Water for Saldanha: War as an Agent of Change

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Introduction

War, as is often stated, has always been a powerful agent of change in human society, particularly in the drawing of national borders and in determining the destinies of peoples. Prominent in South African history in this regard, is the so-called Mfecane (Xhosa) or Difaqane (Sotho), or the wars of destruction amongst indigenous black peoples during the 1820s and 1830s. These wars caused great socio-economic upheaval, famine, death and destruction, and led to a large-scale regrouping of peoples that culminated in the formation of five powerful states, namely the Zulu, Ndebele, Swazi, Basotho and Mpondoland. Grundlingh observes “patterns, structures and traditions of society are challenged and often changed, mostly prompted by the inexorable demands of war”. The demands of war, particularly in an age of total war, often make periods of conflict also periods of rapid technological development, as warring parties strive to find innovative, scientific solutions to tactical problems. Such developments furthermore often have invaluable civilian applications, as was the case, for example, with the development of aeronautic technology during the two world wars. In the same fashion, the demands of war mobilise resources and create infrastructures that provide infinite and timeless benefits to civil society.

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3. See, for example, J. Terraine, White Heat the new Warfare 1914-18, (Sidgwick and Jackson, London, 1982), pp 142-201 with regards to the search for technological means to solve the trench-deadlock during the First World War.

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This phenomenon of war as an agent of change was clearly demonstrated during the Second World War (1939-1945) in the remote rural town of Saldanha, on the south-western coast of South Africa. For three centuries after the Dutch settlement at the Cape in 1652, a lack of fresh water hampered development at Saldanha Bay, but this situation changed virtually overnight in 1942/1943, when the Union Defence Force tapped into the waters of the Berg River to satisfy wartime needs at Saldanha Bay. This significant change of fortune has received almost no attention in South African historiography. Works on South Africa’s Second World War history, such as H.J. Martin and N.D. Orpen’s *South Africa at War,*\(^4\) mentions it only in passing. The only “comprehensive” coverage it has received up to now, is half a page in J. Burman and S. Levin’s popular work, *The Saldanha Bay Story.*\(^5\)

The aim of the article is to illustrate how the Second World War acted as an agent of rapid and profound change in bringing water to Saldanha after centuries of privation. The article briefly traces Saldanha Bay’s “waterless” history and the consequent delay in the development of South Africa’s best natural harbour to 1943. It explores Saldanha Bay’s acquisition of strategic importance during the Second World War and the subsequent decision to tap into the Berg River to bring water to Saldanha Bay. It touches on the construction of a pipeline from the Berg River to Saldanha Bay by the South African Engineer Corps and, finally, outlines the immediate and longer-term impact of the acquisition of a fresh water supply on the development of Saldanha and the lives of its inhabitants.

**Origins and climate**

The small, little-known town of Saldanha, situated on the south-western coast of South Africa, about 90 kilometres north of the country’s famous mother city, Cape Town (Figure 1), has a direct link with the history of water on the African continent. Named after the Portuguese seafarer Antonio de Saldanha, it became known as *Aguada de Saldanha,* – which literally means the “Watering Place of Saldanha”.\(^6\) The name is,

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however, an ironic twist of history, because Saldanha Bay was not the watering hole of Antonio de Saldanha and is, in fact, situated in a rather dry and waterless area.

This historic confusion in the naming of Saldanha Bay has everything to do with its proximity to its famous and well-watered neighbour, Table Bay or Cape Town harbour. Antonio de Saldanha left Lisbon for the Far East with three warships in May 1503 and stumbled into Table Bay by sheer accident in about September that same year. His navigator was under the impression that they had already rounded the Cape and directed him to turn north, which landed them in Table Bay. Hence, the current Table Bay became known as *Aguada de Saldanha* – the “Watering Place of Saldanha”. Almost a century later, in November 1601, a Dutch explorer, Joris van Spilbergen, unfamiliar with the Cape sea route, sailed past the present Saldanha Bay, believing that it was Antonio de Saldanha’s famous “Watering Place”. When he arrived at Saldanha’s actual “Watering Place” shortly afterwards, he thought that he had discovered a new bay and called it Table Bay after the impressive flat-topped mountain (Table Mountain) overlooking the bay. The new name stuck and Saldanha Bay inherited Table Bay’s original designation.7

