INTRODUCTION

This chapter focuses on the creation of the physical landscape of the study area by blending two perspectives: that of Indigenous people and that of science and geology. The aim is to provide an understanding of what the landscape was like prior to changes that occurred since the arrival of non-Aboriginal people from the early nineteenth century onwards.

For thousands of years, the study area was used and modified by Woi wurrung and Boon wurrung people, who are part of the Kulin Nations. The eastern part of the study area was a place where Aboriginal people, including those who had been displaced from other parts of Melbourne, came to live and socialise. The occupation by Indigenous communities is also remembered in the names and meanings of places and landscapes. Understanding the evidence of the pre-contact landscape and how it influenced the early settlement of the study area is fundamental to an overall understanding of the later historic development of the municipality.

This chapter provides a scientific explanation of the geomorphology, waterways, flora and fauna associated with the study area. The vision presented of the pre-contact landscape is of a swampy scene around the waterways with thickets of trees, woody and heathy woodland, scrub and floodplain. Wildlife was plentiful and, along with vegetation, adapted gradually to a regime of management by the Indigenous peoples. It is interesting to contrast this with the accompanying section on spiritual places, which explains that the area of the study is the traditional country of the Woi wurrung and Boon wurrung people. This provides the parallel creation stories of places such as the Yarra River and describes the spiritual importance of the land to Aboriginal people and how they interpreted and understood it.

Material dealing with the Indigenous history of Stonnington contained in this Thematic Environmental History has been drawn from sources of public record. Council has prepared an Indigenous History of Stonnington that will further enhance this information.

This chapter incorporates the following themes:

Australian Heritage Criteria (AHC)
Living as Australia’s earliest inhabitants; Tracing the evolution of the Australian environment.
iv J. Cotton c. 1845. Native encampment on the banks of the Yarra. Watercolour with graphite pencil and glazing medium. Note: This image may not be of the Yarra within the boundaries of the study area.


v Scenes of the pastoral landscape around Avoca that show the transition from the natural to cultural landscape (not dated, but appear to be c.1870). Avoca was situated on the banks of the Yarra just to the east of Punt Road.

[SLHC Reg. No. 2051.14, 2051.16]
1.1 Geomorphology – creating the landscape

This section provides an overview of the physical features of the study area as they appear on the surface of the land, and how this is related to geological structures and process. This is illustrated in Figure 2.

The geology (and hence landform and soils) of Stonnington is the result of a long series of depositional and erosion sequences forming part of what is known as the Nillumbik Terrain (Burns, unpubl. p.6; Hills, 1975:323), comprising the Dargile and Andersons Creek formations. These formations underlie most of Melbourne and consist of sediments of layered siltstones, sandstones and mudstones and conglomerate of Silurian Age (around 400 million years ago), which have undergone uplifting, tilting, folding and faulting.

Following extensive erosion, the Nillumbik Terrain was characterised by a very low relief coastal zone traversed by very mature and old age streams. The area was then partially inundated by the ocean during Tertiary times (40–20 million years ago) resulting in the deposition of sands and gravels of the Brighton Group (shown in yellow on Figure 2). This flooding was partially caused by sea level rise and partly by the sinking of the earth’s crust in the Bass Strait area.

In the late Tertiary period (around 10 million years ago) the Nillumbik Terrain was uplifted and probably tilted towards the sea. As this occurred streams began cutting their courses through the Tertiary sands and Silurian bedrock to form valleys such as that of the Yarra River and Gardiners Creek.

As the streams gradually cut down through the sediments, alluvial material was deposited when the streams flooded (shown on Figure 2 in light green), so the older alluviums were left at higher levels (darker green).

