

In the matter of: Proposed Auckland Unitary  
Plan

To: The Auckland Unitary Plan  
Independent Hearings Panel

Under the Resource Management Act 1991

Submitters: Richard Reid and Associates  
Limited 4257, Richard H  
Gallen 4754, Auckland  
Botanical Society FS 3237

## **TOPIC 023 NATURAL HERITAGE SEA**

### **Statement of Primary Evidence of by Dr Mark Bellingham 15 July 2015**

#### **INTRODUCTION**

1. My name is Robert Mark Bellingham. I am a Senior Planner and Senior Ecologist with Terra Nova Planning Ltd.
2. I hold a PhD in Planning from Auckland University and I am a full member of the New Zealand Planning Institute. I have been a practicing planning and ecological consultant for over 25 years. I have also lectured in Environmental Planning at Auckland and Massey Universities. I have served on the Ministerial Advisory Committees for the Review of Protected Area Legislation (1989-90) Oceans Policy (2002-4), and as an Auckland Regional Councillor.
3. I provided Waitakere City Council Parks with advice on weed management in Waitakere Parks. In that report (1997) I identified the significance of the indigenous gumland ecosystem in Waikumete Cemetery and the need for active weed management at that time.
4. I have read and agree to comply with the Environment Court's Expert Witness Code of Conduct (Consolidated Practice Note 2006). This evidence is within my area of expertise, except where I state that I am relying on some other evidence. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## SUMMARY STATEMENT

5. I agree with the ecological evidence of Mr Ewen Cameron and cemetery management evidence of Mr Richard Reid.
6. The SEA area in Waikumete Cemetery in the Draft Auckland Unitary Plan (March 2013) – Map 1, Attachment 1, correctly identifies the significant ecological areas identified in the ADP: Waitakere Section maps. This area of SEA indigenous vegetation has not changed since the late 1990s.
7. Since this regionally significant area of gumland vegetation was identified at Waikumete in the 1990s as being significant, many similar areas have been cleared for urban development in the Tamaki Ecological District and across the Auckland Region.
8. The Operative ADP: Waitakere Section has three levels of significant natural areas, whereas the PAUP has one level – SEA. The three SNA levels in the operative plan are consistent with the one-tier SEA in the PAUP. The PAUP criteria do not identify areas as having lesser degrees of ecological significance.
9. The SEA area in Waikumete on the DAUP maps needs to be reinstated, to the Unitary Plan maps. Should Auckland Council decide to clear this significant indigenous vegetation for further burials, then it would need to seek consent for this, as it has required other private landowners with SEAs to do so.

## MAIN POINTS OF SUBMISSIONS:

10. The area in question was identified as a Terrestrial SEA and mapped by Council as a SEA in the Draft Unitary Plan (March 2013). It has been recognised as a regionally significant area of indigenous gumland vegetation in the 2001 Waikumete Conservation and Reserve Management Plan and the ADP: Waitakere Section (Natural Area planning maps) Map 1, Attachment 1.
11. Ms Salmond's evidence (Auckland Council ecologist) outlines the process for refining the SEAs from the DAUP to the PAUP. 8.12-22. Her evidence indicates that proposed SEAs that were reduced or deleted related to sites where there was no physical inspection of the site

and either the site had changed or the assessment was incorrect. The indigenous vegetation on Waikumete Cemetery has not changed since the late 1990s.

12. The Waikumete Conservation and Management Plan (2001) identified the regional significance of the indigenous vegetation in the park:

*Collectively the gumland areas form the largest area of highly significant gumland vegetation remaining in the Tamaki Ecological District within Waitakere City and, as such, need to be managed in a manner that protects these values in perpetuity. (p.77)*

With on-going loss of gumland scrub in other parts of the Tamaki Ecological District, this is now the largest remaining area of this ecosystem.

13. I note Ms Fuller's rebuttal evidence in the 010 Natural Heritage hearing where she referred to threatened ecosystems in the Tamaki Ecological District (para.4.21), which applies to the gumlands in Waikumete:

*It is worth noting that all examples of any ecosystem identified as threatened will be included in the SEA overlay under the "threat status and rarity" criterion, and if there is less than 10% of that ecosystem type remaining in Auckland, all of these sites will also be identified as representative. Additionally, as a point of clarification, the 10% threshold applies within each of the seven ecological districts in mainland Auckland, and as many of these are quite depleted of indigenous vegetation – e.g. Awhitu and Tamaki – in these ecological districts it is likely that much of the remaining indigenous vegetation will have been included within the SEA overlay as representative examples*

14. Ms Fuller in her 010 Natural Heritage EIC (para.11.2) noted that:

*The main policy direction for consents affecting significant biodiversity is set out in Policy 7 (Policy 6 in the notified PAUP), which outlines that adverse effects of Page 19 activities on significant indigenous biodiversity are to be avoided where practicable. If these effects cannot be practicably avoided they are to be minimised, then remedied, then mitigated. If significant residual effects remain, they are to be offset by protection, restoration and enhancement activities that achieve no net loss and preferably a net gain in indigenous biodiversity values.*

15. I understand that the Waitakere Local Board provided no evidence as to why part of the SEA in Waikumete Cemetery should be deleted, other than it was needed for more burials.