Van Spilbergen never entered Saldanha Bay and it remained unexplored territory for the Europeans until the Englishman, Samuel Castleton, entered it on 17 April 1612 with the vessel *Pearl*. Castleton went ashore the next morning and to his surprise, found the local Khoikhoi more than willing to trade. He bartered a calf and a sheep for a piece of iron hoop and a hatchet without any trouble, but when he endeavoured to refill his water barrels, he encountered the challenge which was to frustrate the development of Saldanha Bay for more than three centuries – an inadequate water supply. Castleton reported that he saw only “a little puddle … of which the [Khoikhoi] people drank, making signs there were none other” and declared Saldanha Bay “a very barren place”.8

Saldanha Bay’s lack of fresh water is the result of South Africa’s position relative to the major global circulation pattern. The predominantly subsiding air associated with the high pressure generated


by the Hadley Cell,9 renders low rainfall and sunny skies important characteristics of the South African climate. On the western coast of South Africa, this pattern is further enhanced by the presence of the cold Benguela current that brings cold, Antarctic water up the coast. The rainfall along this coast results from frontal systems moving into the area from the west and is highly seasonal, with 80 per cent of the precipitation in winter.10 The average annual rainfall is only 270 millimetres, of which 217 millimetres falls in winter and a mere 53 millimetres in summer.11

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The average sunshine duration varies from about 60 per cent of the possible duration in July to over 70 per cent in January.\(^\text{12}\)

The soils of the Saldanha Bay area are sandy and moderately deep to deep and are underlain by granites that surfaces as hills and domes around Vredenburg and Saldanha. These granites are poor aquifers that yield little or no water during the dry summer months.\(^\text{13}\) The combination of sandy soils, low, unreliable, highly seasonal rainfall and an abundance of sunshine create a rather arid environment. The little rain that does fall is quickly soaked up by the sandy soil or it evaporates fairly rapidly, making it hard to find surface water for most of the year.

**Harbour potential**

European explorers recognised Saldanha Bay as an excellent natural harbour even before the Dutch settlement at the Cape in 1652. Etienne de Flacourt, the French Director-General of Madagascar, wrote in October 1648:

> The Bay of Saldanha is seven or eight leagues long and two or three wide. There are several good anchorages, where the tide does not reach and a ship is like on a pond, shielded from all wind. It looks like a lake...\(^\text{14}\)

Sijmon Pieterssen Turver, skipper of the *Goede Hoop*, sent by Jan van Riebeeck from Cape Town in October 1652 to explore Saldanha Bay, also described it as “a finely sheltered bay, protected from all the winds”.\(^\text{15}\) The Dutch East India Company (DEIC) indeed considered developing Saldanha Bay as a seaport, since it was larger than Table Bay and a very secure harbour, less exposed to violent storms. However, a commission appointed in 1729 to investigate the matter, concluded that the lack of fresh water and firewood made it unfeasible.\(^\text{16}\) By 1761 the Dutch had discovered a reasonable, if limited, supply of fresh water (fountains) on the eastern side (“Oostenwal”) of the Langebaan Lagoon.

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The DEIC, of course, kept this source a secret, probably to force foreign ships to buy refreshments at Table Bay and to prevent an invading enemy from utilising it to supply its ships and land forces for an assault on the Cape.\textsuperscript{17}

After extensive travels into the interior of South Africa from 1797 to 1798 in his capacity as private secretary to the Cape Governor, Lord Macartney, the famous British author, John Barrow, praised Saldanha Bay “as a spacious, secure, and commodious sheet of inland sea water, for the reception of shipping … scarcely … equalled in any part of the world”.\textsuperscript{18} Barrow, however, pointed out that the lack of fresh water, if unresolved, would “ever prevent” Saldanha Bay from becoming “the general rendezvous of a fleet”.\textsuperscript{19}

Barrow stressed the strategic value of Saldanha Bay as a potential British naval base. He pointed out that the gale-force winter winds of the Cape made it a necessity for shipping in Table Bay to take shelter in either Simon’s Bay or Saldanha Bay from May to September.\textsuperscript{20} At the same time, he argued, that:

The necessity of ships of war being sent round into Simon’s Bay for five months of the year might be attended with very serious consequences for the safety of the colony, as far, at least, as depended on the exertions of the navy belonging to the station. Being a lee port, the chances are greatly against their being able to work up to Table Bay, and still less to Saldanha Bay, to afford any assistance in the event of an attack by an enemy’s fleet; which, without any interruption or molestation, might disembark troops, and land artillery, stores and ammunition at Robben Island, or any of the windward bays.\textsuperscript{21}

From this perspective, Barrow insisted, it would be much more advantageous to move the warships stationed in Table Bay to Saldanha Bay during the winter months, which was on the windward side of Cape Town and was, in addition, “one of the best harbours, perhaps, in the whole world … [where] any number of ships may lie in perfect security at all seasons of the year”.\textsuperscript{22} In Barrow’s view, it was only “the clear and

\begin{itemize}
\item \textsuperscript{17} D. Sleigh, \textit{Die Buiteposte VOC-Buiteposte onder Kaapse bestuur 1652-1795} (Protea Boekhuis, Pretoria, 2004), pp 443-444.
\item \textsuperscript{18} J. Barrow, \textit{An Account of Travels into the Interior of Southern Africa, in the years 1797 and 1798} (T. Cadell and W. Davies, London, 1801), p 361.
\item \textsuperscript{19} Barrow, \textit{Travels into the Interior of Southern Africa}, p 362.
\item \textsuperscript{20} J. Barrow, \textit{An Account of Travels into the Interior of Southern Africa II} (T. Cadell and W. Davies, London, 1804), pp 253-254, 256, 259-262.
\item \textsuperscript{21} Barrow, \textit{Travels into the Interior of Southern Africa II}, p 259.
\item \textsuperscript{22} Barrow, \textit{Travels into the Interior of Southern Africa II}, p 259.
\end{itemize}
copious stream of water rushing out of the Table Mountain” and the fact that “no such stream of water falls into Saldanha Bay”23 that had bestowed upon Table Bay rather than Saldanha Bay the privilege of being the cornerstone of the European settlement. To his mind, Saldanha Bay was much better situated than the Cape Peninsula for

... receiving the supplies afforded by the country … [since] the deep sandy isthmus, whose heavy roads have been the destruction of multitudes of cattle, would be entirely avoided; and its distance from the corn districts, which is the most material article of consumption, is much less than that of the Cape. Its (Saldanha Bay’s) situation, with regard to all the northern parts of the colony, is much more convenient than Cape Town; and equally so for those who inhabit the distant district of Graaf Reynet [sic], and who usually pass over the Roode Sand Kloof … [Furthermore] there can be little doubt, if a naval establishment was once formed at Saldanha Bay, that many coasting vessels and fishing ships would be constructed here, as it affords every convenience that could be required for building ships, which would be the means of increasing the coasting trade, and especially in the article of timber, the produce of the colony.24

Barrow thus had great dreams for Saldanha Bay as a strategic military port and a harbour of trade and industry – if only an adequate fresh water supply could be secured.

On the positive side, from the viewpoint of the rulers at the Cape, Saldanha Bay’s harsh climate and lack of fresh water would make an enemy invasion from that tempting port very difficult. In an undated report (probably late 1796), Lieutenant General Sir James Craig, concluded that Saldanha Bay, an excellent harbour, totally without defence and easily accessible for an enemy force to land, was no real danger to the Cape. Mounting operations from there against Cape Town, a distance of about 130 kilometres overland, would present too many obstacles, including the lack of fresh water during summer and the extremely heavy, sandy roads.25 More than a century later, in 1917, during the First World War (1914-1918), the South African Department of Defence secretly tasked Major J.G. W. Leipoldt to conduct a survey of Saldanha Bay and the surrounding area, particularly from the point of view that an enemy raider could land there and cause considerable damage. Leipoldt pointed out that Saldanha Bay would be of

considerable value to an enemy who wanted to invade South Africa, but that such an enemy would have had to establish an advanced base on the Berg River, some 30 kilometres to the west, to secure an adequate supply of fresh water once he had established a bridgehead on the lagoon.26