During the period known as the Newer Volcanics (from around 4 million years ago to recent times), basalt lavas (shown as pale orange) flowed from the north down the Merri and Darebin Creek valleys to the Yarra and down the Yarra, damming the Yarra and Gardiners Creek (Hills, 1975:230) and probably also Hawksburn Creek. Alluvial sediments were deposited in the lakes formed on the lower Gardiners and Hawksburn Creeks, and on the Yarra. When the Yarra cut a new valley along the eastern edge of the lava flows the lake drained, exposing the lake beds. This is the origin of the wide alluvial flats on the lower Gardiners and Hawksburn Creeks, and why the banks of the Yarra in the study area between Heyington Place and Punt Road tend to be higher and cliffier than the opposite bank.
CREATION

Figure 2: Geology

LEGEND

- PO - OLDER VOLCANIC BASALT
- NB - BRIGHTON GROUP SANDS
- Q41 - QUATERNARY ALLUVIUM
- QC1 - QUATERNARY COLLIERSUM
- Q31L1 - COASTAL DUNE DEPOSITS
- QM1 - SWAMP DEPOSITS
- QNO1 - NEWER VOLCANIC BASALT
- QNC - COOK ISLAND SILTY
- S6A - ANDERSONS CREEK FORMATION
- S6G - DARGILE FORMATION Silurian Siltstone

Source: Geological information published with permission from the Department of Human Industry.
1.2 ‘Swampy Poor Ann’

The waterways and swamps of the study area as they would have been prior to the arrival of non-Aboriginal people are shown in Figure 3. The Yarra River and its main tributaries – Gardiners Creek and Hawksburn Creek – were main channels of a drainage network that resulted from millions of years of erosion and other geological processes briefly described in Chapter 1.1. They provided an important habitat that supported a particular range of plants and animals. The swampy nature of the study area at the time of first settlement by non-Aboriginal people created hazards for the early settlers, and led to disparaging remarks about the area. Joseph Crook, in an article published in an October 1897 edition of the Prahran Telegraph recalls that:

*It was only on rare occasions that the Prahranites indulged in theatre going, for it was no joke finding the road home in the dark, and we never attempted it unless four or five of us went together. Then it was only when the moon shone, and even then we would sometimes land among the swamps, from which Prahran was called by the Melbournites ‘Swampy Poor Ann’ (Prahran Local History Catalogue, Registration No. 10692).*

Swampy thickets of tea-tree and paperbark occurred particularly at the confluence with minor tributaries, and at a range of billabongs along the river. Brackish water sometimes extended past the rocky ‘falls’ at the site of what is now Princes Bridge as far upstream as Dight’s Falls (Finn 1967:38). The waters, the tea-tree scrub and the reeds swarmed with birds – black swans, ducks and pelicans, and with black fish, bream, flounder and herring.

Kooyong Koot Creek or Gardiners Creek as it later became known was a little braided stream flowing in a wide swampy floodplain mostly covered in ‘ti tree’ (Hall, 1911). The ti tree referred to is probably what is now known as Swamp Paperbark or Woolly Tea-tree, or a mixture of the two. In heavy rain the creek would spread out through the surrounding scrub-covered flats and flow slowly to the Yarra. The present-day suburbs of Kooyong, Malvern, Glen Iris and Malvern East drain to Gardiners Creek.

Many other smaller, mostly intermittent tributaries flowed generally northward to the Yarra and Gardiners Creek. Rainfall seeped through the porous Brighton Sands soils to the underlying relatively impermeable Silurian clays. The hidden topography of the clay channelled the soil water, and where the overlying sands had over millions of years been eroded, the groundwater emerged as springs.