16. The Operative ADP: Waitakere Section has three-tier overlays for significant indigenous vegetation (Protected Natural Area, Restoration Natural Area and Managed Natural Area) and the large-scale clearance of the significant indigenous vegetation would be a non-complying activity in these overlays.

17. The Rules page of the ADP: Waitakere Section describes the four natural area overlays in Waikumete Cemetery:

*Restoration natural area - covers areas in the city which have been identified as having significant native vegetation, but of a lower quality than that identified as managed natural area.*

*Managed natural area - covers areas which are characterised by significant native vegetation, wildlife habitats and water systems. The area is also an important landscape feature. This natural area is primarily located in the Waitakere Ranges, although there are sizeable portions in the rural areas and eastern lowlands.*

*Protected natural area - covers areas close to the coast which have outstanding landscape quality and all other areas in the city (all being in the Waitakere Ranges) which have been classified as having outstanding native vegetation.*

*Riparian margins natural area - covers an area extending around coastlines and adjoining important streams, rivers, wetlands and lakes. This natural area forms an ecological buffer beside natural water systems and does not provide for public access to private land.*

The Plan identifies the Restoration Natural areas and the Managed Natural Areas as “significant native vegetation”, and the Protected Natural Areas as “outstanding native vegetation.

18. The PAUP does not have a tiered significance ranking and all of these areas are identified as significant ecological areas - SEAs.

19. The PAUP maps show all of these SNA overlays from the ADP: Waitakere Section (where they are still extant) as SEAs in both the DAUP and the PAUP maps. Waikumete appears to be the only area where these significant native vegetation overlays were translated into the

DAUP and extant parts of the SEA were removed for the PAUP maps. For instance the Managed Natural Areas across the railway line from the southern boundary of Waikumete Cemetery (last two maps of Attachment 2) show the managed natural areas appearing in the DAUP and PAUP maps as SEA.

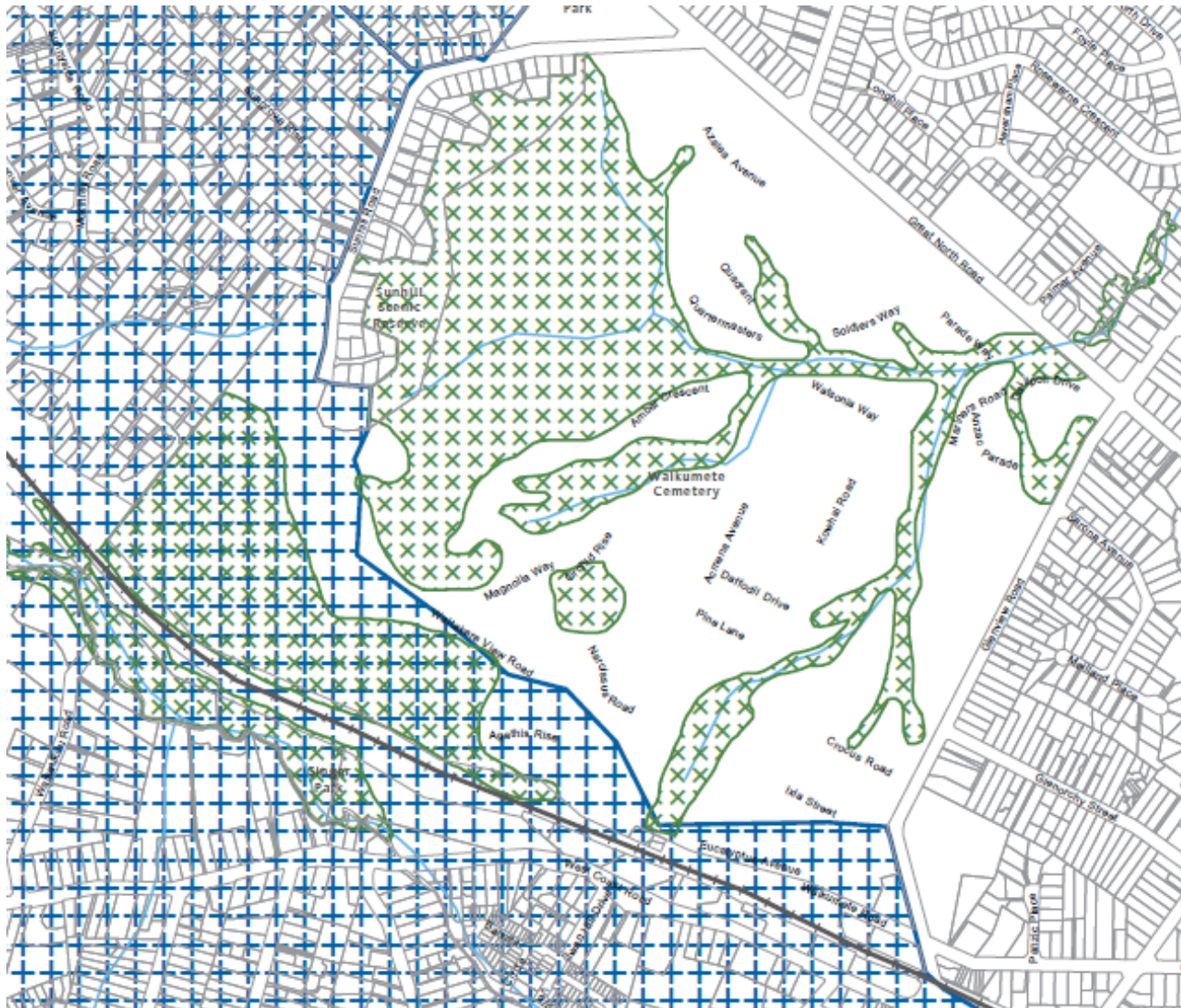
20. A pre-Unitary Plan report on the vegetation of Waikumete, by Bioresarches argued that some of the significant indigenous vegetation in Waikumete was not quite as significant as other areas. These seem to have coincided with areas being sought for additional burials.
21. The argument for a Two-tier significance scale for SEAs under the PAUP has been rejected by Council and most submitters to the PAUP in the 010 RPS Heritage hearings. Clearly all of the significant natural areas (mapped in the ADP: Waitakere Section, Attachment 2) that were also mapped in the DAUP should have remained in the PAUP maps, as they met the SEA criteria in the PAUP (as amended).
22. I consider that the appropriate course of action would be to recognise the extent of the SEA in Waikumete Cemetery, by reinstating the SEA as it was published in the DAUP. This recognises the boundaries of the significant ecosystems in the park as they are now, with the addition of the council reserve on the north-west boundary.
23. Should Council decide it needs to clear some of that vegetation for further burials, then it will need to seek a consent to do that. This is the approach that Council has taken with other submitters seeking to remove SEA status for developments on private land with significant ecosystems.
24. Ms Fuller in her 010 Natural Heritage EIC (para.11.2) noted that:

*The main policy direction for consents affecting significant biodiversity is set out in Policy 7 (Policy 6 in the notified PAUP), which outlines that adverse effects of Page 19 activities on significant indigenous biodiversity are to be avoided where practicable. If these effects cannot be practicably avoided they are to be minimised, then remedied, then mitigated. If significant residual effects remain, they are to be offset by protection, restoration and enhancement activities that achieve no net loss and preferably a net gain in indigenous biodiversity values.*
25. I note that Council have identified the need for a new major cemetery in the west/northwest of Auckland within the next few years and has allocated funding for that purpose in the

LTCCP (Attachment 3). If it cannot provide sufficient rationale for clearing the SEA in Waikumete then it may need to seek Mr Reid's advice on more efficient methods for burials and/or moving the date forward for a new cemetery.

## ATTACHMENT 1

Draft Auckland Unitary Plan natural heritage map 13 March 2013

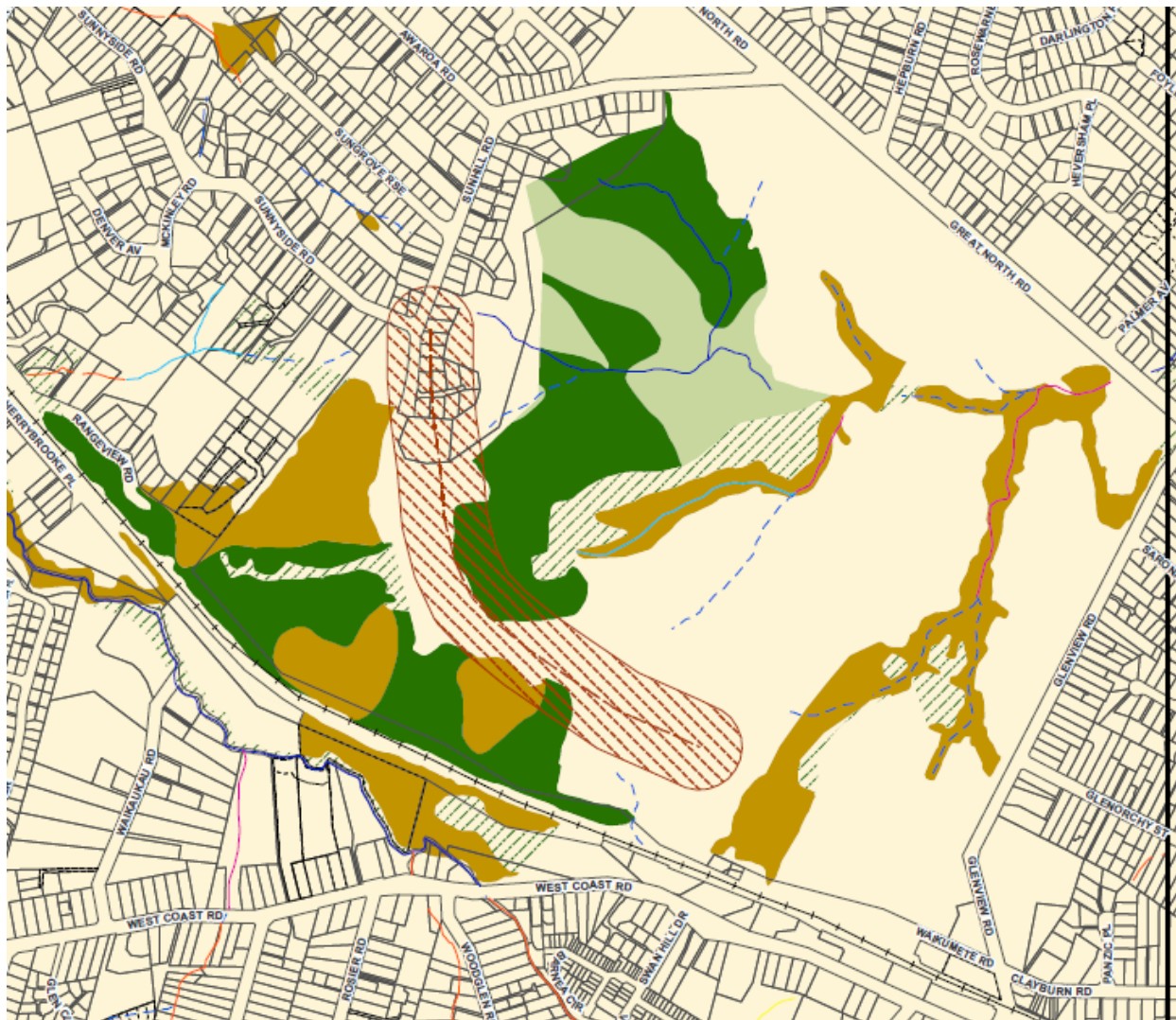


This map illustrates the proposed Sunnyside Park and its connection to the coastline. The park area is highlighted with a green cross-hatch pattern, and the connection to the coastline is shown with a blue line. The map includes labels for roads such as Sunnyside Road, Sunnyside Rise, Sunnyside Road, West Coast Road, and Glenview Road. The proposed park area is located between Sunnyside Road and the coastline, and the connection to the coastline is shown with a blue line.



## ATTACHMENT 2

ADP: Waitakere Section, Natural Area map F9



## Auckland Cemeteries - Levels of Provision and Demand

File No.: CP2014/28932

### Purpose

1. This report provides information on the future demand for body and ash burials for the Auckland region and highlights the issues with levels of provision in Auckland Cemeteries to meet the projected future demand.

### Executive Summary

2. Based on information from Statistics NZ (Census 2006) and analysis that has been completed to date, developed burial space and ash plots at two of the three main Council operated cemeteries will be exhausted in 2018/19. North Shore Memorial Park (NSMP) and Waikumete cemetery, serving the north and west of Auckland, will run out of developed burial space by 2019. Manukau Memorial Gardens (MMG) and Purewa Cemetery (privately owned), serving the south and east of Auckland, will both run out of burial capacity in 2035. Across the region, sufficient crematoria capacity is available for the next 65 years.
