



Mark Skinner/SA Tourism

From the time of its inception, Cape Town has always been a thirsty city. In this part one of a two-part series, Petro Kotzé traces the early history of water supply in the Mother's City.

It was water that first drew visitors and settlers to the Cape and, like the changing phases of its biennial rivers and streams, Cape Town itself has had many faces during the centuries. The traditional name for the area where the Mother City now stands is *Camissa* – a Khoi word meaning 'the place of sweet waters'. The abundance (or scarcity) of this resource is what has defined the lives of those seeking to make a living at the foot of Table Mountain.

WATER RESOURCES

Believed to be one of the oldest mountains on Earth (six times older than the Himalayas), Table

Mountain is an excellent source of water. Moisture laden fronts sweep across the south Atlantic and pour down the Table Mountain chain, while the heavy condensation of the south east clouds, the famous table cloth, contribute further.

The greatest single catchment area drains into what used to be known as the Backwater Stream, and runs through Upper and Lower Disa gorge, down Orange Kloof and into the sea at Hout Bay. The main river of the city bowl has its source at the top of the Platteklip Gorge on Table Mountain, the Platteklip Stream. It drains the northern parts of Table Mountain.

Today, the tributary of this stream that used to flow down Buitekant and Maynard Streets disappears into a culvert at the foot hill zone of the mountain and becomes a sub-surface storm water channel that spills out, polluted, into the Atlantic Ocean. The city's history is intimately linked

with this stream, and as early as 1488 the presence of Khoi had been observed by the newcomers in the Cape coastal region. It is believed that the Table Valley was used by the Khoi during spring and summer, as it provided good vegetation for their herds.

THE PLACE OF SWEET WATER

In 1647, the Verenigde Oost Indische Compagnie (VOC) ship *Haarlem* was wrecked at the Cape. The stranded crew settled just below where the Platteklip River naturally splits in two, on the banks of the stronger tributary, named the *Varsche* (Fresh) River. They prepared ground, sowed seed and soon had a good supply of vegetables. They also bartered for livestock with the Khoi. The men were picked up by the passing *Coningh van Polen* in 1648. It is said that it was upon the report

Top right: The streams flowing from Table Mountain were for a long time the main sources of water for the first citizens of Cape Town.

Middle right: The old Heerengracht circa 1832 in what is now Adderley Street.

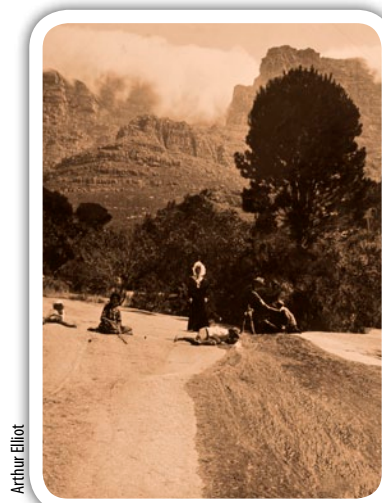
Bottom right: The Platteklip Stream, photographed in 1900.



Water Knim/SA Tourism



Courtesy Jenny Day



Arthur Elliot

of these men that Jan van Riebeeck was sent to establish a refreshment station at Table Bay in 1652.

Van Riebeeck immediately set to work, but his challenge was not easy. He landed at the Cape during a drought and three months later, the first vegetable beds were flooded. His arrival also signalled the advent of another source: pollution. In 1655, a letter communicated complaints that the crew from a passing ship fell ill after taking on water from the Cape. This led to the issuing of Placaat 12 of 1655, considered South Africa's first piece of environmental

legislation, which forbade settlers to bathe or wash upstream from where the water was being collected. Instead, they had to wash and bathe near the cattle kraal.

EARLY WATER RESOURCE DEVELOPMENT

Van Riebeeck's first engineering project entailed a water supply system for passing sailors. It consisted of a jetty and a 'walkway' of thick planks on which the barrels of water were rolled from the Fresh River. The first fort was also built on the banks of this river in 1656 (it was replaced by the Castle in 1679).

The VOC's gardens, which were to supply Dutch ships with fresh fruit, vegetables and herbs, formed the central axis of the expanding settlement. The garden's water came from the Oranjezicht springs, which originated at the top of Platteklip gorge. From the springs the water was gravity fed by opening sluice gates and taken across the contour in a ditch along Orange Street to the top of the gardens. A canal was dug on each side of the garden in 1654, and water from the Fresh River was left into it, in part to prevent wild animals from entering and ruining the crops.

