

9 Abbreviations and Acronyms

	Abbreviations/Acronyms
Auckland Council	the council
Auckland Tourism Events and Economic Development	ATEED
Auckland Council District Plan – Operative Waitākere Section 2003	Waitākere City District Plan
Auckland Unitary Plan (Operative in Part)	AUP (OP)
Cultural Heritage Inventory	CHI
Council Controlled Organisation	CCO
Geographic Information System	GIS
Global Positioning System	GPS
Heritage New Zealand Pouhere Taonga Act 2014	HNZPT Act
Local Area Plan (s)	LAP(s)
Local Government (Auckland Council) Amendment Act 2010	LGAA
Regional Parks Management Plan 2010	RPMP
Reserve Management Plan	RMP
Resource Management Act 1991	RMA
State of the Waitākere Ranges Heritage Area 2018	the 2018 Report
Waitākere Ranges Heritage Area	the heritage area
Waitākere Ranges Heritage Area Act 2008	the Act
Waitākere Ranges Heritage Area Monitoring Report – Volume 2: Detailed results	the 2013 Report
Waitākere Ranges Local Board	the local board
Waitākere Ranges Regional Park	the regional park

10 References

Statutory documents

Parliamentary Counsel Office. (Reprint as at 20 May 2014). Waitākere Ranges Heritage Area Act 2008. Retrieved from

<http://www.legislation.govt.nz/act/local/2008/0001/latest/DLM1076035.html>

Parliamentary Counsel Office. (Reprint as at 18 October 2017). Resource Management Act 1991. Retrieved from

<http://www.legislation.govt.nz/act/public/1991/0069/208.0/DLM230265.html>

Parliamentary Counsel Office. (Reprint as at 20 November 2016). Heritage New Zealand Pouhere Taonga Act (2014). Retrieved from

<http://www.legislation.govt.nz/act/public/2014/0026/latest/DLM4005414.html>

Auckland Council. (2016). Auckland Unitary Plan Operative in Part. Retrieved from <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/Pages/default.aspx>

Auckland Council. (2003). Auckland Council District Plan – Operative Waitākere Section 2003. Retrieved from <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/district-and-regional-plans/district-plans/waitakere-district-plan/Pages/default.aspx>

Auckland Council. (2013). Waitākere Ranges Heritage Area Monitoring Report 2013 – Volumes 1 and 2.

Auckland Council. (2014). Waitākere Ranges Local Board Plan

Auckland Council. (2017). Waitākere Ranges Local Board Plan

Auckland Council. (2010). Regional Parks Management Plan 2010 – Waitākere Section.

Retrieved from <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/parks-sports-outdoor-plans/Pages/regional-parks-management-plan.aspx>

Auckland Council. (2015). Legacy Bylaw Provisions on Freedom Camping - Waitākere City Council Public Places Bylaw 2010. Retrieved from

<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/bylaws/Documents/legacy-bylaw-provisions-freedom-camping.pdf>

Indigenous terrestrial and aquatic ecosystems

Landers, Todd J, Bishop, Craig D, Holland, Kristi R, Lawrence, Grant R and Waipara N (2018). Changes in indigenous ecosystems and the environment within the boundary of

the Waitākere Ranges Heritage Area Act 2008: 2012-2017 report. Auckland Council technical report, TR2018/002

Crewther, K (2016), – Report on modelled distribution of long-tailed bats in the Auckland region, Prepared for Auckland Council: April 2016 (available on request from Auckland Council)

Boffa Miskell (2017), - Auckland Long-tailed Bat Monitoring 2017 – Bat Roost Assessment in Waitākere Ranges Regional Park, Prepared for Auckland Council: 19 June 2017 (available on request from Auckland Council)

Auckland Council. (2017). Kauri Dieback Report 2017: An investigation into the distribution of kauri dieback, and implications for its future management, within the Waitākere Ranges Regional Park. Version 2. Retrieved from <https://ourauckland.aucklandcouncil.govt.nz/media/16649/kauri-dieback-waitakere-ranges-report.pdf>

Auckland Council. (2015). Waitākere Ranges Strategic Weed Management Plan. Retrieved from: <https://www.aucklandcouncil.govt.nz/pages/search.aspx?k=strategic%20weed%20management%20plan>

Auckland Council. (2007). Auckland Regional Pest Management Strategy 2007-2012. Retrieved from <https://www.aucklandcouncil.govt.nz/environment/what-we-do-to-help-environment/Pages/our-regional-pest-management-strategy.aspx>

West Coast Lagoons Action Plan (5 February 2016). Retrieved from http://infocouncil.aucklandcouncil.govt.nz/Open/2016/03/ENV_20160315_AGN_6179_AT.htm#PDF3_Attachment_40662_1

Natural landforms, landscape and the night sky

Auckland Council. (Revised 2014). Waitākere Ranges Foothills Design Guide. Retrieved from <https://www.aucklandcouncil.govt.nz/arts-culture-heritage/heritage-walks-places/Pages/waitakere-ranges-heritage-area.aspx>

Auckland Council. (2017). Building in the Bush Design Guide. Retrieved from <https://www.aucklandcouncil.govt.nz/arts-culture-heritage/heritage-walks-places/Pages/waitakere-ranges-heritage-area.aspx>

Recreational use of the heritage area

Auckland Council. (2014). Regional Parks 2013/2014 Visitor Profile and KPI Research Results (Captiva)

Auckland Council. (2017) Regional Parks 2016/2017 KPI Research Results. (Captiva)

- Auckland Transport. (2017). Traffic counts. Retrieved from <https://at.govt.nz/about-us/reports-publications/traffic-counts/>
- Groundspeak Inc. (2018). Geocaching. Retrieved from <https://www.geocaching.com/play>
- Strava Inc. (2018). Global Heatmap. Retrieved from www.labs.strava.com/heatmap
- Auckland Council. (2012). Dog management bylaw. Retrieved from <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/bylaws/current-bylaws/Pages/default.aspx>
- Auckland Council. (2012). Policy on dogs. Retrieved from <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-policies/Pages/policy-on-dogs.aspx>
- Auckland Council. (2018). Auckland Design Manual. Retrieved from <https://www.aucklandcouncil.govt.nz/pages/search.aspx?k=auckland%20design%20manual>
- Auckland Council. (2018). Waitākere Ranges Heritage Area design guidelines for local parks Draft for consultation. Retrieved from <https://www.aucklandcouncil.govt.nz/have-your-say/topics-you-can-have-your-say-on/draft-Wait%C4%81kere-local-parks-design-guide/Pages/draft-wait%C4%81kere-local-parks-design-guide-consultation-documents.aspx>
- Auckland Council. (2014). Waitākere Ranges Heritage Area Business Stocktake
- Auckland Council/Qrious. (2017). Visitor numbers to Waitākere Area

Historic Heritage and scheduled trees

- Plowman, M. (2013). Waitākere Ranges Heritage Area 2018 State of the Environment Historic Heritage Monitoring Report – Phase 1. Auckland Council.
- Tatton, K. (July 2015). Stage 1A – Historic Heritage Data Collation, Review and Rationalisation: Survey and Monitoring Program Report. Prepared for Auckland Council.
- Dave Pearson Architects. (June 2017). Waitākere Ranges Heritage Area Monitoring Report. Prepared for Auckland Council.

Water catchment and supply

- Auckland Council. (2015). State of the Environment Monitoring: River Water Quality Annual Report 2014. Auckland Council technical report 2015/28.

Others

Statistics New Zealand

http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/demographic-trends-2012/international%20travel%20and%20migration.aspx

http://archive.stats.govt.nz/browse_for_stats/population/Migration/international-visitor-arrivals-jun-12.aspx

Ministry of Business, Innovation and Employment; New Zealand Tourism Forecasts 2017-2023

<http://www.mbie.govt.nz/info-services/sectors-industries/tourism/tourism-research-data/international-tourism-forecasts/documents-image-library/forecasts-2017-report-final.pdf>

Auckland Tourism Events and Economic Development <https://www.aucklandnz.com/nz>

11 Appendices

Appendix 1: Waitākere Ranges Local Board funding for the Waitākere Ranges Heritage Area Programme 2013 to 2018

	Financial expenditure shown per financial year. Allocated budget shown in brackets. Actual spend shown in bold.				
	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Tangata Whenua Engagement	[\$10,000] \$0				
Ecological Planning	[\$15,000] \$7,560				
Local Area Plan Muddy Creeks	[\$5,000] \$1,850				
Local Area Plan Te Henga /Bethells Beach	[\$25,173] \$8,564	[\$20,173] \$12,964	[\$1,500] \$835		
Oratia Design Project	[\$2,500] \$248				
Heritage Area Public Information			[\$19,500] \$0		
Auckland Council Website Development		[\$2,000] \$3,960			
Foothills Design Guide	[\$2,500] \$6,600				
Building in the Bush Design Guide		[\$15,000] \$13,714	[\$2,000] \$10,950	[\$8,500] \$0	[\$2,000]
Heritage Area Community Forum		[\$5,000] \$262	[\$4,000] \$2,579	[\$4,000] \$0	
Heritage Area Conservation Network Forum		[\$4,000] \$4,344			
Long Tail Bat Research	[\$5,000] \$4,760	[\$5,000] \$5,000	[\$5,000] \$5,000	[\$5,000] \$5,000	[\$5,000]
Heritage Site Mapping – Phase 1		[\$12,500] \$12,430			
Heritage Site Mapping – Stage 1 Field Work		[\$38,500] \$37,557	[\$60,000] \$59,522	[\$30,000] \$30,000	[\$25,000]
Strategic Weed Projects (Bufferzone Project)	[\$20,000] \$20,000	[\$25,000] \$25,000	[\$25,000] \$25,000	[\$45,000] \$45,000	[\$45,000]

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

Community Weed Bins			[\$60,000] \$60,000	[\$100,000] \$100,000	[\$76,693]
Sustainable Neighbourhoods Programme	[\$90,000] \$90,000	[\$90,000] \$90,000			
Sustainable Neighbourhoods Transition Support			[\$15,000] \$15,000		
Weed and Pest Grants			[\$30,000] \$6940		
Road Corridor Management Guidelines	[\$20,000] \$1,550				
Road Safety Assessment Bethells / Te Henga				[\$10,000] \$0	[\$10,000]
Local Business Stocktake	[\$20,000] \$24,750	[\$5,000] \$5,000			
Small Business Facilitation		[\$3,000] \$1,986			
Thrive Newsletter			[\$5,000] \$5,000	[\$7,500] \$7,500	
Total budget allocated Total budget spent	[\$215,173] \$165,882	[\$225,173] \$212,217	[\$227,000] \$199,006	[\$210,000] \$189,462	[\$163,693]

Appendix 2: Update on recommendations for future monitoring from the 2013 Monitoring Report

Progress on recommendations for future monitoring from the 2013 Monitoring Report	
Topic recommendations from the 2013 Monitoring report	Progress on recommendations – 2018 (Note: equivalent topic names and order have changed in 2018 report)
2.1 Landscape	Section 3. Natural landforms, landscapes and the night sky topic
More accurate methods are required to assess the extent of ongoing vegetation removal.	Over 80 additional photos were taken during the 2017 assessment to enable landscape units to be analysed in more detail. This partially addresses the development and accuracy of the methods since the 2013 monitoring report.
Methods for evaluating changes in rural activities and their effects, both positive and negative, on rural character should be developed.	
The potential to develop indicators for landscape objectives which are difficult to measure (for example quietness and darkness) should be explored.	
	Dark Sky NZ has prepared a report to provide some baseline data for the level of darkness. This will enable comparisons to be made in future monitoring reports to determine if the heritage area is getting darker or lighter. A method for measuring quietness has not yet been determined.
2.2 Development and consent activity	Section 5. Development and consent activity topic
Modifications to the consents monitoring and reporting system (Pathways) should be considered and put into effect to provide more efficient monitoring and reporting to better meet the monitoring requirements of the Act.	Consent monitoring upgrades of the reporting system have been achieved by applying additional filtering to the Excel spreadsheet data derived from the upgraded Newcore consents records system.

Improved monitoring of vegetation growth and regeneration and the effectiveness of planting and weed management conditions and covenants should be undertaken so that their contribution to landscape and ecosystem enhancement and restoration can be properly assessed.	Improved monitoring of vegetation growth and regeneration has not taken place primarily as the aerial lidar survey from 2016 is not yet available for analysis. It is expected in 2018, beyond this reporting period.
'Snapshot' records of the urban footprint (buildings and impervious surfaces) for the heritage area and adjacent urban areas should be created and maintained, preferably on a regular basis.	The Urban footprint and impermeable surface layer was not up-dated in time for this report. However, work is underway on a new layer for the whole region and this is expected in 2018, beyond this reported period.
2.3 Ecosystems and ecosystem services	Section 2. Indigenous terrestrial and aquatic ecosystems topic
Better baseline information should be established on a full range of threatened species and ecosystem types, giving priority to those which contribute to achievement of national, regional and local biodiversity targets and objectives.	The council has prioritised data collection for more threatened or less-understood ecosystems between 2013 and 2017 and has mapped Biodiversity Focus Areas to ensure a range of native ecosystems are protected in the long term.
Continue to support collection of long term environmental and ecological datasets in order to provide outcome-based measures of ecosystem health and integrity.	Data collection for more threatened or less-understood ecosystems is being prioritised and monitoring of the Te Henga wetland has increased. In terms of the next five years (2018-2023) there will be: <ul style="list-style-type: none"> • monitoring of the dune systems at multiple locations along the west coast (commenced in 2017) • monitoring of critically threatened coastal turf ecosystems (commenced in 2016) • monitoring of seabirds • funding could be made available to enable monitoring of the road corridor to provide data on weeds and the effectiveness of weed management programmes.
Acquire high resolution aerial photography and digitizing of key data on a regular basis to provide a more adequate method for assessing habitat and landscape quality and change. This should be linked to a programme of field-based survey work. Priority should be given to fragmented/mosaic habitats	High resolution aerial photography and LIDAR data has been completed and is currently being analysed. Together with a new impermeable surface layer, this data is likely to be available for analysis in 2018, beyond this reporting period. Monitoring of the dune systems at multiple locations along the west coast (commenced in

around the periphery of the regional park and in the foothills, together with wetlands and dunelands.	2017).
Establish processes and invest in technology to allow easier and more timely collection/comparison of environmental, resource consent and community group data.	Lidar and aerial analysis should assist in comparison of environmental data with resource consents. Currently investigations into capturing data from the Newcore system is occurring to determine how consent data can be better linked to monitoring requirements.
Introduce better recording and follow up systems for covenants established through planning consent processes, along with monitoring of resource consent conditions regarding ecosystems and restoration.	The recording systems of Council have been subject to an ongoing rationalising and shift to the Newcore system which went live in June 2017. This has prevented any enhanced recording of information to be introduced within this monitoring period.
Provide for better monitoring of habitat quality outside the regional park, particularly in areas of existing or potential ecological value in the bush living landscapes and foothills, including an extension of the network of monitoring sites.	New monitoring sites outside of the regional park were not established for the 2013-2018 period. This is recommended in the 2018 report.
Consideration should be given to reporting on sites in the heritage area which are included in the national Land Use and Carbon Analysis System (LUCAS) programme.	Due to the national uncertainty around carbon pricing no action was taken to progress reporting about this over the monitoring period.
2.4 Cultural and built heritage	Section 7. Historic Heritage and scheduled trees topic
To understand the risk to historic heritage and site condition within the heritage area, regular monitoring and an open and participatory approach is recommended, working closely with tangata whenua and local community groups. Monitoring, survey and re-assessment allows recommendations to be made that reflect dynamic environments, changing significance of historic heritage and produce data based on the evidence,	The 2013 Monitoring Report was unable to determine the state of historic heritage, and therefore did not establish a baseline to enable future monitoring. The primary reason for this was a lack of quantitative and qualitative data, including data on the condition of historic heritage in the heritage area. The supporting technical historic heritage report ⁷⁷ provides more detailed staged recommendations on how to achieve the required baseline data to enable future monitoring. These recommendations include a

⁷⁷ Waitākere Ranges Historic Heritage Monitoring Report, 2013. This report was a summary of the following report: Gallagher, B. 2013, 'Waitakere Ranges Heritage Area 2013 Monitoring Report', prepared for Auckland Council.

