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Te Korowai o Mauao

Archaeological Site Management and the Ecological Restoration of Mauao Historic Reserve, Tauranga

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1. Purpose

Mauao Historic Reserve is an extensive cultural heritage landscape that encompasses 76 hectares of land on the eastern side of the entrance to Tauranga Harbour (Figure 1). The reserve contains components of three pā, with associated pits, terraces, platforms, house floors and middens. The shell mounds in the reserve are the only known surviving examples of this type of archaeological feature in the Bay of Plenty. Mauao is gazetted as a Historic Reserve and is managed by Tauranga City Council (TCC). Mauao is protected under the provisions set out in the Mauao Vesting Act 2008 and the Trustees of the Mauao Trust administer the Reserve on behalf of Ngāi Te Rangi, Ngāti Ranginui and Ngāti Pūkenga. The Reserve must be managed in a manner consistent with the requirements of the Reserves Act 1977.



Figure 1: Location of Mauao Historic Reserve, Tauranga.

Historic reserves are established under the Reserves Act 1977 primarily to protect and preserve in perpetuity places, objects, and natural features of historic, archaeological, cultural, educational, and other special interest (section 18). The administering body must manage and control the reserve in accordance with the appropriate provisions of the Act and in terms of its appointment and the means at its disposal, to ensure the use, enjoyment, development, maintenance, protection, and preservation, as the case may require, of the reserve for the purpose for which it is classified (section 40). No

management action taken within the reserve can be inconsistent with the requirements of the Heritage New Zealand Pouhere Taonga Act 2014.

Objective 1 of the Mauao Historic Reserve Management Plan (2017) is to protect the historical and cultural values of the reserve and meet the cultural needs and aspirations of the tangata whenua. Objective 2 is to protect and enhance the landscape character and ecological values of the reserve. Included within objective 2 is the opportunity to restore the korowai o Mauao (cloak) through conservation programmes and planting projects. The cloak of Mauao is a metaphor for the chiefly rangatira status of the maunga¹.

The purpose of this report is to illustrate the location of areas of archaeological significance within the historic reserve in relation to vegetation management units. This will guide the consideration and location of further ecological restoration planting projects within the reserve to balance objectives 1 and 2 of the management plan.

2. Vegetation Management and Archaeological Sites

The reserve comprises approximately 76 hectares. At present 51.5 hectares (67%) of the reserve is in vegetation cover other than grassland, and 24.5 hectares (33%) is in vegetation cover dominated by grassland species (Figure 2).

Grazing of sheep, to maintain a protective grass cover on archaeological features, has the potential to seriously damage the features through trampling and tracking. The appropriateness of having grazing animals on archaeological features of Māori cultural significance on the maunga is also a matter for debate.

At present, grazing by sheep is being used as a management tool to maintain a vegetation cover within the reserve that offers good protection to archaeological features while also providing for public viewing and appreciation of the surface features. The many archaeological features within the reserve represent a tōhu whenua (landmark) that is a visual expression of the long history of Māori occupation of Mauao. Being able to see and appreciate the large number of archaeological features within the reserve is an effective way to illustrate the cultural significance of the landscape to reserve visitors.

¹ Mauao Historic Reserve Management Plan 2017. Tauranga City Council and the Mauao Trust.