3. The analysis carried out shows that all ash plots at all sites will be exhausted by 2018/19, without further development. However, these areas are installed in a “just-in-time” basis, usually one or two years in advance of anticipated demand. They also require less land and less investment and are easier to install than burial plots. The future provision of ash plots is not considered to be a significant issue.
4. There is land available at North Shore Memorial Park that can be developed to provide additional burial capacity until 2042. Funding of \$5.5million has been included for this work within the draft LTP 2015-2025, with development planned to commence in 2016.
5. Waikumete Cemetery is constrained by the limitations of the site. The only areas left to be developed to provide future burial space are the ecological area and surrounds and other areas on the site that are difficult to develop due to their topography. Initial investigations have been carried out as to the appropriateness of developing these areas but they will require more site investigation, planning and significant investment.
6. The demographics of the Auckland region are changing. It is anticipated that by 2020, 23 percent of the region’s population will be Asian (includes Chinese, Indian and Filipino). Whilst current figures show that across New Zealand 70 percent of people favour burial whilst 30 percent favour cremation, indications are that this will change. The majority of the Asian population favour cremation, so as the Asian population increases so will the demand for cremations. Sufficient provision is available for cremation in the region. Auckland also has the biggest pacific population outside of the pacific islands. Currently it is a very young population, but as the population grows older over the next 30 to 40 years there will be an increase in demand on cemetery burial services as this group traditionally favour burial over cremation. Although it is difficult to predict what the true impact on

demand will be based on the changing demographics, it is clear that the cemetery service offer will need to be flexible and be able to adapt and offer a wide range of services to meet demand in the future.