<p>which has the potential to track changes in condition, environment, land use and the success or failure of management strategies previously employed.</p>	<p>data collation and rationalisation study in conjunction with staged site survey and monitoring. In 2014/2015 the data collation and rationalisation study was undertaken by council.</p>
<p>Highest initial priority should be given to sites at greatest risk, in particular:</p> <ul style="list-style-type: none"> • Peripheral sites, especially the open west coast coastline; • Ephemeral non-protected sites, especially pre-European sites; and • Areas of farming where animals graze. 	<p>In 2015/2016 council developed a field survey and monitoring programme for 653 priority sites. These sites were prioritised based on risk and site accessibility. These sites were primarily located on council land and/or were within the coastal marine area. To date, 164 archaeological sites along the Manukau Harbour coast and 90 built heritage places have been surveyed.</p> <p>The survey of all the priority sites was expected to be completed in time for the 2018 Monitoring Report however this was not possible due to the extent of remedial work required (correcting poor quality data, patchy survey information and poorly maintained archives) and the funding and staff resource limitations to undertake the work.</p> <p>The more detailed recommendations also identified priority research projects. To date, four research projects are underway. These relate to significant archaeological and built heritage sites that represent broad historic Māori and European settlement and industrial activities and land use in the heritage area.</p> <p>The data collation and rationalisation study and the priority site surveys have not involved iwi or local community groups. However the development of two Local Area Plans⁷⁸ involved significant community and iwi involvement. Both these Local Area Plans identified key actions which included the implementation of archaeological surveys, site management plans and monitoring of cultural heritage sites.</p>
<p>2.5 Recreation and visitor management</p>	<p>Section 4. Recreational use of the heritage area topic</p>
<p>Monitoring of visitor use and satisfaction should be extended to additional locations</p>	<p>There are a number of council departments, and council-controlled organisations (ATEED and AT), which are collecting data. However, there is</p>

⁷⁸ The Muddy Creeks (Parau, Laingholm, Woodlands Park, Waimā) (2014) and the Te Henga (Bethells Beach)/Waitākere River Valley (2015) Local Area Plans

in the heritage area.	inconsistency or lack of co-ordinated approach about where and how this data is collected and how the information is shared. In some cases, this makes comparisons between 2013 and 2017 or using figures collected by one department in relation to those collected by another department difficult.
Further research should be carried out to assess the potential for recreational activities based on the distinctive heritage and character of the foothills, including those which support traditional rural land uses.	There is still a lack of data around the satisfaction with, and use of, local parks and reserves. Further research on the potential for recreational activities based on the distinctive heritage and character of the foothills has not been progressed.
2.6 People and communities	Section 6. People and communities topic
Initiate further discussion with Te Kawerau a Maki and Ngati Whatua regarding ways to progress those parts of the Act which relate to their interests.	There is regular engagement with each iwi, and following the Treaty of Waitangi settlements, engagement has commenced on a range of matters related to the management of land that forms part of those settlements.
Include assessment of community wellbeing (through for example surveys) as part of future LAP preparation processes and incorporate into the next five-year monitoring report.	Has not been progressed
Develop a 'Quality of Life' indicator that is tailored to the experience of living in the heritage area. This could be implemented as a 'Quality of Life' Survey before the preparation of the proposed Area Spatial Plan for the Waitākere Ranges Local Board area (provisionally scheduled for 2016).	Has not happened as the Area Plan programme across the City has been put on hold.

Appendix 3: Extracts of the Waitākere Ranges Heritage Area Act 2008

Section 7 National significance and heritage features of heritage area

The heritage area is of national significance and the heritage features described in subsection (2), individually or collectively, contribute to its significance.

- (2) The heritage features of the heritage area are—
- (a) its terrestrial and aquatic ecosystems of prominent indigenous character that—
 - (i) include large continuous areas of primary and regenerating lowland and coastal rainforest, wetland, and dune systems with intact ecological sequences:
 - (ii) have intrinsic value:
 - (iii) provide a diversity of habitats for indigenous flora and fauna:
 - (iv) collect, store, and produce high quality water:
 - (v) provide opportunities for ecological restoration:
 - (vi) are of cultural, scientific, or educational interest:
 - (vii) have landscape qualities of regional and national significance:
 - (viii) have natural scenic beauty:
 - (b) the different classes of natural landforms and landscapes within the area that contrast and connect with each other, and which collectively give the area its distinctive character:
 - (c) the coastal areas, which—
 - (i) have a natural and dynamic character; and
 - (ii) contribute to the area's vistas; and
 - (iii) differ significantly from each other:
 - (d) the naturally functioning streams that rise in the eastern foothills and contribute positively to downstream urban character, stormwater management, and flood protection:
 - (e) the quietness and darkness of the Waitakere Ranges and the coastal parts of the area:
 - (f) the dramatic landform of the Ranges and foothills, which is the visual backdrop to metropolitan Auckland, forming its western skyline:
 - (g) the opportunities that the area provides for wilderness experiences, recreation, and relaxation in close proximity to metropolitan Auckland:
 - (h) the eastern foothills, which—

- (i) act as a buffer between metropolitan Auckland and the forested ranges and coasts; and
- (ii) provide a transition from metropolitan Auckland to the forested ranges and coast:
- (i) the subservience of the built environment to the area's natural and rural landscape, which is reflected in—
 - (i) the individual identity and character of the coastal villages and their distinctive scale, containment, intensity, and amenity; and
 - (ii) the distinctive harmony, pleasantness, and coherence of the low-density residential and urban areas that are located in regenerating (and increasingly dominant) forest settings; and
 - (iii) the rural character of the foothills to the east and north and their intricate pattern of farmland, orchards, vineyards, uncultivated areas, indigenous vegetation, and dispersed low-density settlement with few urban-scale activities:
- (j) the historical, traditional, and cultural relationships of people, communities, and tangata whenua with the area and their exercise of kaitiakitanga and stewardship:
- (k) the evidence of past human activities in the area, including those in relation to timber extraction, gum-digging, flax milling, mineral extraction, quarrying, extensive farming, and water impoundment and supply:
- (l) its distinctive local communities:
- (m) the Waitakere Ranges Regional Park and its importance as an accessible public place with significant natural, historical, cultural, and recreational resources:
- (n) the public water catchment and supply system, the operation, maintenance, and development of which serves the people of Auckland.

Section 8 Heritage area objectives

The objectives of establishing and maintaining the heritage area are—

- (a) to protect, restore, and enhance the area and its heritage features:
- (b) to ensure that impacts on the area as a whole are considered when decisions are made affecting any part of it:
- (c) to adopt the following approach when considering decisions that threaten serious or irreversible damage to a heritage feature:
 - (i) carefully consider the risks and uncertainties associated with any particular course of action; and
 - (ii) take into account the best information available; and
 - (iii) endeavour to protect the heritage feature:

- (d) to recognise and avoid adverse potential, or adverse cumulative, effects of activities on the area's environment (including its amenity) or its heritage features:
- (e) to recognise that, in protecting the heritage features, the area has little capacity to absorb further subdivision:
- (f) to ensure that any subdivision or development in the area, of itself or in respect of its cumulative effect, —
 - (i) is of an appropriate character, scale, and intensity; and
 - (ii) does not adversely affect the heritage features; and
 - (iii) does not contribute to urban sprawl:
- (g) to maintain the quality and diversity of landscapes in the area by—
 - (i) protecting landscapes of local, regional, or national significance; and
 - (ii) restoring and enhancing degraded landscapes; and
 - (iii) managing change within a landscape in an integrated way, including managing change in a rural landscape to retain a rural character:
- (h) to manage aquatic and terrestrial ecosystems in the area to protect and enhance indigenous habitat values, landscape values, and amenity values:
 - (i) to recognise that people live and work in the area in distinct communities, and to enable those people to provide for their social, economic, environmental, and cultural well-being:
- (j) to provide for future uses of rural land in order to retain a rural character in the area:
- (k) to protect those features of the area that relate to its water catchment and supply functions:
- (l) to protect in perpetuity the natural and historic resources of the Waitakere Ranges Regional Park for their intrinsic worth and for the benefit, use, and enjoyment of the people and communities of the Auckland region and New Zealand.

Appendix 4: Public feedback received at 15 June 2017 meeting

These comments are transcribed from 'post-it notes' used at the meeting. Minor editing has been done to assist the reader. Red dots were used to indicate where other people at the meeting also supported the comments on the 'post-it notes'. At the time of this meeting water catchment and supply was not identified as a topic which is why there are no comments grouped under this heading.

General Concerns

Concerned objectives of the WRHA Act are not being consistently upheld, especially by AC Consenting processes	
The council fails to follow the WRHA Act when consenting e.g. felling of protected trees without affected party consents	
CCO – AT etc. not being responsible on their own land. Need clear directive	2 red dots
Council must police its own rules regarding maintenance of septic water systems both traditional and hi tech	4 red dots
Council shouldn't be doing the monitoring report.	
Tree rules need to be strengthened following changes to the law which weakened tree rules	2 red dots
Now feel disfranchised since amalgamation i.e. engagement with council now very difficult	
More resources are needed to ensure compliance with both general and specific rules	
Weak integration of the WRHA Act and consenting processes? Do we need an amendment to the WRHA Act to sharpen teeth?	
Will monitoring analysis verify how effective the WRHA Act objectives have been? Will the council be able to identify what improvements to the area have taken place?	

Landscape

Householders and builders to be encouraged / educated to use darker paint colours on buildings in the ranges	
Local landowners need education and encouragement work to on their roadside margins, e.g. weeds	
AT and Regional Parks Infrastructure should give effect to the WRHA Act and its values i.e. not a proliferation of signs, badly located toilets	3 red dots
Large trees removed lack of protection	
Resource and building consent processes must become more practical and efficient in their application	1 red dot
Colour palettes for development would help mitigate adverse effects of	

development on the landscape	
Views from the sea are important	1 red dot
Council should put a heavy weighing on the heritage and protected areas when assessing consents	
Regional parks impact can have a big impact i.e. even changing their wooden directional signs to flash plastic ones are inappropriate and their tree removal activities	1 red dot
Long term would like to see far fewer pine trees, pink cherry blossom trees etc. and more native trees.	3 red dots
Lose the Laingholm Phoenix palms	1 red dot
Bring back prohibited activity status (for subdivision) in the WR Zones	
Protect our ridgelines more rigorously	3 red dots
Concerns about wilding pine trees which are impacting on the landscape (all over the ranges)	3 red dots
Kauri dieback has seriously affected the landscape of large areas of the heritage area Landscape is being altered illegally in the ranges e.g. bush clearance, and when reported to council, very little is done in my experience	2 red dots
Actively maintain the dark night sky qualities esp. relevant to AT	2 red dots

Development and Consents

Cutting down of protected trees needs to stop removal of large trees – no removal of any trees	
Too many unconsented activities and no real follow-up of complaints	2 red dots
Oratia Water stealing Promote subdivision use home water tanks instead	
All new consent should require water tanks, rain gardens, public toilets too	3 red dots
How are consents monitored and who is monitoring council performance?	
Consents analysis is required of <ul style="list-style-type: none"> • Trees • Subdivisions • Effect of WRHA Act consenting accuracy Council should put a heavy weight of the Heritage protected areas when assessing consents Follow up and enforcement of infringements. Follow the rules. Consenting long, different and costly and people doing a lot of illegal work and these not enforced All up more restrictive	
How have the liberalised tree trimming regulations impacted the area?	
Need to test the different impact of the WRHA Act on consenting activity given RMA requirements to consider cumulative effects	

Ecosystems and Ecosystem Services

Additional weed control on roadsides, especially Scenic Drive and feeder roads to the beaches need to be increased	
Contractors need training to better identify problem species and spray out beyond the roadside e.g. Japanese honey suckle infestation on turn off to Bethells on Scenic Drive.	
Need for Ecological Pest Management programme to control possums in particular and especially in Piha	
Lack of active efforts by AC to reduce the proliferation of exotic weeds including Pampas, Cape Ivy etc.	
Protecting Muddy Creek LAP eco corridor and more value on invertebrates, native fish species in relation to tree clearance	2 red dots
How can we improve our response to Kauri dieback?	
Actively pursue clean swimming in streams and lagoons – no more reports!	2 red dots
Cornwallis – French Bay Manukau Harbour Wood Bay Water quality – sewage overflow around the whole coast	1 red dot
Why did folk work to create the heritage area? Because of its environment <ul style="list-style-type: none"> The hills and the bush If these special ecosystems are not protected and the act is an ASS. Bush = trees, plants and the animals that live there	2 red dots
Invasive weeds are out of control in many places in the heritage area e.g. Agapanthus, Pampas, wattles	6 red dots
Do not use glyphosate Get AT to drop the use Do it with steam though Road are the reservoir of a lot of the weeds in the Ranges. AT are completely incompetent at controlling weeds on the road corridors, particularly climbing weeds and Wattle etc.	2 red dots
Engage with all trade users via an attractive trade map on internet and mobile apps – (social media) Have pop-ups that ask people to prevent the spread of Kauri dieback	1 red dot
Little Muddy Creek Sediment and water quality, very tidal, lots of kayaks etc., concerned about Water Treatment Plant at top of Waituna Would affect water quality and make it not swimmable.	
Locals running Pest animals and weeds Possum and rat central South Titirangi peninsulas from Little Muddy Creek to Wood Bay and north to village	4 red dots
Predator free Auckland needs to be implemented in heritage area. Possum	4 red dots

problems are escalating rapidly Dead is good	3 red dots
Pest free Waitākere If Kaipatiki can do it so can we!	1 red dot
Waitākere Valley big pine trees! Need removal	1 red dot
Waitākere swamps (Bethells Road) resume Willow clearance project ASAP. And other weeds e.g. Honeysuckle and Arundo Donax which are invading the Mosquito Lane area of Bethells Road. N.B. Willow control is now going backwards, and all the gains will be lost if the central projects is not resumed ASAP	1 red dot
Maintain and enhance protection of coastal habitats and species Including threats from vehicles on beaches, dogs i.e. penguins and seals, weeds	1 red dot
Increasing pressures and threats from diseases and pest e.g. Kauri dieback Myrtle rust, possums	
All indigenous trees/vegetation – girth/age should have some protection Heritage area, all trees should be protected	2 red dots
Rabbit control	
Pest control <ul style="list-style-type: none"> • Possums • Rats Auckland South to Titirangi	
Encourage local pest control, maybe negotiate a deal with trap makers that can be purchased by locals, this encourages those people to adopt bush	1 red dot
The Kauri dieback prevention programme is not working. Council needs to do more to promote the problem via internet track mapping and social media (mobile apps) Still promoting Hillary Trail	1 red dot
Stop promoting Hillary trail and promote Kauri Dieback prevention through social media	1 red dot
Kauri Dieback Close healthy areas Close infected until tracks upgraded Improve cleaning stations and staff them Stop Hillary trail marathon Prosecute people who use closed tracks More funding for biosecurity Upgrade cleaning stations Enforce track closures	1 red dot
Run a campaign “Make this your last cat in the ranges”	1 red dot
Pae o Te Rangī Tobacco weeds needs attention ASAP	1 red dot