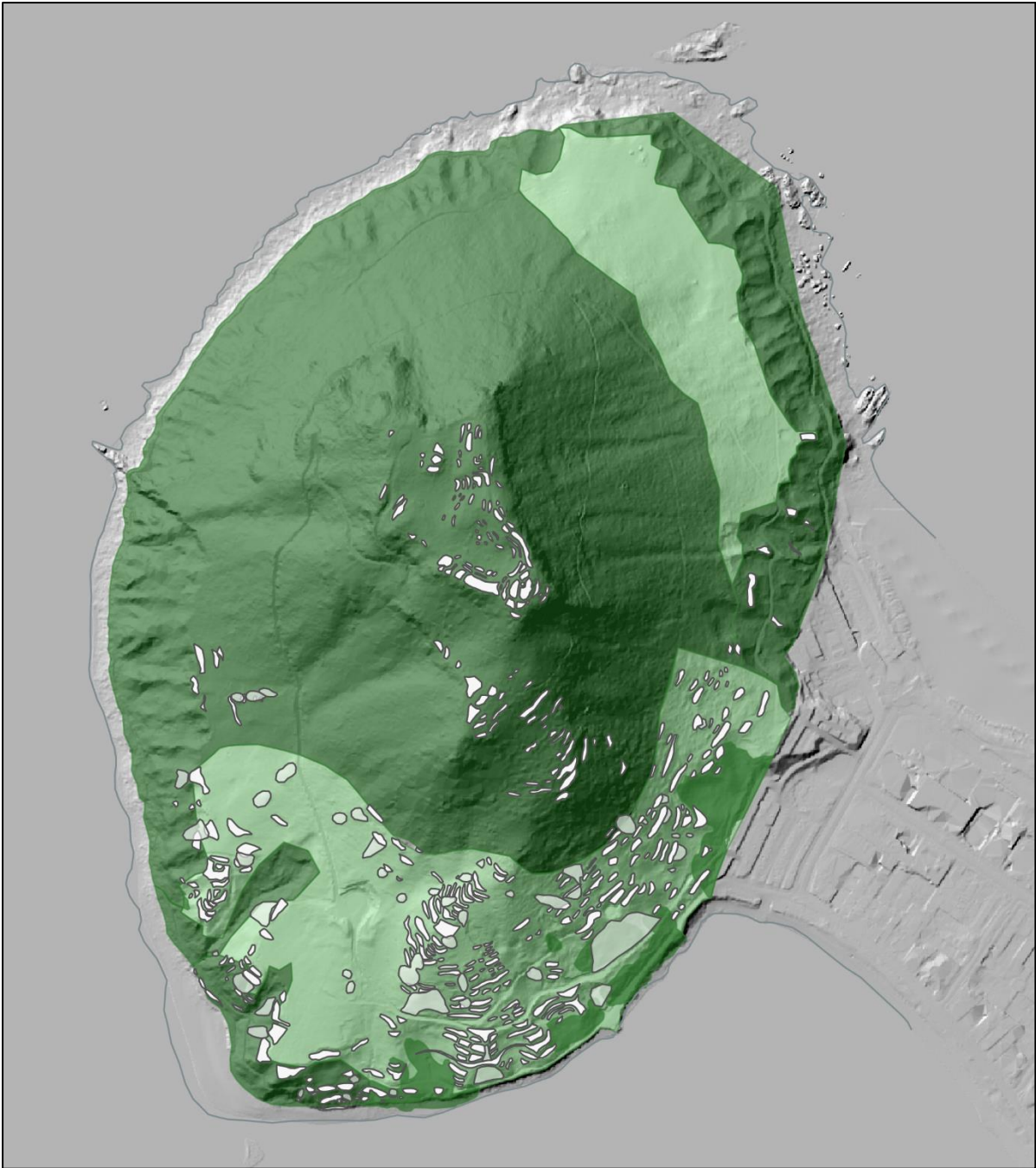


Figure 2: Plan showing the archaeological features on Mauao, as grey polygons. Dark green indicates vegetation other than grassland, and light green indicates grassland.

Many of the archaeological features in the reserve are within areas that have a vegetation cover other than pasture grazed by sheep and are therefore less visible (Figure 2). It is appropriate to establish vegetation other than grazed pasture on archaeological features in parts of the reserve where continued livestock grazing is not desirable for archaeological site protection or other reserve management purposes, such as preventing livestock from accessing the coastal margins of the reserve.