7. Council has a statutory requirement under the Burials and Cremations Act 1964 to ensure that sufficient burial space is provided across the region by both council operated and independent (private) cemeteries. Ultimately, over the medium to long term, the responsibility for the provision of that burial space will fall to council owned cemeteries as independent providers exit from these community services.
8. From the analysis completed, it is evident that solutions to increase capacity in Auckland Council cemeteries need to be investigated. Development is planned within the short term to ensure anticipated future demand for burials across the Auckland region can be accommodated in the short to medium term, within the region's cemeteries. Provision has been made of \$46.5million within the draft LTP 2015-2025, for future cemetery acquisition and development of cemetery provision.

## Recommendations

That the Parks, Recreation and Sport Committee:

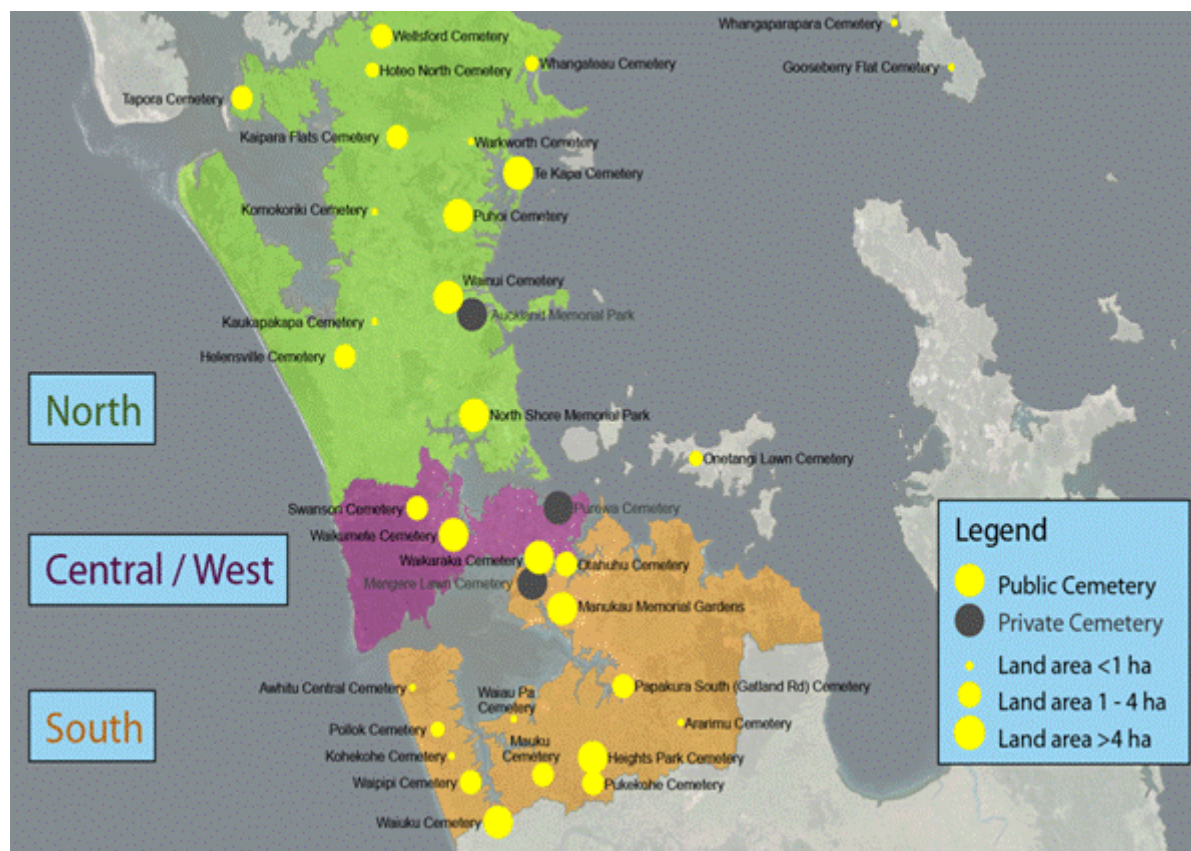
- a) receive the report on Auckland Cemetery provision and demand.

## Discussion

### Background

9. There were 7,566 deaths in the Auckland region in 2013 (Statistics NZ). Of these, 1,446 were buried at Council cemeteries, 2,686 were cremated at Council crematoria, and the remaining 3,434 are assumed to be buried or cremated at independent facilities. Therefore 55 percent of the burials and cremations across the Auckland Region were carried out by Auckland Council owned cemeteries.
10. Auckland Council operate 53 cemeteries across the Auckland region. Of these, 30 are currently open. There are three main public cemeteries which each serve a separate area of Auckland. Combined, these three cemeteries carry out approximately 81 percent of the public-facility burials;
  - North Shore Memorial Park serves the North Auckland area, including the North Shore and Rodney.
  - Manukau Memorial Gardens serves the South Auckland area, including Franklin
  - Waikumete Cemetery serves the Central and West Auckland area.
11. Auckland Council cemeteries currently provide space within their sites for Muslim and Jewish areas, decorated areas (favored by pacific people), lawn areas, mausoleum and those areas dedicated to RSA veterans.