(long road – access) council owned and part regional park	
---	--

People and Communities

Recognition of the historical contributions of trampers – part of the cultural heritage of the area. Waitākere track user's forum.	
More coordinated support for community environment initiatives	1 red dot
AT have an important role re street signs and furniture etc. If not well done it can affect people's perceptions	

Cultural and Built Heritage

The tramping clubs 1920s to early 1980 were a majority in track use of the Waitākere Ranges. Saw millers, dam builders and farmers first created the tracks. The trampers designed the network we have today. The early trampers need to be recognised part of the ranges heritage by collection text and image archive in Council A display in the Pararaha Valley	1 red dot
Little upkeep of abandoned buildings in Woodlands Park Road	2 red dots
AC has allowed a concession business to establish on an archaeological heritage site at the Radar Station. Piha concession should be rescinded.	
Maintain integrity of heritage landscape i.e. natural, green	5 red dots
Heritage buildings need to be retained in appropriate contexts., i.e. old farmhouses in farm open space settings	2 red dots
Give Cornwallis Wharf reserve sense of grandeur! Live ships! Look in Marlborough Sounds!	
Built Heritage brochure needed specifically for the heritage area including what is open for public access	
Use Māori place names	
The level of protection of natural features is going backwards. AC promoting features on social media without monitoring or control. Features are being destroyed.	
Lack of acknowledgement of Māori history of Little Muddy Creek/Ridge line.	1 red dot
Hellaby House How is it managed now? Who is responsible? How are council heritage assets managed? Are they open to the public?	
No private camping concessions of heritage land especially historic sites	
Huia Road brick bridge by Tangiwai Reserve, Auckland's oldest in disrepair.	
Some cultural heritage may be best celebrated through reconstruction i.e. Cornwallis wharf	1 red dot
CCOs need to hold their scheduled buildings with a minimum standard e.g. Nihotupu Filter station	1 red dot

Tunnel point – old train line - lots of artefacts Regional park put in a toilet not in a suitable place Implementation does not always take into account the strategic direction	
Issue with development on properties surrounding Historic heritage places. (No protection afforded) e.g. non-complying development not taking into account the WRHA Act. i.e. allowing a 3-storey development next door	
Māori heritage isn't necessary visible but needs respect / protection celebration as appropriate defined by iwi	3 red dots
AT needs to take the WRHA Act into account and Parks also re their built infrastructure – road signs, toilets, lights, toilets	3 red dots
Tomorrows cultural heritage is todays building i.e. Arataki and elevations – contemporary buildings now but define the heritage area in part for the future	
Opportunity to enhance and continue heritage features through design guidelines use of colour and building materials	
Built new development environment should be subservient to natural environment	
Sensitively interpret and respect cultural and built heritage features i.e. Tunnel Point but use of compromise or diminished integrity	1 red dot

Recreation and Visitor Management

The track use 2010 was roughly 700K day visits per annum. It is now roughly 850-1000K p.a. 2008 = Kauri dieback 2010 = Hillary trail When the track began to exceed the annual Regional growth	
Most of the track users today use internet and mobile apps to plan their journeys in the Waitākere. Council should setup internet track maps with track users and mobile apps to engage with track users about Kauri dieback.	1 red dot
Engage with your track users community for Waitākere Ranges by setting up an advisory panel of disabled family walkers, runners, mountain bikers, trampers and every walker possible.	
Investigate the current track monitoring methodology – what are the data capture points? (the indicator tracks) and what are the analyses models?	
Stop the human vectors of kauri dieback. Close track into and through uninfected areas. STOP The Hillary marathon Waitākere is a class 1 conservation park 1st and foremost not a recreational park	
Dogs should be limited in regional parks and on beaches.	
Dogs – Whatipu – banned always Cat – curfew and feral cats	
Control dogs access by laws	2 red dots
Off leash day walkers not monitored after hours, spread Kauri dieback,	

including professional pack walker	
More mountain biking Open 4WD tracks Beveridge is very popular It's not about fast riding but open access	
Extra mountain bike tracks in the Waitākeres Yes, but not the existing walking tracks	
Mountain biking on other tracks other than Beveridge Ridge Road Long Road Cascades Enforcement	
Keep mountain bikes off existing tracks	6 red dots
Safer walking around Waitākere roads footpaths!	1 red dot
Public transport preventing people walking up Scenic Drive	
Park and Ride! Has it come to that? Or should it?	2 red dots
Designate Orpheus Bay as an official nudist beach. (Someone keeps putting up signs saying no nudity!)	2 red dots
Engage and inspire these 'meet-up' groups via the media, they use Meet-up (sometimes 100 or more at a time) via internet, track maps and mobile apps.	
Who and how are unofficial walking groups monitored? There seems to be an increased number of new groups e.g. 'Waitākere Walks'	1 red dot
Plastic signage replaces more appropriate eco signage. A backward step.	
Avoid proliferation of signs	
Council Controlled Land Need to look at classification of reserve scientific reserve most stringent	1 red dot
Close tracks through infected areas until those tracks are up graded. The current survey results clearly indicate the movement of sports along the tracks	
Karekare, Piha, Anawhata car parks over flowing in summer, weekends, busier and more congested than ever, what is the solution? Anawhata Carpark- cap.	1 red dot
Te Henga <ul style="list-style-type: none"> • Capacity at hotspots • Incorrect information on websites • Dogs free running disturbing native birds 	
Pararaha Valley as a wilderness area on the West Coast in 1960s-1790s. Tramper sports day – invite people from across the country.	

Appendix 5: Indicator results summary table

Scores are based on a 1000-point scale from 1.000 (excellent) to 0.000 (very poor).

The 'Change 2012-2017' column is coded as follows: ↗ = improvement in indicator; ↘ = deterioration in indicator; → = no significant change in indicator; # = data available for 2017, but the absence of 2012 information means change is not reported; - = no data available for 2012-17 but data is likely to be available in time for inclusion in the next report; * = no data available at present and collecting the information required to inform the indicator is a longer-term proposition; n/a = indicator not relevant to the 2012-17 monitoring period. + = These indicators are not included in this report as data available relate to a 10-year time period back to the enactment of the Act in 2008, rather than the 2012-17 time period covered in this report

Code and category	Sub-category	Name	Score in 2012	Score in 2017	Change 2012 - 2017
Habitat 1 ⁺	Habitat	Percentage cover of indigenous ecosystems	n/a	n/a	n/a
Habitat 2	Habitat	Loss or gain of indigenous ecosystems (area and %)	0.999	No remote sensing data	-
Habitat 3	Habitat	Loss or gain of significant indigenous habitat (area and %)	0.999	No remote sensing data	-
Habitat 4	Habitat	Loss or gain of threatened species habitat (area and %)	No data (other)	No data (other)	*
Habitat 5	Habitat	Loss or gain of naturally uncommon ecosystem types (area and %)	No data (other)	No data (other)	*
Riparian 1	Ecosystem services	Proportion of riparian area around Zone I streams with indigenous wetland, forest and/or scrub landcover	0.909	No remote sensing data	-
Riparian 2	Ecosystem services	Proportion of riparian area around Zone II streams with indigenous wetland, forest and/or scrub landcover	0.659	No remote sensing data	-

Code and category	Sub-category	Name	Score in 2012	Score in 2017	Change 2012 - 2017
Riparian 3	Ecosystem services	Proportion of riparian area around Zone I streams with wetland, forest or scrub landcover	0.915	No remote sensing data	-
Riparian 4	Ecosystem services	Proportion of riparian area around Zone II streams with wetland or indigenous vegetation landcover	0.709	No remote sensing data	-
Threatened spp 1	Biodiversity	Proportion of threatened species with a stable or increasing population size	No data (other)	No data (other)	*
Threatened spp 2	Response	Proportion of threatened fauna species under active conservation management	No data (other)	0.570	#
Threatened spp 3	Response	Proportion of threatened flora species under active conservation management	No data (other)	0.070	#
Protection 1	Response	Total area of ecosystems (area and %) protected in reserves	0.778	0.782	↗
Protection 2	Response	Total area of indigenous ecosystems (area and %) protected in reserves	0.789	0.793	↗
Protection 3	Response	Total area of significant indigenous ecosystems (area and %) protected in reserves	0.831	0.834	↗
Conservation 1	Response	Proportion of indigenous forest habitat under active conservation management	No data (other)	No data (other)	-

Code and category	Sub-category	Name	Score in 2012	Score in 2017	Change 2012 - 2017
Conservation 2	Response	Weed management	1.000	0.900	↘
Conservation 3	Response	Pest animal management	0.934	0.946	↗
Kauri 1	Threats	Change in the spatial extent of kauri dieback	0.890	0.764	↘
Forest 1 ⁺	Biodiversity	Total area of forest and scrub habitat	n/a	n/a	n/a
Forest 2	Habitat	Loss or gain of forest and scrub habitat (area and %)	0.999	No remote sensing data	-
Forest 3	Biodiversity	Overall percentage biomass of indigenous plants in forest plots	0.999	0.998	→
Forest 4	Threats	Overall percentage biomass of weedy exotic plants in forest plots	0.999	0.998	→
Forest 5	Threats	Average biomass of exotic weeds in forest plots	0.999	0.997	→
Forest 6	Biodiversity	Proportion of forest plots with no exotic trees or saplings	0.880	0.850	→
Forest 7	Threats	Average percentage dominance of weedy exotic saplings	0.998	0.998	→
Forest 8	Threats	Average percentage dominance of weedy exotic seedlings	0.999	0.998	→
Forest 10	Biodiversity	Average species diversity of indigenous plants	0.900	0.980	→
Forest 11	Biodiversity	Change in avifauna in forest and scrub habitat	0.66	0.64	→
Wetland 1 ⁺	Biodiversity	Total wetland area	n/a	n/a	n/a
Wetland 2	Habitat	Loss or gain of wetland habitat (area and %)	0.999	No remote sensing data	-

Code and category	Sub-category	Name	Score in 2012	Score in 2017	Change 2012 - 2017
Wetland 3	Biodiversity	Native: exotic plant biomass ratio in monitored wetlands	0.738	0.779	➔
Wetland 4	Biodiversity	Average native: exotic plant biomass ratio in monitored wetlands	0.752	0.760	➔
Wetland 5	Biodiversity	Average percentage frequency of native plants in monitored wetlands	0.587	0.646	➔
Wetland 6	Threats	Average percentage frequency of weedy plants in monitored wetlands	0.652	0.711	➔
Wetland 7	Biodiversity and threats	Change in wetland condition index	0.844	0.836	➔
Wetland 8	Biodiversity and threats	Change in wetland perimeter condition index	0.904	0.844	➔
Wetland 9	Biodiversity	Change in avifauna in wetland habitat	0.52	0.600	➔
Dune 1 ⁺	Biodiversity	Total duneland area	n/a	n/a	n/a
Dune 2	Habitat	Loss or gain of duneland habitat (area and %)	1.000	No remote sensing data	-
Dune 3	Biodiversity	Proportion of duneland area with a landcover of indigenous ecosystems	0.810	No remote sensing data	-
Dune 4	Biodiversity	Proportion of duneland area with urban or production agriculture landcover	0.911	No remote sensing data	-
Dune 5	Biodiversity	Building and impervious cover on duneland area (area and %)	No remote sensing data	No remote sensing data	-

Code and category	Sub-category	Name	Score in 2012	Score in 2017	Change 2012 - 2017
Dune 6	Response	Proportion of indigenous duneland habitat under active conservation management	No data (other)	No data (other)	-
Freshwater 1	Biodiversity	Ecological Quality (Rivers): Macroinvertebrate Community Index (MCI)	0.711	0.677	➔
Freshwater 2	Biodiversity	Native fish Index of Biological Integrity IBI	0.766	No data (other)	-
Freshwater 3	Ecosystem services	Water Quality (Rivers)	1.000	0.791	➔
Freshwater 4	Ecosystem services	Ecological Quality (Lakes): Rotifer Index	0.450	0.487	➔
Freshwater 5	Ecosystem services	Ecological Quality (Lakes): Macrophytes (LakeSPI)	0.100	0.080	⬇
Freshwater 6	Ecosystem services	Groundwater quality (for discharge into rivers)	No data	No data (other)	*
Water supply 1	Ecosystem services	Ecological quality – change in macro invertebrate index above vs. below dam	0.770	No data (other)	-
Water supply 2	Ecosystem services	Water quality in supply lakes	1.000	No data (other)	-

Appendix 6: Description, approximate area and conservation status of indigenous ecosystems types in the heritage area⁷⁹

Description, approximate area and conservation status of indigenous ecosystems types (Singers et al. 2017) in the heritage area (Table 1 ⁸⁰)			
Ecosystem description (and code)	Approx. total area (ha)	% of total area	Threat status (based on IUCN criteria)
Kauri-podocarp-broadleaf forest (WF11)	9,660	44.7	Endangered
Manuka-kanuka scrub (VS3)	3,700	17.1	Least Concern
Broad-leaved scrub and forest (VS5)	2,870	13.3	Least Concern
Kanuka scrub and forest (VS2)	2,610	12.1	Least Concern
Tawa-kohekohe-rewarewa-hinau-podocarp forest (WF13)	600	2.8	Vulnerable
Pohutukawa-puriri forest (WF4)	470	2.2	Endangered
Spinifex-pingao foredune (DN2)	315	1.5	Endangered
Oioi-knobby clubrush sedgeland (DN5)	265	1.2	Critically Endangered
Pohutukawa treeland, flaxland and rockland (CL1)	260	1.2	Vulnerable
Kauri forest (WF10)	205	1	Endangered
Raupo reedland (WL19)	70	0.3	Endangered
Taraire-tawa-podocarp forest (WF9)	60	0.3	Endangered
Hebe - wharariki (mountain flax) flaxland and rockland (CL6)	30	0.1	Least Concern
Machaerina sedgeland (WL11)	25	0.1	Critically Endangered
Kahikatea forest (MF4)	20	0.1	Critically Endangered
Manuka gumland (WL1)	15	0.1	Critically Endangered

⁷⁹ Table 1 (pg 2) Landers, Todd J, Bishop, Craig D, Holland, Kristi R, Lawrence, Grant R and Waipara, Nick W (2018). Changes in indigenous ecosystems and the environment within the boundary of the Waitākere Ranges Heritage Area Act 2008: 2012-2017 report. Auckland Council technical report, TR2018/002

Kahikatea-pukatea forest (WF8)	7	<0.1	Critically Endangered
Coastal turf (SA5)	8	<0.1	Critically Endangered
Harakeke-toetoe-Carex flaxland (WL18)	3	<<0.1	Critically Endangered
Mangrove forest and scrub (SA1) ¹	2	<<0.1	Least Concern
Oioi-restiad reedland (WL10)	1	<<0.1	Endangered
Lakeshore turf (WL15)	<0.1	<<0.1	Critically Endangered

+ = These indicators are not included in this report as data available relate to a 10-year time period back to the enactment of the Act in 2008, rather than the 2012-17 time period covered in this report.