In these areas, continued grazing is having a detrimental effect on slope stability and is contributing to the loss of archaeological sites (Figure 3). While establishing a vegetation cover other than grazed pasture may lead to some loss of archaeological information, overall that loss will be less than that caused by on-going erosion. This applies to areas where there have been large land slips above the 4WD track within the grazed portion of the reserve. These may require retirement from grazing and planting in indigenous vegetation to prevent or minimise the possibility of further land slippage (Figure 4).

A variety of methods to protect and stabilise archaeological features within the reserve are being utilized and trialed, such as the establishment of indigenous grassland species that can be maintained without livestock grazing. Pōhuehue (*Muehlenbeckia complexa*) is also being encouraged to grow on shell mounds in the reserve to protect the features from erosion (Figure 5).



Figure 3: Eroding slopes with exposed eroding midden (2016).



Figure 4: Photograph from a similar vantage point as Figure 3, taken in 2020, showing a variety of vegetation cover, and improved slope stability with less exposed and eroding midden.



Figure 5: Protective vegetation established on a shell mound (centre of photo) in the grazed part of the reserve, with an eroding shell mound without effective vegetation cover in the foreground.

3. Vegetation Management Units

The Conservation Plan for Mauao Historic Reserve prepared by Wildlands in 2015, identified nine management units within the reserve, based on vegetation management requirements². Within this report the number of management units has been reduced to seven based on the progress that has been made with the planting programme since 2015, but the main principles of the Conservation Plan have been retained. The units are illustrated in Figure 6 and comprise as follows:

Unit 1

Protect archaeological values and views while supporting a high level of public visitation to the summit. Indigenous vegetation and grassland mix, maintained without grazing by livestock.

Unit 2

To be retained in indigenous vegetation. Indigenous grasses to be established on archaeological features on the western side of the reserve within this unit. Some active management of indigenous vegetation on archaeological features may be required at times to conserve features.

Unit 3

The long-term aim for this area is to establish pōhutukawa forest; in the short-term the aim is to reduce pest plant cover and establish a vegetation cover that is relatively resistant to fire. Contains no known archaeological features.

Unit 4

Retain as grazed pasture in the short-term and undertake archaeological research. Subject to the results of that investigation, either retain as grassland or establish an alternative vegetation management regime.

² Conservation Plan for Mauao Historic Reserve, Vol 1, Wildlands Ltd 2015 pp.58-61.