### Auckland Council owned open cemeteries:



12. Analysis has been completed into the capacity available for burial and cremations at Auckland Council cemeteries and to establish what capacity will be required, when and where, to meet anticipated future demand. The large independent cemetery, Purewa Cemetery, was also considered as part of this analysis because when it reaches capacity (in 2035) there will be an impact on demand for other cemeteries including those operated by Auckland Council.
13. Information used in the analysis for the number of registered deaths within the Auckland region and forecasts for deaths were provided by Statistics NZ from the 2006 census.

14. As identified in the Funding Policy under the LTP 2012-22, the majority of costs for cemeteries and crematoria are funded from the user charges. Grants and subsidies (for example the maintenance subsidies from Veteran Affairs) are utilized where available. User charges make up 99 percent of the funding whilst the additional one percent is made up of grants and subsidies.
15. The demographics of the Auckland region are changing. It is anticipated that by 2020, 23 percent<sup>[1]</sup> of the region's population will be Asian (includes Chinese, Indian and Filipino). Whilst current figures show that across New Zealand 70 percent of people favour burial whilst 30 percent favour cremation, indications are that this will change. The majority of the Asian population favour cremation, so as the Asian population increases so will the demand for cremations. There will also be an increase in demand for places where "cremains" can be stored until Asian families (includes Chinese, Taiwanese, Korean) are ready to move them elsewhere, as it is considered unlucky to store them at home.
16. Auckland also has the biggest pacific population outside of the pacific islands. Currently it is a very young population, but as the population grows older over the next 30 to 40 years there will be an increase in demand on cemetery burial services as they traditionally favour burials over cremations. Although it is difficult to predict what the true impact on demand for cemetery services will be based on the changing demographics, it is clear that the service offer will need to be flexible and be able to adapt and offer a wide range of services to meet the changes to customer demand in the future.
17. Whilst there are other independent providers within the region, Council has a statutory requirement under the Burials and Cremations Act 1964 to ensure that sufficient burial space is provided across the region by both council run and independently run cemeteries. It is anticipated that as traditional independent cemeteries reach capacity there will be a greater reliance on council cemeteries to provide burial services.

#### **Regional Capacity Forecast**

18. Table 1 below displays the regional burial plot and ash plot capacities across all public cemeteries. Each column shows the plot capacity for an area of Auckland. The "Overall" columns show the first year that capacity is exceeded (in any area). With the current number of available ash and burial plots, areas will start to reach capacity as early as 2019.

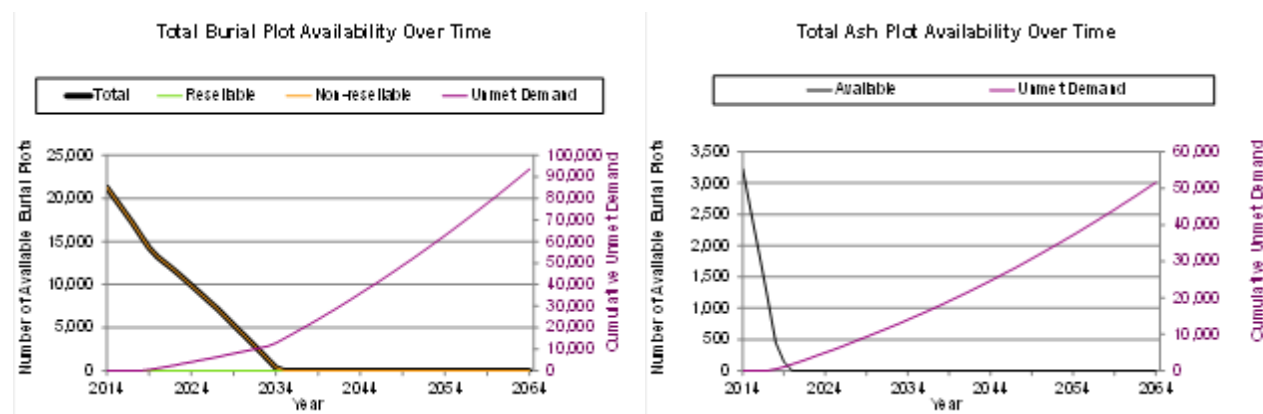


**Table 1 Plot capacity summary – all regional public cemeteries**

	Burial Plots				Ash Plots			
	North	South	Central/ West	Overall	North	South	Central/ West	Overall
Available plots in 2014	1,247	17,744	2,300	<b>21,291</b>	1,583	660	988	<b>3,231</b>
Average annual demand from 2004 to 2013	260	810	400	<b>1,470</b>	355	180	160	<b>700</b>
Remaining life from start of 2014 (years, rounded up)	6	22	6	<b>6</b>	5	5	6	<b>5</b>
Reaches capacity in year	2019	2035	2019	<b>2019</b>	2018	2018	2019	<b>2018</b>
Remaining capacity if include undeveloped land area	29 years (2042)				10 years (2023)			

19. Figure 1 below shows that by 2035, all the burial capacity available today will be exhausted. By 2018, all the ash plot capacity is exceeded. Note that in figure 1, unmet demand starts to accumulate before the overall capacity is exceeded. This is because the model used for analysis assumes residents will only be buried in the area they resided in before their death.