Appendix 7: Duneland habitat in the heritage area⁸¹

Name	Approx size	Brief description
Whatipu duneland and wetland complex	735 ha	Whatipu comprises an expansive and largely intact mosaic of dunes, brackish and freshwater wetlands that are contiguous with terrestrial forest and shrubland.
Karekare Beach and duneland	14 ha	A moderate-sized area of largely intact dunes with scattered dwellings, bounded by steep coastal slopes and cliffs.
Piha Beach and duneland (north and south)	12.0 + 5.5 ha	Most of the dune habitat is highly modified by coastal development and weeds. The foredunes are the most intact part of the Piha duneland system and are characterized by abundant spinifix and smaller amounts of pingao. Dune planting and weeding is carried out by a local community group.
Whites Beach	1.5 ha	A small isolated beach north of Piha with an area of unmodified duneland (some of which is privately owned) buffered by steep coastal slopes.
Anawhata	3.5 ha	This isolated beach contains a largely unmodified dune system bisected by a major watercourse. It is semi-contiguous with dunes at Parera Bay to the north.
Parera Bay	1.5 ha	Lies just to the north of Anawhata and contains a small area of unmodified dunes bounded by steep coastal slopes.
Wahirua Bay	1.5 ha	A very small, isolated beach south of Wigmore Bay that contains a small, unmodified area of duneland bounded by steep coastal slopes and cliffs.
Wigmore Bay	2.5 ha	An isolated beach south of Te Henga that contains a small, unmodified area of duneland bounded by steep coastal slopes and cliffs.
Bethells Beach/Te Henga	140 ha	The site is characterized by extensive foredunes, two dune lakes, dune forest (indigenous and pine), residential dwellings, open grassland, and a large area of inland dunes within the Te Henga Scenic Reserve.
O'Neill Bay	5 ha	A small, but largely intact indigenous dune system.
TOTAL	922 ha	

⁸¹ Table 11 (pg 102, 103) Landers, Todd J, Bishop, Craig D, Holland, Kristi R, Lawrence, Grant R and Waipara, Nick W (2018). Changes in indigenous ecosystems and the environment within the boundary of the Waitākere Ranges Heritage Area Act 2008: 2012-2017 report. Auckland Council technical report, TR2018/002

Appendix 8: Threatened species in the heritage area

Note that the table numbers are those used in the footnoted report.

⁸²Table 37: ‘Threatened’ and ‘at risk’ bird species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. Current threat rankings are taken from Robertson *et al.* 2017).

Scientific name	Common name	Threat status	Actively managed 2012-2017
<i>Anas superciliosa</i>	Grey duck	Threatened-Nationally Critical	✓
<i>Anarhynchus frontalis</i>	Wrybill	Threatened-Nationally Vulnerable	✓
<i>Anas chlorotis</i>	Brown Teal	At Risk-Recovering	
<i>Anthus novaeseelandiae novaeseelandiae</i>	New Zealand pipit	At Risk-Declining	
<i>Botaurus poiciloptilus</i>	Bittern	Threatened-Nationally Critical	
<i>Bowdleria punctata vealeae</i>	Fernbird	At Risk-Declining	
<i>Callaeas wilsoni</i>	Kokako	At Risk-Recovering	
<i>Charadrius bicinctus bicinctus</i>	Banded dotterel	Threatened-Nationally Vulnerable	✓
<i>Charadrius obscurus aquilonius</i>	New Zealand dotterel - Northern	At Risk-Recovering	✓
<i>Egretta sacra sacra</i>	Reef heron	Threatened-Nationally Endangered	✓
<i>Eudynamys taitensis</i>	Long-tailed cuckoo	At Risk-Naturally Uncommon	
<i>Eudyptula minor iredalei</i>	Little penguin	At Risk-Declining	✓
<i>Gallirallus philippensis assimilis</i>	Banded rail	At Risk-Declining	
<i>Hydroprogne caspia</i>	Caspian tern	Threatened-Nationally Vulnerable	✓
<i>Haematopus unicolor</i>	Variable oystercatcher	At Risk-Recovering	✓
<i>Larus bulleri</i>	Black-billed gull	Threatened-Nationally	✓

⁸² Appendix 3 – Threatened species in the Heritage Area (pg 118 – 125) Landers, Todd J, Bishop, Craig D, Holland, Kristi R, Lawrence, Grant R and Waipara, Nick W (2018). Changes in indigenous ecosystems and the environment within the boundary of the Waitākere Ranges Heritage Area Act 2008: 2012-2017 report. Auckland Council technical report, TR2018/002

Scientific name	Common name	Threat status	Actively managed 2012-2017
		Critical	
<i>Larus novaehollandiae scopulinus</i>	Red-billed gull	At Risk-Declining	✓
<i>Mohoua albicilla</i>	Whitehead	At Risk-Declining	
<i>Nestor meridionalis septentrionalis</i>	Kaka	At Risk-Recovering	✓
<i>Petroica longipes</i>	North Island Robin	At Risk-Declining	
<i>Phalacrocorax carbo novaehollandiae</i>	Black shag	At Risk-Naturally Uncommon	✓
<i>Phalacrocorax sulcirostris</i>	Little black shag	At Risk-Naturally Uncommon	✓
<i>Phalacrocorax varius varius</i>	Pied shag	At Risk-Recovering	✓
<i>Poliiocephalus rufopectus</i>	Dabchick	At Risk-Recovering	✓
<i>Porzana pusilla affinis</i>	Marsh crake	At Risk-Declining	✓
<i>Porzana tabuensis tabuensis</i>	Spotless Crake	At Risk-Declining	✓
<i>Puffinus carneipes</i>	Flesh-footed shearwater	Threatened-Nationally Vulnerable	
<i>Puffinus griseus</i>	Sooty shearwater	At Risk-Declining	
<i>Sterna striata striata</i>	White-fronted tern	At Risk-Declining	✓

Table 38: ‘Threatened’ bat species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. Current threat rankings are taken from O’Donnell *et al.* (2013).

Scientific name	Common name	Type of organism	Threat status	Actively managed 2012-2017
<i>Chalinolobus tuberculatus</i>	Long-tailed bat	Bat	Threatened-Nationally Vulnerable	✓

Table 39: ‘Threatened’ and ‘at risk’ reptile and frog species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. Current threat rankings are taken from Hitchmough *et al.* (2015) for reptiles and Newman *et al.* (2013) for frogs.

Scientific name	Common name	Type of organism	Threat status	Actively managed 2012-2017
<i>Dactylocnemis pacificus</i>	Pacific gecko	Herpetofauna	At Risk-Relict	✓
<i>Leiopelma aff. hochstetteri</i> "Waitākere"	Hochstetter's frog (Waitākere group)	Herpetofauna	At Risk-Relict	✓
<i>Mokopirirakau granulatus</i>	Forest gecko	Herpetofauna	At Risk-Declining	✓
<i>Naultinus elegans</i>	Elegant gecko	Herpetofauna	At Risk-Declining	✓
<i>Oligosoma aff. smithi</i> "Three Kings, Te Paki, Western Northland"	Tatahi skink	Herpetofauna	Declining-Regionally Endangered	✓
<i>Oligosoma ornatum</i>	Ornate skink	Herpetofauna	At Risk-Declining	

Table 40: Threatened freshwater fish species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. Current threat rankings are taken from Goodman *et al.* (2014).

Scientific name	Common name	Type of organism	Threat status	Actively managed 2012-2017
<i>Anguilla dieffenbachii</i>	Longfin eel	Freshwater Fish	At Risk-Declining	
<i>Cheimarrichthys fosteri</i>	Torrentfish	Freshwater Fish	At Risk-Declining	
<i>Galaxias argenteus</i>	Giant kokopu	Freshwater Fish	At Risk-Declining	✓
<i>Galaxias brevipinnis</i>	Koaro	Freshwater Fish	At Risk-Declining	
<i>Galaxias maculatus</i>	Inanga	Freshwater Fish	At Risk-Declining	
<i>Galaxias postvectis</i>	Shortjaw kokopu	Freshwater Fish	Threatened-Nationally Vulnerable	✓
<i>Geotria australis</i>	Lamprey	Freshwater Fish	Threatened-Nationally Vulnerable	✓

<i>Gobiomorphus huttoni</i>	Redfin bully	Freshwater Fish	At Risk-Declining	
-----------------------------	--------------	-----------------	-------------------	--

Table 41: ‘Threatened’ and ‘at risk’ invertebrate species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. Current threat rankings are taken from Hitchmough (2013).

Scientific name	Common name	Type of organism	Threat status	Actively managed 2012-2017*
<i>Paranephrops planifrons</i>	koura	Aquatic crustacean	At Risk-Declining	
<i>Peripatus</i>	Velvet worm	Onychophora	At Risk-Declining	
<i>Paraphanta busbyii</i>	kauri snail	Snail	At Risk-Naturally Uncommon	

*At present no specific invertebrate management actions have been set by Auckland Council, however invertebrates are indirectly being managed through the various pest management programmes that exist within the Heritage area.

Table 42: ‘Threatened’ and ‘at risk’ plant species known in the Heritage Area and an indication of any direct species management by Auckland Council known to occur from 2012 to 2017. National threat rankings are taken from de Lange *et al.* (2013) and regional threat rankings are taken from Stanley *et al.* (2005).

Scientific name	Threat status - National	Threat status - Regional	Actively managed 2012-2017
<i>Abrodictyum strictum</i>	Not Threatened	Range Restricted	
<i>Adelopetalum tuberculatum</i>	Naturally Uncommon	Sparse	
<i>Anthosachne kingiana</i> subsp. <i>multiflora</i>	Data Deficient	Gradual Decline	
<i>Ascarina lucida</i> var. <i>lucida</i>	Not Threatened	Regionally Critical	
<i>Asplenium appendiculatum</i> subsp. <i>maritimum</i>	Not Threatened	Regionally Critical	
<i>Asplenium hookerianum</i> var. <i>hookerianum</i>	Not Threatened	Sparse	
<i>Astelia grandis</i>	Not Threatened	Regionally Critical	
<i>Azolla filiculoides</i>	Not Threatened	Regionally Endangered	

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

<i>Blechnum blechnoides</i>	Not Threatened	Sparse	
<i>Blechnum colensoi</i>	Not Threatened	Regionally Critical	
<i>Blechnum nigrum</i>	Not Threatened	Range Restricted	
<i>Blechnum procerum</i>	Not Threatened	Range Restricted	
<i>Blechnum triangularifolium</i>	Not Threatened	Sparse	
<i>Blechnum vulcanicum</i>	Not Threatened	Regionally Critical	
<i>Botrychium australe</i>	Naturally Uncommon	Regionally Critical	
<i>Brachyglottis kirkii</i> var. <i>angustior</i>	Nationally Vulnerable	Not listed	
<i>Brachyglottis kirkii</i> var. <i>kirkii</i>	Declining	Serious Decline	
<i>Bulbophyllum tuberculatum</i>	Naturally Uncommon	Sparse	
<i>Caladenia atradenia</i>	Naturally Uncommon	Sparse	
<i>Carex litorosa</i>	Declining	Regionally Critical	✓
<i>Carmichaelia williamsii</i>	Relict	Regionally Critical	
<i>Celmisia major</i> var. <i>major</i>	Naturally Uncommon	Gradual Decline	
<i>Centipeda aotearoana</i>	Naturally Uncommon	Data Deficient	
<i>Centipeda minima</i> subsp. <i>minima</i>	Nationally Endangered	Regionally Critical	
<i>Chionochloa conspicua</i> subsp. <i>cunninghamii</i>	Not Threatened	Regionally Critical	
<i>Coprosma acerosa</i>	Declining	Serious Decline	✓
<i>Coprosma pedicellata</i>	Not Threatened	Range Restricted	
<i>Coprosma propinqua</i> var. <i>propinqua</i>	Not Threatened	Regionally Vulnerable	
<i>Coprosma tenuicaulis</i>	Not Threatened	Data Deficient	
<i>Corokia cotoneaster</i>	Not Threatened	Sparse	
<i>Corunastylis nuda</i>	Naturally Uncommon	Not listed	
<i>Corunastylis pumila</i>	Naturally Uncommon	Gradual Decline	

<i>Corybas rotundifolius</i>	Naturally Uncommon	Regionally Critical	
<i>Dactylanthus taylorii</i>	Nationally Vulnerable	Regionally Critical	
<i>Danhatchia australis</i>	Naturally Uncommon	Sparse	
<i>Daucus glochidiatus</i>	Nationally Vulnerable	Regionally Critical	✓
<i>Dichelachne inaequiglumis</i>	Naturally Uncommon	Data Deficient	
<i>Dicksonia fibrosa</i>	Not Threatened	Sparse	
<i>Doodia mollis</i>	Naturally Uncommon	Sparse	
<i>Doodia squarrosa</i>	Naturally Uncommon	Sparse	
<i>Drosera hookeri</i>	Coloniser	Sparse	
<i>Earina aestivalis</i>	Not Threatened	Sparse	
<i>Einadia allanii</i>	Naturally Uncommon	Not listed	
<i>Elaeocarpus hookerianus</i>	Not Threatened	Regionally Critical	
<i>Eleocharis neozelandica</i>	Declining	Regionally Critical	✓
<i>Epilobium chionanthum</i>	Not Threatened	Data Deficient	
<i>Epilobium hirtigerum</i>	Nationally Critical	Regionally Critical	
<i>Epilobium nerteroides</i>	Not Threatened	Serious Decline	
<i>Epilobium pedunculare</i>	Not Threatened	Regionally Endangered	
<i>Epilobium pubens</i>	Not Threatened	Sparse	
<i>Euchiton delicatus</i>	Not Threatened	Data Deficient	
<i>Euphorbia glauca</i>	Declining	Regionally Critical	
<i>Ficinia spiralis</i>	Declining	Serious Decline	✓
<i>Galium propinquum</i>	Not Threatened	Data Deficient	
<i>Gastrodia minor</i>	Not Threatened	Range Restricted	
<i>Geranium potentilloides</i>	Not Threatened	Sparse	
<i>Geranium retrorsum</i>	Nationally Vulnerable	Gradual Decline	
<i>Geranium solanderi</i>	Declining	Gradual Decline	
<i>Glossostigma elatinoides</i>	Not Threatened	Sparse	