Finn (1967:37) provides an idyllic description of the waterways:

*Large trees, like lines of foliaged sentinels, guarded both sides and their branches protruded so far riverwise as to more than half shadow the stream. The waters were bright and sparkling, and wooed by the fragrant acacias shaking their golden blossom-curls.*
Flora and fauna

The development of the original flora and fauna communities in the study area was the result of a long dynamic process whereby plant and animal species moved in and out as climate, water levels, soils, fires and grazing levels changed. The species themselves slowly evolved to better cope with environmental changes as well as coping or competing with, and taking advantage of other plant and animal species. In addition, by the time of settlement by non-Aboriginal people it is thought that plant and animal communities had adapted to tens of thousands of years of Aboriginal land management, including regular burning of the bush, harvesting and re-planting tuberous bulbs, and hunting. The flora and fauna of the study area clearly provided a rich diet, which could have supported large gatherings of Aboriginal people. Food items included possums, wallabies, waterbirds, fish and the staple tubers and bulbs. Many indigenous plants had medicinal or other uses well known by the Aboriginal people (Wigney, 1994). Unfortunately, the complex interrelationship between Aboriginal people and the natural environment is not fully understood.
1.3.1 Grassy woodlands and tea tree swamps

As we shall see in the next chapter, the native vegetation within the study area was cleared quite rapidly and few early records were made. Consequently, it is difficult to accurately describe the vegetation that would have occurred in the study area prior to the early nineteenth century. Joseph Crook, in an article published in the 28 August 1897 edition of the Prahran Telegraph, provides an almost contemporary account of the vegetation in the Prahran district in 1849:

… in August 1849 when I first saw it was a dense bush of big trees, full of birds, kangaroos, opossums and wild fowls, with no roads. From the outlet of the present drain at the railway bridge over the Yarra to Motherwell Street was a swamp thickly covered with Ti-tree, while from the upper part of Chapel Street from High Street to St Kilda was a thick wattle scrub. Mount Erica was covered with heath (Prahran Local History Catalogue, Registration No. 10692).

Mount Erica was near the present-day intersection of High Street and Williams Road. It is remembered by the eponymous Mount Erica Hotel.

The plan shown at the beginning of this chapter, dated 1857, provides some broad descriptions of the vegetation in the south-east part of the study area, which includes ‘Heath and Scrub’ in the area between what is now Kooyong Road and Tooronga Road, to ‘Wooded with Box Gums’ in the area east of Burke Road extending to Warrigal Road.

In 2001, Oates and Taranto created a set of maps showing the Ecological Vegetation Classes (EVC) for the Port Phillip and Westernport Region as the authors concluded they probably were in 1750, based on ecological factors and historical records such as the newspaper reports and plans described above. The reconstructed EVCs are a very broad typology of vegetation communities, which are shown in Figure 4.

Generally speaking, soils based on the Brighton Sands supported Grassy Woodland, but on the more well-drained areas (e.g., parts of Armadale) it supported Heathy Woodland. Along the Yarra and Gardiners Creek was a continuous strip of Floodplain Riparian Woodland, with the smaller tributaries carrying Creekline Grassy Woodland. What is now the Como Park area carried Swamp Scrub.

1.3.2 A source of food and medicine – fauna of the study area

Early indigenous fauna records for the study area are few, and it is almost impossible to determine the exact number and type of species that may have been found there before settlement by non-Aboriginal people. The Land Conservation Council (1991) lists the following numbers of faunal species occurring in the ‘Melbourne 2’ district, which includes the study area:

- 316 indigenous birds of which approximately 200 might have occurred in the study area
- 51 indigenous non-marine mammal species, 41 indigenous reptiles, 22 indigenous amphibians, and 26 indigenous freshwater fish, most of which might have occurred in the study area
- A large but unknown number of indigenous insects and other invertebrates would also have occurred. All these species depended on each other and the indigenous flora species.
1.4 Spiritual places

The study area is the traditional country of the Woi wurrung and Boon wurrung peoples. Although the Woi wurrung and Boon wurrung were two distinct nations they shared much in common. They belonged to a larger affiliation of five central Victorian tribes known as the Kulin Nation. The other Kulin people were the Wathaurong, the Dja Dja wurrung and the Taungurong. The people of the Kulin Nation shared similar languages and culture and maintained close economic ties (Hercus 1968: map, unpaginated). Archaeologists believe that Aboriginal people have been in Victoria for more than 30,000 years. Throughout this long history their relationship with the landscape (where and how they lived) changed according to factors such as climate change and resource availability, and cultural change. It is possible, however, to assume that the land of the Kulin has been occupied for many thousands of years.