**Figure 1 Total burial and ash plot availability across Auckland**



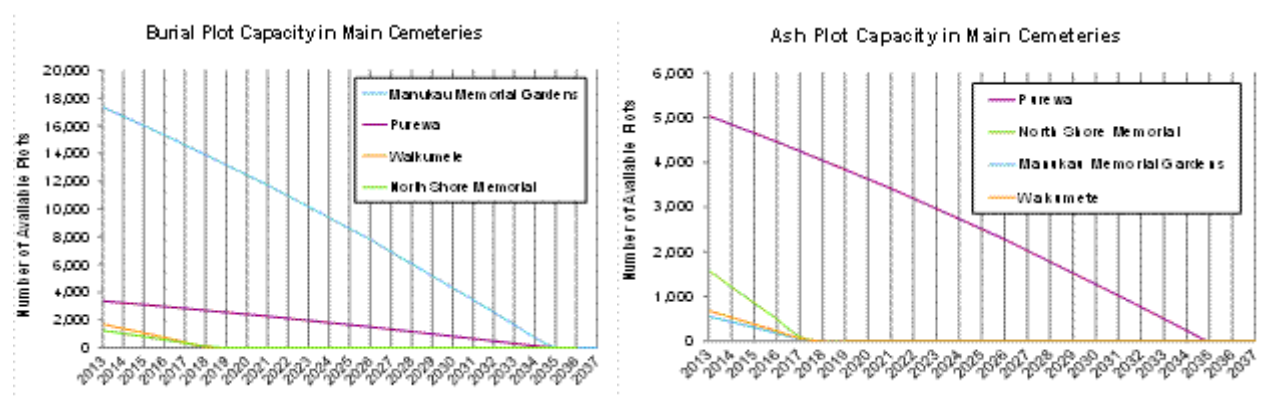
## Main Cemeteries

20. The remaining life of the four large cemeteries in Auckland is shown in figure 2 and Table 2. Manukau Memorial Gardens and Purewa Cemetery have burial capacity until 2035 and Waikumete Cemetery and North Shore Memorial are expected to reach burial plot capacity in 2019 and ash plot capacity in 2018. This does not include the undeveloped southern area of North Shore Memorial Park which is unfunded in the current LTP. If that were included, then North Shore Memorial Park would have sufficient burial capacity until 2042.
21. Ash plot provision is not regarded as an issue. As ash plots are smaller than burial plots, more undeveloped land in public cemeteries will be allocated to ash plots for future development. Auckland Council currently assumes a 1:4 demand ratio for ash plots to burial plots. Although the analysis shows that all sites will run out of ash plots by 2018/19 these areas are installed in a “just-in-time” basis, usually one or two years in advance of anticipated demand. They require less land and less investment than burial plots and are easier to install.
22. Based on information provided by Purewa Cemetery, burial plot capacity will be exceeded in 2035. Currently there are no plans and no land available in the immediate area, to extend this cemetery beyond this date. It is important to note that the public cemeteries reach capacity long before this, as shown in table 2.

**Table 2 Burial and ash plot capacities of main cemeteries**

	Burial Plots				Ash Plots			
	NSMP	MMG	Waikumete Cemetery	Purewa Cemetery	NSMP	MMG	Waikumete Cemetery	Purewa Cemetery
Available plots in 2014	1,247	17,344	1707	NA	1,583	560	689	NA
Average annual demand from 2004 to 2013	220	630	310	165	340	110	150	240
Remaining life from start of 2014	6 years	22 years	6 years	22 years	5 years	5 years	5 years	22 years
Reaches capacity in year	2019	2035	2019	2035 (assumed)	2018	2018	2018	2035 (assumed)
Remaining life if include undeveloped land area	29 years (2042) <sup>[2]</sup>	To be surveyed			10 years (2023)	To be surveyed		

**Figure 2 Burial and ash plot capacities of main cemeteries**



## Crematoria

23. Table 3 below shows the current performance of public and private crematoria in Auckland. This assumes public cremators can perform five cremations per day, private cremators can perform two cremations per day, and cremators are in operation every day except Sundays and public holidays.