<i>Grammitis billardierei</i>	Not Threatened	Range Restricted	
<i>Gratiola sexdentata</i>	Not Threatened	Regionally Critical	
<i>Gunnera dentata</i>	Not Threatened	Range Restricted	
<i>Gunnera monoica</i>	Not Threatened	Data Deficient	
<i>Halocarpus kirkii</i>	Naturally Uncommon	Range Restricted	
<i>Hebe bishopiana</i>	Nationally Vulnerable	Regionally Vulnerable	✓
<i>Hebe obtusata</i>	Naturally Uncommon	Range Restricted	
<i>Hebe pubescens</i> subsp. <i>pubescens</i>	Not Threatened	Regionally Critical	
<i>Hibiscus richardsonii</i>	Nationally Critical	Not listed	
<i>Hydrocotyle pterocarpa</i>	Not Threatened	Data Deficient	
<i>Hymenophyllum armstrongii</i>	Not Threatened	Range Restricted	
<i>Hymenophyllum lyallii</i>	Not Threatened	Range Restricted	
<i>Hypolepis dicksonioides</i>	Naturally Uncommon	Sparse	
<i>Hypolepis lactea</i>	Not Threatened	Sparse	
<i>Ileostylus micranthus</i>	Not Threatened	Regionally Critical	
<i>Ipomoea cairica</i>	Not Threatened	Range Restricted	
<i>Ipomoea pes-caprae</i> subsp. <i>Brasiliensis</i>	Naturally Uncommon	Not listed	
<i>Isolepis distigmatosa</i>	Not Threatened	Data Deficient	
<i>Juncus holoschoenus</i> var. <i>holoschoenus</i>	Nationally Critical	Not listed	
<i>Juncus pauciflorus</i>	Nationally Vulnerable	Regionally Endangered	
<i>Korthalsella salicornioides</i>	Naturally Uncommon	Sparse	
<i>Lagenifera stipitata</i>	Not Threatened	Sparse	
<i>Lepidium oleraceum</i>	Nationally Endangered	Regionally Endangered	
<i>Lepidothamnus intermedius</i>	Not Threatened	Range Restricted	

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

<i>Leptinella rotundata</i>	Nationally Vulnerable	Regionally Extinct	✓
<i>Leptinella squalida</i> subsp. <i>squalida</i>	Not Threatened	Regionally Endangered	
<i>Leptinella tenella</i>	Declining	Sparse	
<i>Leptolepia novae-zelandiae</i>	Not Threatened	Data Deficient	
<i>Leptostigma setulosa</i>	Not Threatened	Regionally Endangered	
<i>Libertia micrantha</i>	Not Threatened	Range Restricted	
<i>Libocedrus plumosa</i>	Naturally Uncommon	Sparse	
<i>Lindsaea viridis</i>	Naturally Uncommon	Regionally Critical	
<i>Linum monogynum</i> var. <i>monogynum</i>	Not Threatened	Sparse	✓
<i>Lophomyrtus obcordata</i>	Not Threatened	Regionally Endangered	
<i>Luzula banksiana</i> var. <i>banksiana</i>	Not Threatened	Regionally Critical	
<i>Luzula picta</i> var. <i>picta</i>	Not Threatened	Regionally Endangered	
<i>Manoao colensoi</i>	Not Threatened	Regionally Critical	
<i>Melicytus lanceolatus</i>	Not Threatened	Range Restricted	
<i>Mentha cunninghamii</i>	Declining	Range Restricted	
<i>Metrosideros carminea</i>	Not Threatened	Sparse	
<i>Microlaena polynoda</i>	Not Threatened	Sparse	
<i>Molloybas cryptanthus</i>	Naturally Uncommon	Data Deficient	
<i>Myoporum laetum</i>	Not Threatened	Gradual Decline	
<i>Myosotis pansa</i> subsp. <i>pansa</i>	Nationally Endangered	Regionally Endangered	✓
<i>Myriophyllum robustum</i>	Declining	Regionally Critical	
<i>Myriophyllum votschii</i>	Not Threatened	Range Restricted	
<i>Myrsine divaricata</i>	Not Threatened	Regionally Endangered	
<i>Nematoceras rivulare</i>	Data deficient	Not listed	

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

<i>Nestegis cunninghamii</i>	Not Threatened	Regionally Critical	
<i>Nestegis montana</i>	Not Threatened	Sparse	
<i>Olearia albida</i>	Not Threatened	Sparse	
<i>Olearia angulata</i>	Naturally Uncommon	Data Deficient	
<i>Ophioglossum coriaceum</i>	Not Threatened	Sparse	
<i>Ophioglossum petiolatum</i>	Nationally Critical	Regionally Critical	✓
<i>Paspalum orbiculare</i>	Declining	Serious Decline	
<i>Pelargonium inodorum</i>	Not Threatened	Sparse	
<i>Pellaea falcata</i>	Declining	Regionally Critical	
<i>Pennantia corymbosa</i>	Not Threatened	Sparse	
<i>Peraxilla tetrapetala</i>	Declining	Range Restricted	
<i>Petalochilus bartlettii</i>	Naturally Uncommon	Data Deficient	
<i>Picris burbridgeae</i>	Nationally Endangered	Serious Decline	
<i>Pimelea longifolia</i>	Declining	Regionally Endangered	
<i>Pimelea tomentosa</i>	Nationally Vulnerable	Regionally Endangered	
<i>Pittosporum ellipticum</i>	Naturally Uncommon	Sparse	
<i>Pittosporum kirkii</i>	Declining	Regionally Vulnerable	
<i>Planchonella costata</i>	Relict	Gradual Decline	
<i>Plantago raoulii</i>	Not Threatened	Regionally Critical	
<i>Plumatichilos tasmanicum</i>	Nationally Vulnerable	Regionally Critical	
<i>Poa billardiarei</i>	Declining	Regionally Critical	
<i>Pomaderris apetala subsp. maritima</i>	Nationally Critical	Not listed	
<i>Potamogeton ochreateus</i>	Not Threatened	Sparse	
<i>Pseudopanax ferox</i>	Naturally Uncommon	Regionally Endangered	
<i>Pseudowintera colorata</i>	Not Threatened	Sparse	

<i>Pteris comans</i>	Not Threatened	Sparse	
<i>Pterostylis cardiostigma</i>	Not Threatened	Data Deficient	
<i>Pterostylis tasmanica</i>	Nationally Vulnerable	Regionally Critical	
<i>Ptisana salicina</i>	Declining	Gradual Decline	
<i>Ranunculus acaulis</i>	Not Threatened	Regionally Endangered	
<i>Ranunculus macropus</i>	Data Deficient	Regionally Critical	
<i>Ranunculus urvilleanus</i>	Not Threatened	Serious Decline	
<i>Raukaua anomalus</i>	Not Threatened	Range Restricted	
<i>Raukaua edgerleyi</i>	Not Threatened	Regionally Vulnerable	
<i>Rubus squarrosus</i>	Not Threatened	Data Deficient	
<i>Ruppia polycarpa</i>	Not Threatened	Data Deficient	
<i>Rytidosperma clavatum</i>	Not Threatened	Data Deficient	
<i>Scandia rosifolia</i>	Declining	Serious Decline	✓
<i>Schizaea dichotoma</i>	Naturally Uncommon	Sparse	
<i>Schoenus concinnus</i>	Not Threatened	Regionally Critical	
<i>Schoenus nitens</i>	Not Threatened	Regionally Critical	
<i>Scleranthus biflorus</i>	Not Threatened	Regionally Endangered	
<i>Senecio quadridentatus</i>	Not Threatened	Sparse	
<i>Senecio rufiglandulosus</i>	Not Threatened	Regionally Critical	
<i>Senecio scaberulus</i>	Nationally Critical	Regionally Critical	
<i>Sicyos australis</i>	Coloniser	Data Deficient	
<i>Solanum aviculare</i> var. <i>aviculare</i>	Declining	Range Restricted	
<i>Sonchus kirkii</i>	Declining	Regionally Critical	✓
<i>Sophora fulvida</i>	Naturally Uncommon	Range Restricted	
<i>Sophora microphylla</i>	Not Threatened	Sparse	
<i>Sparganium subglobosum</i>	Not Threatened	Regionally Endangered	

<i>Sticherus flabellatus</i> var. <i>flabellatus</i>	Not Threatened	Range Restricted	
<i>Streblus banksii</i>	Relict	Regionally Critical	
<i>Syzygium maire</i>	Not Threatened	Gradual Decline	
<i>Tetragonia tetragonoides</i>	Naturally Uncommon	Regionally Critical	
<i>Thelymitra aemula</i>	Not Threatened	Sparse	
<i>Thelymitra carnea</i>	Not Threatened	Sparse	
<i>Thelymitra formosa</i>	Naturally Uncommon	Regionally Critical	
<i>Thelymitra pulchella</i>	Not Threatened	Data Deficient	
<i>Thelymitra tholiformis</i>	Not Threatened	Sparse	
<i>Thelypteris confluens</i>	Naturally Uncommon	Coloniser	
<i>Tmesipteris sigmatifolia</i>	Not Threatened	Sparse	
<i>Trisetum antarcticum</i>	Declining	Not listed	
<i>Trisetum arduanum</i>	Not Threatened	Gradual Decline	
<i>Tupeia antarctica</i>	Declining	Regionally Critical	
<i>Uncinia laxiflora</i>	Not Threatened	Range Restricted	
<i>Utricularia australis</i>	Nationally Critical	Regionally Critical	
<i>Wahlenbergia littoricola</i> subsp. <i>Vernicosa</i>	Not Threatened	Sparse	
<i>Zoysia minima</i>	Not Threatened	Gradual Decline	

Appendix 9: Results of landscape field assessment

1. Foothills

Overall, there was no identifiable change in the landscape character of the majority of the 18 foothills type landscape units. Of the small changes identified, the majority were the result of localised development. Several landscape units were recorded as having either minor or very minor adverse changes. These included Anamata, Cochran, Driving and Oratia where the changes were from localised development.

In 2012 it was noted that increasing residential development in the foothills brings with it threats to the foothills' character in terms of built elements potentially dominating the natural environment and the more open rural character. In 2017, very few examples of bulky, poorly sited, designed or coloured structures were identified. Generally, they are well integrated into the landscape.

There are a number of new dwellings under construction in Shaw Road as shown in Photograph 1 below.



Photograph 1: Shaw Road with development in the subdivision behind it in 2017

Photograph 2 shows the same view photographed in 2012. Extensive riparian planting has already been undertaken but the colour and finish of the buildings is unknown. These dwellings do have the potential to change the rural character of this landscape unit.



Photograph 2: Shaw Road with open land behind in 2012

Some forms of development that do not require a resource consent, for example the construction of a boundary fence, can have minor adverse effects on the local character of individual landscape units. One such example is the fence on Gum Road shown in photograph 3 below. Its light colour, design and location immediately adjacent to the road mean that it does create very localised adverse effects on the landscape unit as experienced when driving along Gum Road.



Photograph 3: The fence on Gum Road

Another example of a bulky development within the lower foothills that was identified in the 2012 report was on Henderson Valley Road (Anamata). No mitigation for the bulk of the building and its extensive associated earthworks was required as part of the resource consent. The result was a substantial building which dominates its rural setting (and the

adjoining primary school) as shown in photographs 4 and 5 below. Developments of this scale, with little or no mitigation, have the potential to contravene the objective of the Act of ensuring that 'change in a rural landscape maintains a rural character,' s8 (g) (iii).



Photographs 4 and 5: The large house on top of the extensive earthworks on Henderson Valley Road in 2012 and 2017

A positive development in the Holdens landscape unit is the establishment of a vineyard in the old orchard between Parrs Cross Road and Holdens Road. In the 2012 assessment, the removal of the orchard trees was noted, and potential residential development anticipated. The continuation of a horticultural land-use in this area reinforces the rural character of the landscape unit in a positive way.

Similarly, the development of new horticultural activities on Henderson Valley Road in landscape unit Anamata is a positive reinforcement of the rural character of this area, as shown in photograph 6 below.



Photograph 6: New horticultural development in Henderson Valley Road

2. Bush Living

The assessments found very little change in the landscape character of the bush living landscape units. As was identified in 2012, the greatest threat to the landscape character of the bush living landscape units is the loss of vegetation from either subdivision or development. However, if earthworks and vegetation removal are minimised, the bush-clad areas of the bush living units clearly demonstrate they are able to accommodate reasonable population densities with only minor impacts on landscape character.

Some of the more recent, and one or two older, subdivisions within the bush living landscape units clearly display a number of characteristics which undermine the landscape character of those units. These include the use of urban/suburban elements, mostly on public land, such as kerb and channelling, street lighting, retaining walls, concrete paths and other infrastructure.

3. Coastal

Overall, the coastal landscape units displayed little change to their landscape character or effects on the identified heritage features. As was identified in 2012, the greatest threat to the landscape character of the coastal landscape units is the loss of vegetation from development or re-development, particularly coastal pōhutukawa trees.

3.1 Parau

Overall there was very little change in the landscape character of the four Parau landscape units. In 2012 inappropriate urban style roadside treatment of private properties was noted in Parau B. During the 2017 assessment, roadside infrastructure changes in Parau A were identified as having an adverse effect on the landscape character on a local scale. These appear to have been implemented by Auckland Transport in an attempt to manage stormwater run-off along the edge of steep Rauhuia Crescent. This development has led to an inappropriate urban-style solution which, as well as undermining the heritage features of the area has also proved to be inadequately constructed so that rocks designed to act as check dams have largely been removed.

3.2 Huia and Little Huia

The majority of the Huia and Little Huia landscape units show very little change since 2012. Two positive changes were noted in landscape units Huia G and Huia J. In Huia G the road has been resurfaced and the rock retaining wall along the foreshore has been redeveloped. This work has been carried out in a manner that has protected the heritage features in this area.

Similarly, a new house near the top of the hill, which was noted as being under development in the 2012 assessment, has now been completed. The form, height, materials and colour of the building and the associated garden development all ensure that this new house sits comfortably within the landscape unit and does not undermine the heritage features. Photographs 7 and 8 below show the house in 2012 and 2017.



Photographs 7 and 8: Showing the new house in Little Huia in 2012 and 2017

Restoration potential was identified on the neighbouring property as part of both the 2008 and 2012 landscape assessments. Since 2012, the container and bus on the neighbouring property has been supplemented with additional portable buildings, as shown in the Photographs 9 and 10, below. This type of development does not protect or enhance the heritage features of the heritage area, as required by the Act.



Photographs 9 and 10: 2012 and additional buildings in 2017 on Whatipu Road

Similarly, the construction of a new house in Upland Road has had very minor adverse effects on the landscape character of part of Huia E landscape unit. The unusual pyramidal roof form is particularly striking, primarily because of the pale colour it has been finished in. It appears that a second pyramidal form may be about to be erected nearby.