Early history

Human settlement at Saldanha Bay goes back a very long way. The Saldanha Bay area was in fact one of the very first areas inhabited by modern humans. Fossilised human footprints discovered in the vicinity of the Langebaan Lagoon in 1995, believed to be 117 000 years old and, according to Alan Mountain, “the oldest modern human footprints yet discovered.”27 This suggests that the area had been inhabited ever since the first modern humans evolved between 200 000 and 100 000 years ago.28 A garbage-dump excavated near Paternoster contains bone fragments of sheep and cattle, suggesting that Khoikhoi livestock herders had already lived in the area between 1 800 and 1 600 years before the present.29 The aridity of the region forced these Khoikhoi farmers into a nomadic lifestyle to find greener pastures and alternative water holes during the dry summer.30

Soon after the Dutch settled at the Cape in April 1652, Governor Jan van Riebeeck engaged in stock bartering with Khoikhoi arriving at the Cape from Saldanha Bay. In October 1652 he sent skipper Sijmon Turver and bookkeeper F. Verburgh with the vessel Goede Hoop to Saldanha Bay to determine what benefits the DEIC could draw from that area and to investigate the possibilities of stock trading with the Khoikhoi first-hand. Several other fact-finding visits followed after this first excursion. The Dutch found an abundance of fish, seals, birds’ eggs and whales at Saldanha Bay and in January 1658 Van Riebeeck allowed two free burghers, Jurien Jansz and Gerrit Harmansz, the first European inhabitants of Saldanha Bay, to settle there in order to supply the Cape and passing ships with dried fish, birds’ eggs and other supplies and to police the border of the Dutch settlement. By the early eighteenth century

27. A. Mountain, The First People of the Cape: A look at their history and the impact of colonialism on the Cape’s indigenous people (David Philip, Cape Town, 2003), p 13.
Dutch farmers settled in the Saldanha Bay area, herding sheep and cattle and cultivating wheat. The area however, remained sparsely populated due to the limited local supply of fresh water. At the beginning of the twentieth century, fishing and whaling industries developed in the hamlets of Saldanha and Langebaan respectively.31

**Meagre supply of fresh water**

During his visit to Saldanha Bay in 1797 to 1798, Barrow reported two small springs near the southern end of Saldanha Bay. Both were brackish. A well of approximately nine to twelve metres dug near the landing site at Hoedjes Bay, produced very little water, also slightly salty.32 The best way of supplying water to Saldanha Bay, in Barrow’s estimate, would have been to bring it to the Bay in leaden pipes from a “copious elevated spring”33 at the farm Witte Klip (White Rock) about ten kilometres to the north of Hoedjes Bay. The cost would not have been too much, indeed insignificant, compared to the benefits such a supply of water would have brought.34 Barrow deemed the proposed water supply from Witte Klip “amply sufficient for the supply of a large fleet of ships”.35 The Witte Klip scheme was not a novel idea, since J. Helmisz van Bergh already suggested to the DEIC government at the Cape in 1738 that water could be brought to Hoedjes Bay from Witte Klip by means of an aqueduct.36

Barrow had another plan up his sleeve, should the Witte Klip spring be unable to satisfy the water needs of a fleet: he would access the water of the Berg River “which never fails in the driest weather … (and) could not fail of securing a constant supply of fresh water to any amount”.37 It was “a favorite [sic] subject of conversation” amongst Colonel R.J. Gordon, the Dutch commander of the Cape garrison from 1780 to 1795,38 and other Dutch officials to turn the course of the

Berg River into Saldanha Bay, which would not only have supplied
enough water for “a town, garrison and shipping”, but would have
opened, at the same time, “a navigation into the interior … particularly
into Zwartland, the granary of the colony”. Barrow deemed such an
enterprise practicable, except that the tide would have pushed several
kilometres into the canal, making the water very salty indeed. He
would circumvent that problem by bringing the water to Saldanha Bay in
pipes, instead of a canal. According to Barrow, paying for all this would
be a simple matter: it would cost only about £10 000, which could easily
be recovered by “an additional port duty of ten dollars or two pounds
sterling for each ship”.