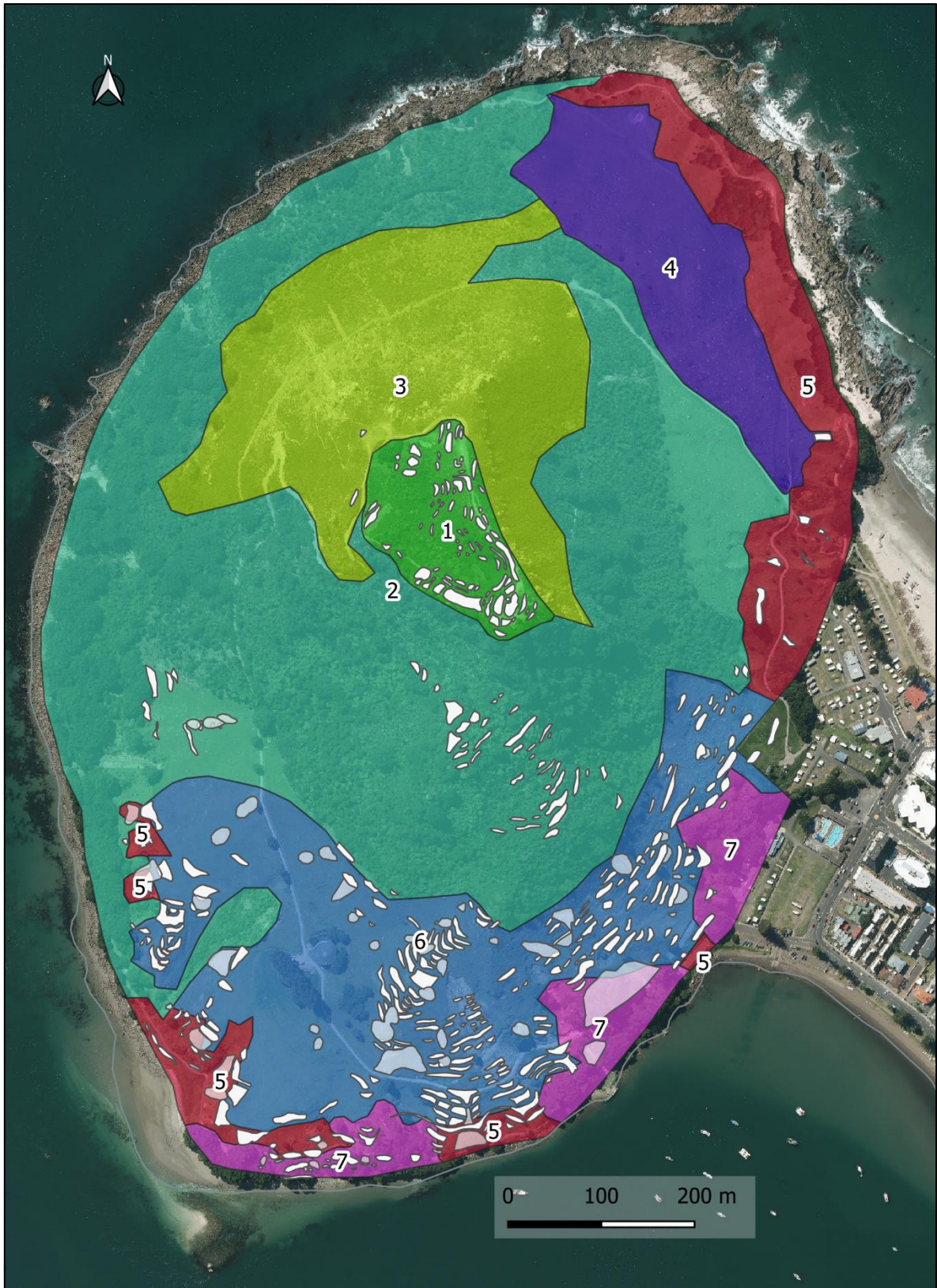


Figure 6: Vegetation management units and archaeological features on Mauao.

Unit 5

Continue to establish indigenous vegetation and connect the corridor of pōhutukawa around the base of Mauao. Archaeological features planted in low growing, shallow rooting species.

Unit 6

To be retained in grazed pasture or indigenous grassland where it is required to protect archaeological features.

Unit 7

Exotic trees occur throughout this unit, interspersed with indigenous species, and the aim is to re-establish pōhutukawa dominant forest. Archaeological features to be maintained in low growing, shallow rooting species.

4. Recommendations

- Mauao Historic Reserve must be managed in a manner consistent with the historic reserve classification and in accordance with the requirements of the Reserves Act and the Heritage New Zealand Pouhere Taonga Act.
- Areas of the Mauao Historic Reserve where there is a high concentration of visible archaeological features must be retained in grassland vegetation cover in order that archaeological features can continue to be seen and so that there is minimal disruption to archaeological values caused by vegetation growth. At present this applies to areas identified as Units 4 and 6.
- Indigenous grassland trials should continue and alternative vegetation cover for archaeological sites should be explored with archaeological advice and in consultation with Heritage New Zealand.
- Units 2 and 3 are to be retained as indigenous vegetation dominated by tree species.
- Infill planting of indigenous species should continue in Units 1, 2, 3, 5 and 7. Archaeological features in these areas must be planted in shallow rooting

species such as pōhuehue, or indigenous grasses or reed species such as wīwī or oioi.

5. References

Mauao Historic Reserve Management Plan 2017. Tauranga City Council and the Mauao Trust.

Wildlands Ltd 2015. Conservation Plan for Mauao Historic Reserve, vol 1.