3.3 Karekare

Overall, there was no change identified in the landscape character. Two very minor negative developments identified in 2012 have both been softened by additional plant growth, including one along Karekare Road shown in Photograph 11, below.



Photograph 11: Growth of vegetation integrating development at 64 Karekare Road

Another new development on Karekare Road which, although it sits isolated from the nearest dwelling, settles well into the character of this part of Karekare, as shown in Photograph 12 below. It is noted that vacant lots on either and further along the road could all be developed with additional houses in the future.



Photograph 12: The new dark coloured dwelling on Karekare Road

3.4 Piha

The in-field assessment found only minor and very minor changes to the landscape character of the various units within Piha, but there is development underway which has the potential to undermine the heritage features of Piha.

At the southern end of the village, where the settlement extends to higher slopes, the majority of the steep vegetated land defining the edge of the settlement is in private ownership. Development has begun on one of these sections, as seen in Photograph 13 below. Depending on the design and colour of this new dwelling and any future dwellings on the neighbouring sections, there could be adverse effects on the landscape character of this part of Piha in the future.



Photograph 13: New dwelling under construction on Piha Road

A new driveway on Garden Road in Piha D is shown in Photograph 14 below. The new concrete surface is currently bright, but it will darken with time. The new planting on either side of the road comprises native species which will, with time, successfully integrate this development into this landscape unit.



Photograph 14: The new driveway on Garden Road, Piha

New development is also underway adjacent to the surf club building in Marine Parade South as shown in Photograph 15 below. It is too early in the building process to be certain what effects this development might have on the landscape character and heritage

features of this part of the heritage area. The height of the scaffolding suggests that this may be a substantial building but this part of Piha already has two-storey buildings and, depending on its finished design, this new building may have very little effect on the landscape character and heritage features.



Photograph 15: New development adjacent to the surf club in Marine Parade South, Piha

3.5 Te Henga / Bethells Beach

The multiple landscape units in and around Te Henga / Bethells Beach used in the 2012 assessment have been incorporated into the larger neighbouring units. The residential settlement extending along the west-facing slopes above Bethells Road has been incorporated in the bush living landscape unit Te Aute Ridge because of its vegetated character. The group of larger rural residential properties at the hairpin bend where Bethells Road turns sharply southwards, and the neighbouring wetland have been incorporated into Te Henga / Bethells Beach North, a foothills landscape unit.

The remainder of the Te Henga / Bethells Beach residential areas are incorporated into the large coastal landscape unit Te Henga / Bethells Beach South. This includes the two enclaves of housing around Erangi and McKay Places, the more dispersed residential area around Lake Waiataru, the large sand dune in the Lake Wainamu Scenic Reserve and the regenerating forest around Lake Kawaupaka.

The 2017 assessment found that there was very little change to the landscape character of Te Henga / Bethells Beach South landscape unit. Vegetation growth within the beach reserve has assisted in integrating both the parking area and the buildings.

3.6 Cornwallis

In 2012 it was noted that there were more open areas close to Cornwallis Beach with coastal views from recently completed larger houses. Since that observation the situation has worsened with the removal of at least one of the coastal pōhutukawa trees above the beach to the south of the wharf. This has opened up views of the two larger, more modern houses, stacked one behind the other when viewed from the wharf, as shown in Photographs 16 and 17. Replacement planting of further coastal pōhutukawa within the reserve would mitigate this effect.



Photographs 16 and 17: Houses above Cornwallis Beach seen in 2012 and 2017

3.7 Whites Beach

No identifiable changes were found in this landscape unit.

4. Parkland

The Parkland landscape units display the least amount of change in their heritage features and landscape character. It is anticipated that this will continue to be the trend in the future, with minimal development occurring on publicly owned and protected land.

4.1 Waitākere Ranges Regional Park

Very little development has occurred within the regional park areas and no change to the landscape character or heritage features was observed.

4.2 Te Waharoa

There has been no change to the heritage features and landscape character of this landscape unit since 2012.

4.3 Matuku Bush

No change has occurred to the heritage features or landscape character of this landscape unit since 2012.

5. Summary of findings

See the table below for a summary of findings for each landscape unit.

Landscape Unit Name	Findings
Foothills	
Te Henga / Bethells Beach North	Neutral
Bethells Valley	Neutral
Long Road	Neutral
Anzac Valley	Neutral
Jonkers	Neutral
Awhiorangi	Neutral
Pipeline	Neutral
Waiomoko	Neutral
Paremuka	Neutral
Seibel	Neutral
Hannibal	Neutral

Driving	Neutral
Anamata	Very minor negative
Holdens	Neutral
Oratia	Neutral
Oratia South	Minor negative
Cochran	Very minor negative
La Trobe	Neutral
Bush living	
Te Aute Ridge	Neutral
Cassel	Neutral
Pukematekeo	Neutral
Welsh Hills	Neutral
Turanga	Neutral
Opanuku	Neutral
Potter	Neutral
Scenic Ridge	Neutral
Titirangi	Neutral
Green Bay	Neutral
Symonds	Neutral
Ranges Properties	Neutral
Anawhata	Neutral
Wigmore Bay	Neutral
Aio Wira	Neutral
Coastal	

Te Henga / Bethells Beach South	Neutral
Parau North	Neutral
Parau A	Very minor negative
Parau B	Neutral
Parau South	Neutral
Cornwallis	Very minor negative
Huia A	Neutral
Huia B	Neutral
Huia C	Very minor negative
Huia D	Neutral
Huia E	Minor negative
Huia F	Neutral
Huia G	Neutral
Huia H	Neutral
Huia J	Very minor negative
Karekare A	Neutral
Karekare B	Very minor positive
Karekare C	Neutral
Karekare D	Neutral
Karekare E	Neutral
Piha A	Neutral
Piha B	Neutral
Piha C	Neutral
Piha D	Very minor negative

Piha E	Neutral
Piha F	Neutral
Piha G	Very minor negative
Piha H	Neutral
Piha J	Neutral
Piha K	Neutral
Piha L	Neutral
Piha M	Neutral
Piha N	Neutral
Piha South	Minor negative
Whites Beach	Neutral
Parkland	
Matuku Bush	Neutral
Te Waharoa	Neutral
Regional Parkland	Neutral

Appendix 10: Results from the Dark Sky Assessment

Field coverage of sky quality measurements undertaken

Measurements were taken of key areas that are accessible by car and taken on three separate days across the heritage area.

Sky quality measurements summarised

Data from the measurements consisted of more than 1,300 readings. It was then sorted, cleaned, grouped and analysed. The results, consisting of 350 data points, cover 33 locations (some on multiple occasions). The results are summarised in the table below.

Site number	Site Name	Start Time	Latitude	Longitude	Number of Readings	Mean Measurement (mpsas)
		21-Aug-17				
1	Titirangi Village	7:44 p.m.	-36.9378	174.6570	5	17.85
2	Scenic Drive	7:55 p.m.	-36.9466	174.6146	6	19.96
3	Arataki Visitor Centre Entrance	7:58 p.m.	-36.9464	174.6079	18	20.04
4	Anawata Road Turnoff	8:14 p.m.	-36.9454	174.5266	3	20.51
5	Karekare Beach Carpark	8:29 p.m.	-36.9863	174.4792	15	20.65
6	Piha Beach Lookout	8:43 p.m.	-36.9628	174.4736	6	20.55
7	North Piha Sand Dunes	8:51 p.m.	-36.9514	174.4680	15	20.37
8	South Piha	9:01 p.m.	-36.9576	174.4682	9	20.22
9	Anawata Road Turnoff	9:20 p.m.	-36.9454	174.5265	10	19.94
		22-Aug-17				

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

1	Ranui, Swanson	7:44 p.m.	-36.8640	174.6018	8	15.68
2	Bethells Beach Car Park	8:10 p.m.	-36.8910	174.4491	26	20.66
3	Bethells Village	8:23 p.m.	-36.8875	174.4502	8	20.7
4	Bethells Waitākere township junction	8:37 p.m.	-36.8674	174.5048	12	20.51
5	Arataki Visitor Centre nearby	8:50 p.m.	-36.8907	174.5458	21	20.36
6	Scenic Drive	9:04 p.m.	-36.9239	174.5559	8	20.45
7	Karekare Beach Carpark	9:31 p.m.	-36.9862	174.4792	15	20.89
8	Piha Beach Lookout	9:45 p.m.	-36.9628	174.4735	7	20.93
9	North Piha Sand Dunes	9:52 p.m.	-36.9518	174.4682	15	20.96
10	South Piha	10:02 p.m.	-36.9577	174.4682	14	21.01
11	Anawata Road Turnoff	10:21 p.m.	-36.9454	174.5266	12	20.88
12	Arataki Visitor Centre Entrance	10:35 p.m.	-36.9464	174.6081	12	20.48
		25-Aug-17				
1	Titirangi Village	7:45 p.m.	-36.9378	174.6569	10	14.63
2	Cornwallis Wharf launching point	8:07 p.m.	-37.0119	174.6052	8	20.37
3	Huia Point	8:18 p.m.	-37.0092	174.5756	7	20.47
4	Huia Viewing Point	8:28 p.m.	-37.0100	174.5626	6	20.55
5	Whatipu Turnoff after the bridge	8:33 p.m.	-37.0170	174.5583	8	20.54
6	Whatipu Carpark near Lodge	8:54 p.m.	-37.0394	174.5077	11	20.79
7	Road out of Little Huia	9:11 p.m.	-37.0203	174.5437	12	20.84

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

8	Little Huia turnoff from Whatipu	9:21 p.m.	-37.0173	174.5586	14	20.73
9	Little Huia Ranger Station	9:28 p.m.	-37.0135	174.5601	4	20.28
10	Near Huia Settlers Museum	9:31 p.m.	-37.0044	174.5621	7	20.75
11	Huia Point	9:40 p.m.	-37.0092	174.5756	8	20.74
12	Nihotupu Dam	9:52 p.m.	-36.9635	174.6149	10	20.42
				33		
					350	
						20.14
						20.55

Appendix 11: Recorded events in local parks and reserves

Type of event	Location	Year					Name of event*
		2014	2015	2016	2017	2018**	
Wedding	Piha Beach	1	1	2	3	2	
	French Bay Esplanade	8	7	5	4	1	
	Armour Bay			1		1	
	Titirangi Beach	1		1	1		
	Te Henga (Bethells Beach)	11	4		2		
	Waitākere War Memorial Park	1					
	Paturoa Bay				1		
	Tangiwai Reserve				1		
	O'Neill Beach				1	1	
Surf Life Saving	Piha Beach	3	5	2	1	1	<ul style="list-style-type: none"> • Piha Classic Wave Surfboat Competition • Billabong Grom series • National scholastic surf championship • ANZAC
Community Events	Piha Beach	2	5	6	2		<ul style="list-style-type: none"> • West Coast Arts Festival • Surface Movements • NZ Police National Summer Road Safety Campaign • Kiwi's against seabed mining • Expedition South
	Piha Domain	2	2	2	3		<ul style="list-style-type: none"> • Piha Library car boot fair • Aotearoa Surf film festival • Spring Fling Fiesta • ANZAC • Sustainable Coastlines
	Huia Domain	1		2	4		<ul style="list-style-type: none"> • Huia Domain Community Consultation • Music in Parks • Head2Head

STATE OF THE WAITĀKERE RANGES HERITAGE AREA 2018

	Les Waygood carpark (Piha)		2	1	1		<ul style="list-style-type: none"> • Piha Preschool Market Day
	Titirangi Road		1	2	1	1	<ul style="list-style-type: none"> • Titirangi Glow • ANZAC
	Te Henga/Bethells	2	5	2	2	1	<ul style="list-style-type: none"> • Speight's West Coaster • The Bethells Beach Community Day
	Olive Grove Reserve		1				<ul style="list-style-type: none"> • Olive Grove Planting Day
	Waitākere War Memorial Park		1	1	1		<ul style="list-style-type: none"> • Bigfoot Adventures for school camp • ANZAC • Neighbours Day Aotearoa
	Rahui Kahika Reserve		1				<ul style="list-style-type: none"> • Tunes for Trees working bee
	Armour Bay		1	2	1	1	<ul style="list-style-type: none"> • Unitec early learning Christmas Party
	Titirangi War Memorial carpark			1	1		<ul style="list-style-type: none"> • Celebrating nature of Titirangi Village • ANZAC
	Little Muddy Creek				1		<ul style="list-style-type: none"> • Opening ceremony (of walkway)
	Arataki Visitor Centre				1		<ul style="list-style-type: none"> • Arataki Kids Day
	Waima Reserve	1	1				<ul style="list-style-type: none"> • Learning Edge Montessori Preschool Sports Day
Private Events	Armour Bay	1	2				<ul style="list-style-type: none"> • Te Whanau o Waipariera Picnic • Birthday
	Waima Reserve	1					<ul style="list-style-type: none"> • Birthday
	Olive Grove Park		1				<ul style="list-style-type: none"> • Birthday
Totals		35	40	30	32	9	
<p>* Name of event and number of events do not match as some of the events are part of a series ** Figures as up to March 2018.</p>							

Appendix 12: Census information

Note: Figures for the 2006 Census data have been taken directly from the 2013 Monitoring Report. In some cases, the totals are greater than 100% and the assumption is that the figures were rounded up.