By 1917 Major J.G.W. Leipoldt, during his aforementioned survey
of Saldanha Bay, reported a water shortage at the village of Saldanha
Bay, stating that most of the water sources were at the southern end of the
lagoon, that is near the village of Langebaan, while the best landing sites
were on the northern side near Hoedjes Bay at Saldanha. In the vicinity
of Langebaan, it was possible to find water in many places along the
lagoon by digging from 1.2 to 2.4 metres into the soft, sandy soil. The
two whaling stations at Langebaan, for example, used about 14 000 litres
of fresh water per day, which they obtained from a series of wells, 2.5 to
3 metres deep, near Oostenwal along the lagoon. In the Vredenburg and
Saldanha areas, this was not possible. These villages depended mostly on
rainwater harvested from rooftops and stored in underground concrete
tanks. This state of affairs was still at the order of the day when the
Second World War broke out in 1939. Local coloured communities
(many of them were descendents of the Khoikhoi settlers) were worse off
than the whites. Most of them did not have storage tanks at their houses.
For all intents and purposes they only had an adequate water supply in the
rainy season. During the dry summer months, they bought small
quantities of water from reservoir owners. This was supplemented by
water from “a few brack, and not very hygienic wells”. A well situated
at Hoedjes Kop had, according to oral tradition, the lowest salt content
and was therefore utilised by the local coloured community to do their

41. Barrow, Travels into the Interior of Southern Africa II, p 262.
43. SANDFA: DC 355, DC40035, Report on Saldanha Bay and the country
adjoining by Major J.G.W. Leipoldt, 28 August 1917.
44. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Public Health - Secretary
for Defence, 1 July 1943.
At some stage the help of the South African Railways Administration was enlisted to haul fresh water from Kalabaskraal at reduced tariffs, apparently mostly, if not exclusively, for the benefit of “the coloured fisher folk”.

In the years between the two World Wars (1919-1938), the Great Berg River remained a tantalising if unattainable prospect. During the 1930s “some English Engineers” proposed pumping water for Saldanha Bay from a site about 1.5 kilometres upstream from Berg River Station. It was to be a commercial enterprise with a private company exploiting the opportunity to quench Saldanha’s thirst at a profit. The project, however, never got off the ground, probably because it would have been a big, expensive undertaking. In February 1938, the Department of Irrigation’s Circle Engineer at the Cape, E. Fincham, accompanied by the Department’s Controller of Reconnaissance, H.S. Jackson, surveyed the Berg River from Wellington to its mouth in St. Helena Bay to determine how it could be optimally exploited for domestic and irrigation purposes in the region. They recommended that the possibility be investigated to either build a dam near the confluence of the 24 Rivers and the Berg River, or to convert Vogel Vlei, off the Berg River, into a dam with a view to irrigation along the lower Berg River and supplying potable water to Velddrift, Vredenburg and Saldanha Bay. This proposal did not get off the ground either.

The next proposal for supplying water to Saldanha Bay, came from Martin Melck of the farm Kersefontein (“Candle Fountain”) on the Berg River. He was a descendant of a well-known Prussian ancestor, Martin Melck, who joined the service of the Dutch East India Company at the Cape in 1746 as a soldier, but later became a big farmer, owning several wine and stock farms at Stellenbosch and elsewhere in the Western Cape, including two stock farms, St. Helena and Kersefontein on the Berg River. (The farm Kersefontein is still in the hands of the

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45. I. Paarman (red.), Weskuskos (Struik Uitgewers, Kaapstad, 2003), p 16.
46. SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943.
47. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
48. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
49. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham (Circle Engineer, Cape Circle) - Director of Irrigation, 24 February 1938.
Melck family today). Melck requested that the possibility be investigated to build a weir across the Berg River a few kilometres upstream from its mouth to keep the tide out and to render the river water fit for domestic consumption and irrigation during the summer months. There was little flow in the river in summer, resulting in a strong influx of sea water, which made the river water unfit for domestic consumption and irrigation. Melck further requested that if possible, “the question of a domestic [water] supply to the township of Saldanha Bay be linked up with whatever investigation is undertaken … [and that] the township of Vredenburg might also be included” 51. Melck presumably had his own interests at heart with these requests, since the site of the weir would probably have been at Kersefontein (or one of the other family farms) and he had probably hoped to make some money from supplying water to Saldanha Bay and Vredenburg from an intake site on his farm. The Acting Circle Engineer, Cape Circle, submitted a detailed report regarding Melck’s proposal,52 but nothing came of it.

