland Plan 2050 outcomes.

Such information will help us gain a better understanding of what has worked well and not so well to improve effectiveness of future investment. We will also be better at articulating the returns of our investments to our investors and ratepayers.

The change we’re making

The investment framework presented in this plan sets out the process for rigorous decision-making, monitoring and reporting.

Over time, we expect to see significant improvement in the quality of evidence and analysis used to inform investment decisions and improve sector and staff capability. This will enable a continuous feedback loop of refinement and improvement in investment to ensure delivery of better outcomes for Aucklanders.

- Investing in sport
  - Quality inputs
  - Informed decisions
  - Investing in sport projects
  - Evaluation of KPIs
  - Evaluation of outcomes
  - Achieving outcomes

Continuous refinement and improvement

Richer data, better analysis, sector and staff capability development
A new investment approach

Auckland Council is taking a new investment approach to meet the sport needs of Aucklanders

Future Auckland Council investment will be guided by four principles:

- Accountability
- Equity
- Financial sustainability
- Outcome-focused

We will adopt a new investment framework to:

- Guide decision-making
- Prioritise investment projects
- Measure and monitor outcome delivery
- Refine investment decisions over time

Aucklanders will have:

- Improved access to quality and fit-for-purpose facilities and programmes for community sports

Sport participation levels will increase, with a focus on:

- Improving participation of low-participant communities
- Improving participation in emerging sport with high growth potential
- Maintaining levels in high-participation sports

Increased sport participation will lead to a range of benefits for individuals and community including:

- Improved physical activity, health and wellbeing outcomes
- Improved educational outcomes and skills
- Increased economic development and creation of new jobs
- Improved social community benefit

The contributions to the Auckland Plan 2050:

- Belonging and participation
- Māori identity and wellbeing
- Homes and places
- Opportunities and prosperity

KPIs 7 & 8 (quality decisions) → KPIs 5 & 6 (service delivery) → KPIs 1-3 (participation) → Auckland Plan KPIs
3.2 Indicative implementation timeline

This plan will be a staged process that will be completed over the next three to five years.

An indicative implementation timeline is provided below.

- **Immediate adoption**

  Key parts of the plan will be implemented immediately, particularly:
  - the investment outcomes, investment principles and focus of investment set out in Section 2 will help to set investment priorities to guide every investment decision in sport
  - the investment framework set out in Section 3 will be used to assess every investment proposal, although the scale of the assessment should be adjusted to the scale of the investment and the risk profile.

- **Changes 2019–2021**

  The plan will create a number of changes that may affect community groups, sports organisations and Auckland Council. Further policy work and engagement will be undertaken to understand the full impact of the changes. These may include:
  - replacing community loans, rates remissions and postponements with grants
  - embedding new outcome measurement tools for different forms of sport investment
  - evaluating and refining processes and practice for loan guarantees, community leases and grants.

- **Plan refresh every three years**

  We will refresh the plan in late 2021 to ensure it is fit-for-purpose and assist quality investment decisions. A particular focus of the refresh will be to ensure the plan continues to respond to community needs using new performance data that is collected. The refresh will also determine whether additional revenue streams are necessary to fund future sport investments.

  After 2021, the plan will be refreshed every three years to coincide with the Long-term Plan processes and ensure alignment with the council’s strategic priorities.