Community Profile	2006 Census data	2013 census data	Regional data comparisons 2006-2013	Key changes or differences
Resident Population	19,968	20,434	This is a 2.3% increase in the heritage area compared to the Auckland Region's 8.5% increase over the same period	Slow growth of the heritage area resident population
Ethnicity	<ul style="list-style-type: none"> • 85% European • 8% Māori • 2% Pacific • 3% Asian • 2% Other 	<ul style="list-style-type: none"> • 82% European • 8% Māori • 3% Pacific • 4% Asian • 3% Other 	82% European 8% Māori 3% Pacific 4% Asian 3% Other	European people continue to be over represented when compared to the regional population
Age Structure	<ul style="list-style-type: none"> • 23% 0-14 Years • 15% 15-29 • 55% 30-64 • 7% 64 + Median Age 37 years	<ul style="list-style-type: none"> • 21% 0-14 Years • 15% 15-29 • 54% 30-64 • 10% 64+ Median Age 40.6 years	Median Age 2013 35.1 years	The age profile of people in the heritage area is one of an increasing age when compared to the regional median
Households	<ul style="list-style-type: none"> • 7041 Households • 78% one family Households • 16% one- 	<ul style="list-style-type: none"> • 7275 Households • 77% one family Households • 17% one-person 	Average Household size in the Auckland region in the 2013 Census was 3.0	While the Auckland Region household size has been rising, the heritage area has

	<p>person Households</p> <ul style="list-style-type: none"> • 5% multi-family/multi person households • 2.82 people per average household 	<p>Households</p> <ul style="list-style-type: none"> • 6% multi-family/multi person households • 2.81 people per average household 	<p>persons per household</p>	<p>remained static</p>
Median Household Income	\$77,603 income per median household	\$92,600 income per median household	<ul style="list-style-type: none"> • 2006 Regional average income: \$63,387 • 2013 Regional Average income: \$65,000 	A marked increase in household income over the 2012-2017 period above the regional average income
Qualification levels	<ul style="list-style-type: none"> • 14% of people aged 15 years and over had no qualification • 23% of people had qualifications equivalent to a bachelor degree or above 	<ul style="list-style-type: none"> • 16% of people aged 15 years and over had no qualification <p>29% of people had qualifications equivalent to a bachelor degree or above</p>	<p>In the Region in 2006, 20% of people over 15 years had no qualification.</p> <p>In the Region in 2013, 17% of people over 15 years had no qualification</p> <p>In the Region in 2013, 25% of people had qualifications equivalent to a bachelor degree or above</p>	<p>The no qualification level has seen an increase in levels in contrast with the Regional figure which has reduced</p> <p>A split in educational attainment appears to be emerging in the heritage area population between those who are well qualified and those with no</p>

				qualifications
Occupations	<ul style="list-style-type: none"> • 51% of people's total jobs were as managers or professionals • 16% of people's total jobs were as sales workers, machine operators and labourers • 34% of people's total jobs were as community and personal service workers and technicians and trade workers 	<ul style="list-style-type: none"> • 53% of people's total jobs were as managers or professionals • 14% of people's total jobs were as sales workers, machine operators and labourers • 33% of people's total jobs were as community and personal service workers and technicians and trade workers 		Occupation categories of people in the heritage area have remained stable
Economic Profile		*Data from Business Demographics Survey 2016, Dept. of Statistics		

Appendix 13: Community and environmental groups and their initiatives

Environmental Groups	Notes on changes between 2012 and 2017
Waitākere Ranges Heritage Area wide	
EcoMatters Environment Trust	native plant nursery (new) Facilitation/coordination of weed control at Little Muddy Creek and Te Henga / Bethells Beach New - Weed control buffer zone at Henderson Valley, Waiohau, Oratia and Laingholm Climbing asparagus programme Piha, Karekare and Huia (new) Love Your Lagoon (new) Love your Place awards (new) Love Your Neighbourhood grants (new) Weed bin programme War on Weeds campaign
Environmental Defence Society	No significant change
Conservation Volunteers New Zealand	No significant change
Friends of Arataki	Completed the pou whenua programme across the Waitākere Ranges in collaboration with Te Kawerau ā Maki and Auckland Council. Annual Kids Day Out at Arataki Visitor Centre.
Gecko Trust	Training/workshops on weed control and ecological restoration, coordination of Titirangi village weed project, South Titirangi Neighbourhood Network
Kauri Rescue	New - Engagement of landowners in citizen science for the treatment of kauri dieback disease
North West Wild Link Partnership Group	No significant change
Operation Possum Blitz	No significant change
Royal Forest and Bird Society (Waitākere Branch)	No significant change

Sustainable Coastlines	Support for coastal clean-up events, educational programmes, public awareness campaigns and riparian planting projects
The Tree Council	Advocacy around tree protection, publications
Waitākere Ranges Conservation Network	Networking, events, workshops, Facebook presence (new)
Waitākere Ranges Protection Society	No significant change
Hector and Maui Dolphin Defenders	No significant change
Oratia	
Oratia Pest and Weed Control Project	New in August 2017
Waiatarua	
Waiatarua Weed Action Group	New weed control, participate in Buffer Zone programme
Henderson Valley/Opanuku	
Project Twin Streams - Opanuku Stream	No significant change
Titirangi	
Otitori Sanctuary Project	New possum, rat and mustelid control in South Titirangi
South Titirangi Neighbourhood Network	New (Nov 2016) Weed and pest animal control and restoration work on private and public land in South Titirangi. Goal of a weed-and pest-free peninsula by 2022.
Titirangi Village Restoration Project	New rubbish removal and weed control and planting to beautify bushes at the edges of Titirangi Village. Collaboration between local businesses, residents, Gecko Trust with funding from LB.
Muddy Creeks Waima/Woodlands Park/Laingholm/Parau	
Waima to Laingholm Pest Free Zone	New pest animal trapping from Laingholm to Waima/Scenic Drive (possum, stoat and rat trapping) on private and public land.

Little Muddy Creek/Gill Esplanade	New Little Muddy Creek bank restoration.
Owens Green/Muddy Riders Club	No significant change
Waituna Action Group	Weed eradication and planting on Waituna Reserve. Completion of the Little Muddy Creek Walkway between Grendon Road Titirangi, through to Landing Road and Tangiwai Reserve and along Huia Road to Woodlands Park. (November 2017)
Cornwallis/Huia/Whatipu	
Friends of Whatipu	Beach clean-ups, tree planting, seed collection, walks and talks, bioblitz October 2017. 40 scientists note biota.
Huia Weed Warriors	No significant change
Cornwallis Petrel Heads	New weed eradication at Cornwallis Peninsula
Piha/Karekare/Anawhata	
Beach Road Sustainable Neighbourhood	No significant change
La Trobe Forest Ecosystem Restoration Project	No significant change
Lone Kauri Forest Restoration Group	No significant change
Piha Coast Care Group	No significant change
Protect Piha Heritage	New Pest Free Piha strategy in planning in 2017
Te Henga / Bethells Beach / Waitākere Valley	
Ark in the Park	No significant change
Ark in the Park Buffer Zone	New expansion of support to landowners for rats, mustelids and possum in the lower part of Waitākere Valley and at Te Henga / Bethells Beach.
Bethells/Te Henga Beach	No significant change

Care Group	
Forest Ridge Community Group	No significant change
Matuku Link	New Purchase of 37ha Matuku Link property in 2016 Rat and mustelid trapping, weed control.
Matuku Reserve	No significant change
Swimmable Waterways Te Henga	New monitoring, actions and advocacy to achieve clean swimmable Te Henga / Bethells Beach lagoon and healthy network of waterways and wetland.
Te Henga (Bethells Beach) dotterel protection programme	No significant change
Te Henga Track Environmental Group	New Pest plant and animal control and track maintenance along the Te Henga Track (Department of Conservation Community Fund 2016-2017).
Te Henga (Bethells Beach) weed control projects	No significant change
Habitat Te Henga	New mustelid control around the wetland. Release of pateke. Wetland biodiversity monitoring.
Steam Hauler Track residents	No significant change
Waitākere Rivercare	No significant change
Waitākere Valley Trails Group	Newly set up to develop a trail in Te Henga / Bethells Beach to make it safe for local residents to walk to and from Bethells Beach and elsewhere in the area. Stage 1 section: Mosquito Alley to Waiti Stream bridge under design and seeking approvals October 2017.
Swanson	
Swanson Sustainable Neighbourhood	New pest plant and animal control on properties along Awhiorangi Promenade, Awhiorangi Reserve.

Appendix 14: Community facilities

Facility	Address	Ownership	Management	Changes 2008-2012	Changes 2012-2017
Titirangi					
Titirangi Library	500 South Titirangi Rd	Auckland Council	Auckland Council	Upgrades in 2009-10	
Titirangi War Memorial Hall	500 South Titirangi Rd	Auckland Council	Auckland Council		Fire in August 2017 damaged the roof
Titirangi Community House	500 South Titirangi Rd	Auckland Council	Community House Incorporated Society		
Paturoa Bay Hall	Titirangi Beach	Auckland Council land Paturoa Residents and Ratepayers building	Paturoa Bay Residents and Ratepayers		
Titirangi Primary School Hall	Atkinson Rd, Titirangi	Ministry of Education	School	Recently refurbished (leaky building), limited community use	
Lopdell House	418 Titirangi Rd	Auckland Council Leased by Lopdell House Society	Lopdell House Society	Major upgrades 2012-13	
Titirangi Returned Services Association	502 South Titirangi Rd	Titirangi RSA	Titirangi Returned Services Association		
French Bay Yacht Club	Otitori Bay Road	Auckland Council (land),	French Bay Yacht Club		New rigging deck 2017

		French Bay Yacht Club building			
Laingholm					
Laingholm Hall	69 Victory Road	Auckland Council	Laingholm District Citizen Association	Internal refurbishment in 2011	Internal works and re-roofing following fire in 2014
Ex Doctors Room	4 Lookout Dr	Auckland Council	Laingholm Roundabout		Internal Health and Safety improvements in 2016
Laingholm Primary School Hall and community room	54 Victory Road	Ministry of Education	School	Opened in 2009	
Laingholm Fishing Club	Sandy's Parade	Auckland Council (land)	Laingholm Fishing Club		
Muddy Creek Riders	Owens Green Reserve	Auckland Council	Muddy Creek Riders		
Baptist Church Hall and cottage	1 Victory Road	Baptist Union of New Zealand	Baptist Church		
Woodlands Park					
Woodlands Park Primary School Hall	Woodlands Parks Road	Ministry of Education	Woodlands Park School		
Huia					
Huia Hall	1258 Huia Road	Auckland Council (land), Residents and Ratepayers (building)	Huia Residents and Ratepayers Association		
Huia Fishing	48 Foster	Foster Bay	Huia Fishing		

Club	Ave	Residents Association	Club		
Karekare					
Surf Lifesaving Club	34 Watchmans Road	Karekare Surf Lifesaving Patrol Inc.	Surf Lifesaving Club	Plan for new Club House	
Piha					
Barnett Hall	2 North Piha Road	Piha Community Centre Society	Piha Community Centre Society		
North Piha Surf Lifesaving Club	4 North Piha Road	United Surf Lifesaving Club	North Piha Surf Lifesaving Club		
Piha Surf Life Saving Club	23 Marine Parade	Piha Surf Life Saving Club	Piha Surf Life Saving Club		
Piha RSA	3 Beach Valley Road	Piha Memorial RSA	Piha RSA		
Piha Bowling Club	Piha Domain	Auckland Council (land)	Piha Bowling Club	Plan for combined Bowling and Tennis Club facility	
Piha Tennis Club	Piha Domain	Auckland Council (land)	Piha Tennis Club	Plan for combined Bowling and Tennis Club facility	
Piha Community Library	25 Seaview Road, Auckland Domain	Auckland Council (land)	Piha Community Library Trust		
Te Henga / Bethells Beach					
Bethells Beach Surf Life Saving	Te Henga / Bethells Beach	Auckland Council (land)	Bethells Beach Surf Life Saving Club		Lease for storage container

Club					
Waitākere Golf Club	Falls Road	Auckland Council (land)	Waitākere Golf Club		
Waitākere township					
Waitākere Hall	37 Township Road	Waitākere Hall Trustees	Waitākere Residents and Ratepayers		
Waitākere Domain Hall	Bethells Road	Auckland Council (land)	Waitākere Residents and Ratepayers		
Waitākere Primary School Hall	10 Bethells Road	Ministry of Education	Waitākere Primary School	New school hall opened in 2006	
Waitākere RSA	39 Township Road	Waitākere RSA	Waitākere RSA		
Swanson					
Swanson Station meeting room	760 Swanson Road	Auckland Council	Swanson Railway Station Trust		
St Mark's Church Hall	705 Swanson Road	St Mark's Anglican Church	St Mark's Anglican Church		
Swanson School Hall	703 Swanson Road	Ministry of Education	Swanson Primary School		
Swanson RSA	663 Swanson Road	Swanson Memorial RSA	Swanson RSA		
Henderson Valley					
Henderson Valley School Hall	389 Henderson Valley Road	Owned by Henderson Valley Trust	Henderson Valley School		
Henderson Valley Pony Club	201A Henderson Valley Road	Auckland Council	Henderson Valley Pony Club		

Oratia					
Oratia District School Hall	552 West Coast Road	Ministry of Education and BOT of Oratia District School	Oratia District School		
Oratia Small Hall	569 West Coast Road	Auckland Council	Oratia Residents and Ratepayers		
Oratia Settlers Hall	569 West Coast Road	Auckland Council	Oratia Residents and Ratepayers	Recent refurbishment of bathrooms	
Oratia Bowling Club	515 West Coast Road	Oratia Bowling Club	Oratia Bowling Club		
Waiatarua					
Waiatarua Community Hall	911 West Coast Road	Auckland Council	Waiatarua Residents and Ratepayers		
Arataki Visitor Centre	Scenic Drive	Auckland Council	Auckland Council		

Appendix 15: List of published books, reports and articles related to the heritage area

Books

Exhibition Drive: 100 years of making the grade / Fiona Drummond 2016

Atkinson Park and life at Paturua Bay: 1910-1980: a history of Atkinson Park and the Titirangi Beach community in Titirangi, West Auckland / Lynnette Sollitt-Morris – 2015

Voices from the surf: 80 years of the Karekare Surf Lifesaving Club, 1935-2015 / 2015

Maori in Te Huia, Bruce and Trixie Harvey, Huia Settlers Museum Trust, 2015

Walking the Waitākere Ranges: 45 coastal and bush walks / Alison Dence & Lee-Anne Parore 2014

Wild Westie: the incredible life of Bob Harvey / Hazel Phillips 2014

Saving the ranges: the first 40 years of the Waitākere Ranges Protection Society / Trixie and Bruce Harvey 2013

Turuki turuki! Paneke paneke!: tales of the twin streams / Project Twin Streams 2013

On the radar: the story of Piha's World War 2 radar station / Sandra Coney 2013

Untamed coast: Auckland's Waitākere ranges and heritage area / Bob Harvey 2012

The Piha story / Mary D. Woodward 2012

Council Reports

Kauri Dieback Report 2017: An investigation into the distribution of kauri dieback, and implications for its future management, within the Waitākere Ranges Regional Park. June 2017

Worst weeds in the Waitākere Ranges Heritage Area and how to control them – 2016

Local area plan: Te Henga (Bethells Beach) and the Waitākere River Valley: Waitākere Ranges Heritage Area: draft / 2015

Waitākere Ranges Local Board Plan / 2014

Waitākere Ranges heritage area monitoring report / 2013

Waitākere Ranges Visitor Management Plan: Background Report, April 2013 -

<http://www.waitakereranges.org.nz/pdf/waitakererangesvisitorsmanagementplanbackgroundreport-snap150913.pdf>

The Muddy Creeks plan: local area plan for Parau, Laingholm, Woodlands Park and Waimā : Waitākere Ranges Heritage Area : draft / 2013

Auckland Council District Plan (Waitākere Section): decision on submissions to Proposed Plan Change 32 - Penihana North (Plan change 32) ; Auckland Council Regional Plan :

air, land and water : decision on submissions to Proposed Change 1 - extension to the Urban Air Quality Management Area, Penihana North (Change 1) / 2012

Spragg monument, Kaitarakihi Park, Cornwallis Park, Auckland: heritage assessment / 2012

Whare Puke: Huia Dam No. 9 Dwelling conservation plan / prepared by Reynolds & Associates / 2012

Auckland Council Research Investigations and Monitoring Unit (RIMU) publications

Waitākere Ranges Local Board economic overview / ATEED, 2016

Waitākere economic profile / Infometrics, 2015

Demographic report card - Waitākere Ranges Local Board, 2014

Freshwater report card - Waitākere Ranges, 2014

Soil report card - Waitākere Ranges, 2014

Terrestrial report card – Waitākere, 2014

Local board 2013 census profile: Waitākere Ranges, 2014

Education snapshot: Waitakere Ranges / COMET, 2012

Changes in Indigenous Ecosystems and the Environment within the Boundary of the Waitākere Ranges Heritage Area Act 2008: 2008-2013 Report. October 2013 Technical Report 2013/003