The Boonerwrung language was one of five languages that were so similar that they could be grouped together and described broadly as the Kulin languages. Boonerwrung, Woi wurrung and Taungurong were the Eastern Kulin languages. The Western Kulin languages were Wathaurong and Dja Dja wurrung. These groups formed the Kulin Nation. The people of the Kulin Nation not only shared language, they had similar traditions, customs and close economic ties and had the same spirit ancestors (Hercus 1969: map, unpaginated).

1.4.1 Bunjil

The Great Spirit ancestor Bunjil created the earth, trees and animals of the country that is now within the study area. Bunjil’s brother Pallian created the seas, waters and fish. According to Boon wurrung stories, Port Phillip Bay used to be a huge plain where the Boon wurrung hunted animals and gathered plants. At this time, conflict arose among the tribes of the Kulin Nation. The people neglected each other and squandered the land’s resources. Their behaviour made the sea angry and it rose up, covering the plain and threatening to flood the rest of their country. The people appealed to Bunjil to stop the sea from rising. Bunjil told the people that they would have to stop their bad behaviour and start following his laws. The people agreed to this, whereupon Bunjil commanded the sea to stop rising. The coastline of the Boon wurrung as we know it today was created. After Bunjil stopped the rising of the sea, the Kulin people chose the great meeting ground on land now occupied by Government House to come together to discuss the business of the Nation, to celebrate and to dance (story told by Boonerwrung elder Caroline Briggs in an address for National Reconciliation Week www.yarrahealing.melb.catholic.edu.au).
1.4.2 Yarra River

There are a number of stories about the creation of the Yarra River. Billibellary, an important Woi wurrung leader, told the following version. Billibellary’s brother Burrenupton and family are believed to have occupied the land on the south bank of the Yarra upstream to Gardiners Creek (Ellender and Christiansen 2001:35). The waters of the Yarra River used to be locked up in the mountains, creating a vast inland lake that covered most of the hunting grounds of the Woi wurrung. Mo-yarra was a headman of the Woi wurrung who decided to rid the country of the water by digging a channel south to Westernport. Little water followed him, however, and the hunting grounds remained inundated. Some time later, a new headman, Bar-wool, recalled Mo-Yarra’s efforts to free the Yarra and decided to try again himself. He cut a channel with his axe but was stopped by the mountain, Baw Baw. Turning north, he was stopped again by Donna Buang and his brothers. Cutting westward through the hills to War-ran-dyte he met another Woi wurrung man, Yan-Yan, who was cutting a channel for the Plenty River in order to drain Morang. The two men decided to work together and continued digging through the areas we now know as Heidelberg and Templestowe. From here the ground got much harder and the two men had to work much more slowly and used a lot of stone axes. Between the Darebin and Merri creeks they cut a narrow twisting track as they looked for softer ground. When they finally reached the sea the waters rushed out, freeing the country of the Woi wurrung from water but inundating Port Phillip (Massola, 1968:58).

Woi wurrung leader William Barak told the following version: Two boys were playing when one of them climbed a wattle tree to find wattle-gum. Sitting high up in the branches he began throwing lumps of gum down to the other boy but when they reached the ground they disappeared. The boy eventually noticed a hole in the ground and, thinking the gum might have fallen into it, poked it with his spear. An old man who had been sleeping beneath the ground came to the surface. He was very angry and carried the terrified boy off. The path he made as he carried the boy became the Yarra River. The little boy cried with fright and eventually Bunjil heard his distress. Bunjil threw sharp stones onto the ground in front of the old man causing him to fall and cut himself to pieces, allowing the boy to escape and run home. Just before the old man died Bunjil appeared before him and said, ‘Let this be a lesson to all old men. They must be good to little children’ (Massola 1968:55–56).