A system of monitor furrows for irrigation was also installed – the country's first modern irrigation system. In October 1657, the lower course of the Fresh River was altered as its ancient channel was likely to damage the garden when it overflowed in winter. A new, broader channel was built, entering the sea some distance from the fort.

Water scarcity in 1661 prompted Van Riebeeck to start construction on the country's first modern reservoir. Waegenaer's Dam, was eventually completed by Van Riebeeck's successor in 1663. All able bodied persons were called on to help build the reservoir, the remains of which was unearthed during the construction of the Golden Acre building in the 1970s.

The Fresh River was also used for its motive power. In 1657, the first

mill was constructed on the site of Cape Town High School. A number of mills were erected through the years, and stood between the town and the mountain with water led to them via pipes raised on wooden supports. In addition to the watermills along the old Platteklip Stream, the Gortmolen (a barley mill) and Twistniet Mills were also erected. Much later, in 1856, a windmill was erected between Twistniet and Zorgvliet mills.

FRESH WATER SUPPLIES

Until 1891, the whole of Cape Town's water came from springs on Table Mountain. The early streets ran parallel and at right angles to the streams that followed the course of the Fresh River to the fort. Lined with *stoeped* (patio) houses of the burghers the streets had been widened by 1767 into a fashionable oak-lined promenade, described by some 'as the beautiful streets'. Heerengracht was augmented by a stream along Plein Street, while a cross canal along Strand Street drained from the slopes of Signal Hill.

Other canals flanked Strand Street, Whale Street, Queen Victoria Street (then called Tuinstraat) and Long Street. The Kaisersgracht along the present Darling Street was built in 1693. The flow of the water was regulated by sluice gates which property owners were allowed to keep open for a limited time each day. There were also around 36 fountains in town, the most impressive of which was designed by Thibault and stood in the parade.

However, the *Kaapsche Vlek* (as the Cape settlement was known) paid a high price for these developments, and the canals soon changed from a source of pride to one of dismay. Trash was dumped in it, mosquitoes and frogs bred in stagnant pools and every now and again, a drunken sailor met his end in it. There was no waste removal service to speak of, with the taking away of refuse being mostly left up to the South Easter, slaves, open ditches, hyenas and the sea.

ORANJEZICHT FARM – THE FIELD OF SPRINGS

The suburb known as Oranjezicht was once a lush and successful farm, blessed by an abundance of springs, owned by the Van Breda family. The farm's main income was the sale of fruit and vegetables, and it boasted views of its abundant orange trees growing in Table Valley (hence the name). Later, terraces for the cultivation of vines were included. More than 300 slaves were employed to work the lands.

The *Stadsfontein* (or Main Spring), was situated on the farm, and the Van Breda's enjoyed full water rights, given to them in 1769. After complaints from the neighbours a system of sluices to regulate access to water was installed. Main Spring dates back to 1686 and it supplied Cape Town's first water pipe even before 1789. It was covered with a vault in 1813, and in 1853 another collection chamber (New Main Spring) was built for

all the springs in the area.

By 1859 a bill was published that stated that all the fountains, streams and other sources of water supply within the boundaries of the municipality of Cape Town and Green Point shall be solely and exclusively vested in the board of commissioners constituted by this Act. In essence, the entire Oranjezicht farm's water supply would be owned by the Board, which had to obtain the land on which the springs were situated. The Van Breda's petitioned, but to no avail.

This was the first in a series of Acts, so that later the municipality had rights to virtually all water on the estate. The farm became effectively useless to its owners, and was eventually sold for £40 000 to a speculative villa building company. By 1900 the area became a suburb of tree-lined avenues.



A placat of 1714 called for slaves to dump waste in the sea, but the long distances they had to walk usually meant that the canals were used as dump sites instead. The once pure Fresh River, the reason for the establishment of the VOC's supplies station, became unfit for drinking purposes.

In 1707, van der Stel procured 200 lead pipes from the VOC to bring fresh water from the foot of Table Mountain to the jetty. A four-jet fountain supplied local needs and Cape Town was, once again, as far as water was concerned, considered to be well catered for. A well in Greenmarket Square was

the main source of water when the fountains ran dry. As the population increased, slaves had to collect water for their masters from springs on the mountainside.

By the end of the era, the once mighty VOC declined into near bankruptcy, leaving no money for improvements of the half-way stop to the East on the southern tip of Africa.

- In the next issue, read about water supply under British rule and the work of non-governmental organisation Reclaim Camissa and others to transform water resource management in Cape Town. □