Auckland Transport

Waitākere Ranges Urban Design Guidelines 2016 - <https://at.govt.nz/about-us/have-your-say/waitakere-ranges-urban-design-guidelines/>

Watercare

Report to the Board of Watercare Services Limited - Site Selection for Replacement of Huia Water Treatment Plant, 30 May 2017

<https://www.watercare.co.nz/CMSPages/GetAzureFile.aspx?path=~\watercarepublicweb\media\watercare-media-library\huia\boardreportsiteselectionforreplacementofhuiawtp.pdf&hash=8e6fd802490be10fc1cf5497483a2beb908aa24949d50b27789912303c911d88>

Ranges Ratepayers demand Watercare Plant review, 6 April 2017 -

<http://www.scoop.co.nz/stories/AK1704/S00161/ranges-ratepayers-demand-watercare-plant-review.htm>

Western water supply strategy – Huia Water Treatment Plant, February 2017 -

http://www.waitakereranges.org.nz/pdf/Western%20Water%20Supply%20Huia%20Water%20Replace_10_02_17_RevEMAIL.pdf

Huia Water Treatment Plant Site Selection Study: Shortlist Site Development Report, GHD for Watercare, September 2016

https://www.watercare.co.nz/CMSPages/GetAzureFile.aspx?path=~\watercarepublicweb\media\watercare-media-library\huia\ghd_huia_wtp_shortlist_site_development_report.pdf&hash=158531cfbeff9625fa01039f8e83ee4fbd50914e47e04ff972238c46828d192d

Huia Water Treatment Plant: Report on Longlist Options, Tonkin & Taylor for Watercare, June 2016

https://www.watercare.co.nz/CMSPages/GetAzureFile.aspx?path=~\watercarepublicweb\media\watercare-media-library\huia\tonkinandtaylor_longlist_report_24_06_16_v3.pdf&hash=2da3bd00b7b12094fb3e42940602ee3a285e64501ecbe03bf054dff2074e8f9

Huia Water Treatment Plant Upgrade Implementation Strategy, MWH for Watercare, November 2013

https://www.watercare.co.nz/CMSPages/GetAzureFile.aspx?path=~\watercarepublicweb\media\watercare-media-library\huia\huia_upgrade_implementation_strategy.pdf&hash=df21a8495866829779690f9afb7f391fc8709edfeef85e8162843cb0ac95be94

Ratepayers and Residents Associations

Submission to the Local Government and Environment Select Committee on the Local Government Act 2002 Amendment Bill by the Titirangi Ratepayers & Residents Association, June 2012

<https://www.parliament.nz/resource/0000202024>

Articles

Piha: In the Footsteps of a Legend, NZ Today; Apr/May2017, Issue 73, p70-77

<http://nztoday.co.nz/in-the-footsteps-of-a-legend/>

Oratia, mon amour, Gash, Graeme, Metro (NZ), May/Jun2017, Issue 411

<http://www.noted.co.nz/life/life-in-nz/oratia-mon-amour-how-a-community-fought-back-against-watercare/>, For more than a century, a tranquil valley in West Auckland has been home to generations of the Gash family. Now, plans for a major water-treatment plant have put their piece of paradise, and the properties of 100 other people, in peril

Waitākere Ranges Regional Park, NZ Today; Jun/Jul2016, Issue 68, p42-47

The Wilds of Auckland, Warne, Kennedy, National Geographic Traveller, Feb/Mar2016, Vol. 33, Issue 1

Hillary's Other Steps, Harvey, Bob, Metro (NZ) Mar2013, Issue 371

A trip in Titirangi, Barton, Chris, Metro (NZ) Jan/Feb2015, Issue 390

Appendix 16: Summary of key interrelationships between supporting legislation and historic heritage within the heritage area

The purpose of the Waitākere Ranges Heritage Area Act (the Act) is to promote the protection and enhancement of its heritage features for present and future generations including historic heritage. The Act is supported by several other key pieces of legislation, such as the following:

- Resource Management Act 1991 (RMA)
- Heritage New Zealand Pouhere Taonga Act 2014 (HNZPT Act) (formerly Historic Places Act 1993)
- Reserves Act 1977
- Conservation Act 1987
- Each of these has requirements to manage New Zealand's historic heritage/historic resources, in particular the RMA and HNZPT Act.

Extracts from the historic heritage technical report explaining the heritage requirements of the RMA and HNZPT Act are included below.⁸³

Resource Management Act 1991

The RMA provides for the sustainable management and protection of the natural and cultural environment. The RMA is the primary legislation that provides the mandate for local authorities to manage historic heritage resources. Sections 6 (e) and (f) of the RMA recognises matters of historic heritage as having national significance and provides for the protection of such heritage from inappropriate subdivision, use and development. By definition, historic heritage includes those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, this includes historic sites, structures, places and areas; archaeological sites; and sites of significance to Māori. Under the RMA, local authorities have the responsibility to identify significant heritage areas, places, and objects in district plans and to provide an appropriate level of protection and management of these resources through associated rules and regulations.⁸⁴

The responsibility of local authorities' for managing adverse effects on heritage arise as part of policy and plan preparation and the resource consent processes. Local authorities have a duty to gather information and monitor the state of the environment in the region or district (s.35 of the RMA). Knowing the state of the historic heritage resources in regions, districts and the coastal marine area is important and should be monitored and addressed in the state of the environment report. As owners of heritage places (e.g. buildings, parks,

⁸³ Waitākere Ranges Historic Heritage Monitoring Report, Auckland Council Heritage Unit, April 2013. Note: the information on the HNZPT Act has been updated to reflect the amendments to this act.

⁸⁴ Plowman 2010

reserves, infrastructure, and archaeological sites) local authorities must meet relevant statutory requirements and comply with plan rules for land they own and administer. Local authorities should set a good example for heritage management in the district or region by ensuring that their own assets have been researched and evaluated for their heritage values and are managed in accordance with conservation principles.⁸⁵

Heritage New Zealand Pouhere Taonga Act 2014 (previously Historic Places Act 1993)

The Heritage New Zealand Pouhere Taonga Act 2014 (HNZPT Act) protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an authority to modify an archaeological site has been issued by Heritage New Zealand Pouhere Taonga. An archaeological site is defined by section 6 of the HNZPT Act as:

any place in New Zealand, including any building or structure (or part of a building or structure), that—

- (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
- (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and includes a site for which a declaration is made under section 43(1).

Heritage New Zealand Pouhere Taonga is also required to establish and maintain the New Zealand Heritage List/Rārangi Kōrero. The purpose of this list is:

- to inform members of the public about historic places, historic areas, wāhi tūpuna, wāhi tapu, and wāhi tapu areas:
- to notify the owners of historic places, historic areas, wāhi tūpuna, wāhi tapu, and wāhi tapu areas, as needed, for the purposes of this Act:
- to be a source of information about historic places, historic areas, wāhi tūpuna, wāhi tapu, and wāhi tapu areas for the purposes of the Resource Management Act 1991.⁸⁶

Inclusion in the Heritage New Zealand List/Rārangi Kōrero does not of itself protect these places but assists in protection by notifying property owners and the public of their significance. Additionally, local authorities are required to have regard to entries in the register when developing district and regional plans. Regulations and criminal provisions of statutes may also be easier to apply to registered places.

⁸⁵ Heritage Management Guidelines for Resource Management Practitioners 2004. Published by New Zealand Historic Places Trust.

⁸⁶ Section 65(3), HNZPT Act

Reserves Act 1977

The purpose of the Reserves Act is to provide for ‘...the preservation and management for the benefit and enjoyment of the public, areas of New Zealand possessing ... natural, scenic, historic, cultural, archaeological... or other special features or value’ (Section 3(1)(a)).

The Regional Parks Management Plan (2010) was prepared as a fulfilment of requirements under the Reserves Act 1977 and the Local Government Act 1974. It applies to regional parks across Auckland and specifically for the Waitākere Ranges Regional Park.

It includes specific management policies relating to historic heritage including:

- re-survey and update information on archaeological sites on the park and implement the archaeological site management actions identified in the CHI;
- interpret significant heritage stories, including people, places, milestones and events, in accordance with the Regional Parks Interpretation Strategy and Interpretation Guidelines;
- prepare and implement a conservation assessment of the Piha Tramway that runs from Anawhata Stream in the north to Paratutai in the south;
- acknowledge the land formerly held as part of the Auckland Centennial Memorial Park on park interpretation and signs.⁸⁷
- The Regional Parks Management Plan (2010) also includes specific management policies relating to tangata whenua. These include:
 - undertake a comprehensive human occupation report of the park, an assessment of tangata whenua values and a tupuna whenua report (tangata whenua identifying their relationship to the land)
 - in accordance with the Waitākere Ranges Heritage Area Act recognise Ngāti Whātua and Te Kawerau ā Maki as tangata whenua of the Waitākere Ranges Regional Park
 - ensure senior staff responsible for managing the park meet at least once a year with Ngāti Whātua and Te Kawerau ā Maki appointed kaitiaki (representatives) to discuss the annual work programme and the actions outlined in Part 9.⁸⁸

Under the Waitākere Ranges Heritage Area Act 2008 a regional park management plan must be prepared for the Waitākere Ranges Regional Park every 10 years which means the current 2010 management plan should be reviewed in the next two years.

This will provide an opportunity to review whether the various heritage related objectives and policies are achieving the intended outcomes and whether they are still appropriate. It may also provide an opportunity to incorporate new heritage management and maintenance plans as recommended through the archaeological survey findings.

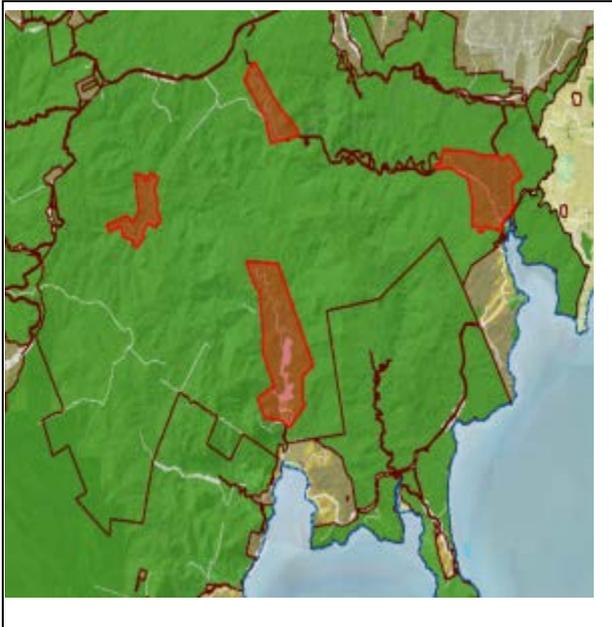
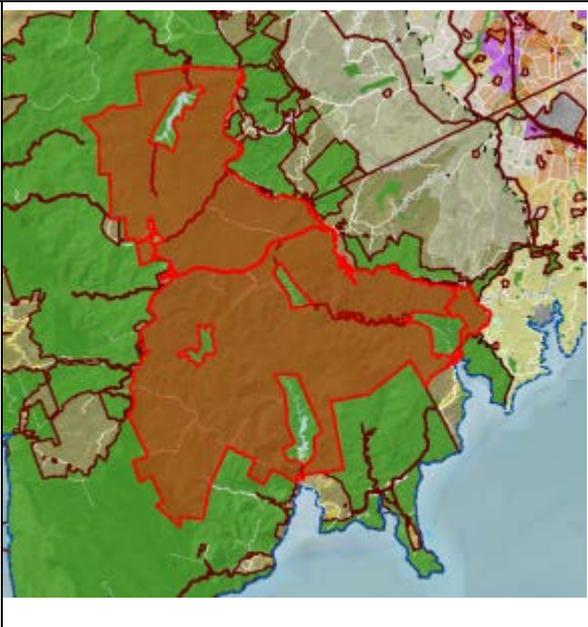
⁸⁷ Tatton, K. January 2015. Stage 1A – Historic Heritage Data Collation, Review and Rationalisation: Survey and Monitoring Program Report (Draft), Prepared for Auckland Council.

⁸⁸ Tatton, K. January 2015. Stage 1A – Historic Heritage Data Collation, Review and Rationalisation: Survey and Monitoring Program Report (Draft), Prepared for Auckland Council.

Appendix 17: Summary of water supply related designations held by Watercare

AUP No.	Designation Name	Purpose	Location/Address
9317	Swanson Reservoirs (Scenic Drive North)	Water supply purposes - reservoirs and associated structures.	893 and 895 Scenic Drive North, Swanson
9318	Titirangi Reservoir (Scenic Drive)	Water supply purposes - reservoir and associated structures.	272A Scenic Drive, Titirangi
9319	Bush Road Reservoirs	Water supply purposes - reservoirs and associated structures.	19 Bush Road, Waiatarua
9320	Huia Road Reservoir	Water supply purposes - reservoir and associated structures.	1076A Huia Road, Huia
9321	Waitākere Ranges Headworks Areas	Water supply purposes - headworks areas	Waitākere Ranges
9322	Waitākere Ranges Catchment Headworks Service Land	Water supply purposes - catchment headworks service land.	Waitākere Ranges
9323	Waitākere Water Treatment Plant	Water supply purposes - water treatment plant and associated structures.	105-121 Christian Road, Swanson and 21 Long Road, Bethells
9324	Huia and Nihotupu Water Treatment Plants	Water supply purposes - water treatment plants and associated structures.	Woodlands Park Road, Manuka Road and Exhibition Drive, Titirangi
9326	Titirangi Reservoir (Konini Road)	Water supply purposes - reservoir and associated structures.	166-176 Konini Road, Titirangi
9332	Titirangi Pump Station (Wood Bay Beach Reserve)	Wastewater purposes – pump station and associated structures	Wood Bay Beach Reserve in vicinity of 81 Wood Bay Road, Titirangi
9333	Wastewater Purposes - Wastewater Pumping Station,	Wastewater purposes – pump station and associated structures.	Road reserve adjoining 172A Laingholm Drive, Laingholm

Maps of key areas designated for water catchment and supply purposes.

	
<p>Designations – 9321, Water Supply Purposes – Water Catchment Headworks Areas Waitakere Ranges</p>	<p>Designations – 9322, Water Supply Purposes – Headworks Service Land Waitakere Ranges</p>
	
<p>Designations – 9323, Water Supply Purposes – Waitakere Filter Station Location: 105-121 Christian Road, Swanson and 21 Long Road, Bethells</p>	<p>Designations 9324, Water Supply Purposes – Huia and Nihotupu Filter Stations, Woodlands Location: Woodlands Park Road, Manuka Road and Exhibition Drive, Titirangi</p>



Source: Sean Shadbolt

Auckland Council disclaims any liability whatsoever in connection with any action taken in reliance of this document for any error, deficiency, flaw or omission contained in it.

ISBN 978-1-98-855574-4 (Print)
ISBN 978-1-98-855575-1 (PDF)

**Waitākere Ranges
Local Board**