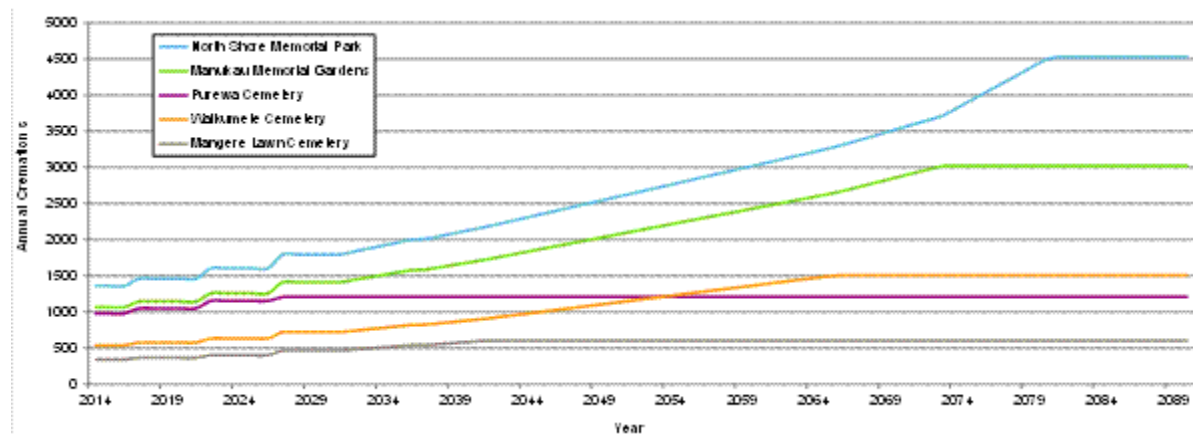
**Table 3 Current performance of Crematoria**

Crematorium	Number of Incinerators	Cremation Capacity per Year	Current Ave Cremations per year	Proportion of Region's Cremations	Current Utilisation
Manukau Memorial Gardens	2	3,020	1,090	25%	36%
North Shore Memorial Park	3	4,530	1,390	32%	31%
Waikumete Cemetery	1	1,510	550	13%	36%
Pukekohe Cemetery	2	1,208	1,008	23%	83%
Mangere Lawn Cemetery	1	604	350	8%	58%
<b>Total</b>		<b>10,872</b>	<b>4,380</b>	<b>100%</b>	<b>40%</b>

24. With the current total capacity of 10,900 cremations per year, there is sufficient capacity to meet demand for at least the next 65 years. Figure 3 shows the forecast number of cremations for each crematoria annually. The cremation trend flat lines when the cremators are working at 100 percent utilization.



**Figure 3 Annual cremations forecast for each crematoria**



25. The current crematoria capacities are sufficient to meet demand until 2080. Auckland Council crematoria on the three main cemetery sites currently have sufficient capacity to cope with future demand.

#### **Draft LTP 2015-2025**

26. The draft LTP 2015-2025 includes provision of \$46.5million for the acquisition and development of cemetery land, within the Auckland region, over the next 10 years. \$5.5m relates to the development of burial area at the North Shore Memorial Park. The remaining \$41million will be used to extend burial areas at Waikumele, the acquisition of additional land adjacent to Manukau Memorial Gardens when required, and the acquisition and initial development of a new north western cemetery, which will provide burial capacity across that area of the region when Waikumele cemetery capacity is exhausted.

## **Consideration**

### **Local Board Views and Implications**

27. Local Boards will receive a copy of this report for their information. Rodney and Great Barrier Island Local Boards have specifically requested information regarding the capacity available within their Local Board area. This is addressed within the analysis that has been completed, and will be presented to the Local Boards for their information and feedback in developing a cemetery development plan.
28. Responsibility for decisions relating to Auckland Cemeteries rests with the governing body, although Local Boards will be kept informed.

## **Māori Impact Statement**

29. The matters raised here are of critical interest to mana whenua and full consultation will be undertaken with mana whenua in the preparation of a cemetery development plan.
30. Te Ao Māori will be considered in preparing a cemetery development plan, including three key areas, Te Reo Māori (Māori language), tikanga Māori (protocols and customs) and Te Tiriti o Waitangi (the Treaty of Waitangi). Together, these three areas will provide a broad overview, and a better understanding of Māori culture and Māori realities for the delivery of cemetery and cremation services.
31. A number of cemeteries provide urupa areas within cemeteries for Māori and tikanga Māori is provided for. A Wāhi Tapu Māori Komiti has been in place since 1996 at Waikumete Cemetery to oversee the operation of the Wāhi Tapu Māori area. Consultation was undertaken for the development of the Cemeteries and Crematoria Bylaw 2014 / Te Ture ā-Rohe mo gā Wāhi Tapu me ngā WhareTahu Tupāpaku 2014 and Cemeteries and Crematoria Code of Practice 2014 / Arataki Tikanga mo ngā Wāhi Tapu me ngā Whare Tahu Tupāpaku 2014. The Code of Practice, in particular, provides for Te Ao Māori.

## **Implementation Issues**

32. As a result of the analysis that has been completed a cemetery development plan will be prepared and include:
  - a. Development of additional burial space at NSMP is planned to commence in 2016.
  - b. Detailed planning into the availability of land at Waikumete Cemetery for burial space. This work will be refine an initial assessment and will consider the overall business case for meeting demand over the short to medium term.
  - c. Planning future demand and provision across the Auckland region cemetery network will be reviewed at three year intervals to update the development plan, including analysis and information from cemeteries across Auckland (private and public).
  - d. Ash plots will continue to be provided by all cemeteries on a “just-in-time” basis on land in existing cemeteries.
  - e. Work will continue on seeking to maximise the utilisation of cremators on Auckland Council cemetery sites.