Saldanha Bay thus remained waterless. Fincham and Jackson spent a night at a hotel in Saldanha during their above-mentioned survey of the Berg River in February 1938, and were assured by the locals that there was “more beer in the hotel than potable water”.53 They consequently decided “not to rob the wretched inhabitants of any aqua pura and ‘the day’s good deed’ was thus accomplished!”54

**Saldanha Bay as a strategic harbour during the Second World War**

As a member of the Commonwealth, South Africa's defence policy was closely connected to that of Great Britain on the eve of the Second World War. Within that context, the British Admiralty had identified Saldanha Bay as a potential relay port in their war plans long before the Second World War. By March 1939, Saldanha Bay was one of the so-called “defended ports” where the Department of Defence could introduce shipping control measures should the need arise. Yet no action was taken with regard to Saldanha Bay when the Second World War broke out, since there was no immediate need and there was barely enough naval

51. SANDFA: DC 3395, DC2305/51/2, I, Acting Circle Engineer, Cape Circle - Director of Irrigation, 25 March 1938.
52. SANDFA: DC 3395, DC2305/51/2, I, Acting Circle Engineer, Cape Circle - Director of Irrigation, 25 March 1938.
53. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Director of Irrigation, 24 February 1938.
54. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Director of Irrigation, 24 February 1938.
Saldanha personnel available to satisfy the needs of the other South African ports. By the end of October 1939, Admiral G.W. Hallifax, the designated director of the proposed South African Seaward Defence Force, however, reminded the Union Defence Force that Saldanha Bay could be required as a convoy assembly port at short notice.  

With Italy’s entry into the Second World War in June 1940, the Cape sea route suddenly became of critical importance to the Allies. The Mediterranean was no longer safe for Allied shipping and Allied supply ships serving the Middle East theatre were compelled to sail around the Cape to the Red Sea. This naturally led to a tremendous increase in traffic along the South African coast and the Union ports, and particularly Table Bay (Cape Town), were completely saturated. In 1941, the South African Government, in consultation with Great Britain, consequently decided to expand the port facilities at Cape Town, Durban and East London and, furthermore, to build an additional port at Saldanha Bay to relieve the pressure on Table Bay.  

The two governments agreed that the cost of developing the Saldanha Bay area for military and naval purposes, and of providing harbour facilities, would be borne jointly by the Union Government (War Expenses Account), the South African Railways and Harbours Administration and the United Kingdom on the basis of the work that each required to be carried out.  

As a first step in developing the port at Saldanha Bay, a 6-inch artillery battery was deployed in 1941 in fortified positions on the hills to the northern side of the entrance to the bay in order to control access to the bay. These defences were expanded in early 1942 when fortifications were also erected on the southern side of the bay entrance, and 12-pounder artillery batteries were deployed there. At the same time, a second 6-inch battery was deployed on the northern side, while strong searchlights were installed at strategic points on either side of the bay. These four artillery batteries comprised the 8th Heavy Battery, South African Coastal Artillery.

The increased flow of Allied shipping around the Cape soon led to the arrival of German submarines in the South Atlantic Ocean to prey on them. This prompted the Department of Defence to enlist the help of the

57. SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 21 August 1943; SANDFA: DC 3395, DC2305/51/2, I, C.H. Blaine (Secretary for Defence) - Director of Irrigation, 31 August 1943.
58. Visser, “Bewakers van die Baai”; p 56.
British Admiralty to deploy antisubmarine defences in South Africa’s principal ports, including Saldanha Bay. By early October 1942, German submarine activities in the South Atlantic had escalated to such an extent that fourteen allied cargo ships were sunk off the Cape coast within three days. The Anglo-South African defence authorities, in reaction to the increased threat, decided to step up South Africa’s antisubmarine defences, which led to the acceleration of the military and naval developments at Saldanha Bay.\(^59\)

**Huge increase in demand for water**

The military activities obviously caused a sharp increase in the population of Saldanha Bay, which put severe pressure on the town’s meagre water supplies. The water problem, of course, would increase tremendously if Saldanha Bay became a convoy assembly point, as the British envisaged, and as had actually happened in January 1943,\(^60\) when an even larger number of shipping had to be provided with water. The Circle Engineer at the Cape, E. Fincham, consequently submitted an “urgent and confidential”\(^61\) report to the Department of Irrigation in August 1940 on the daunting issue of supplying sufficient fresh water to Saldanha Bay. He raised the possibility of pumping water from the Berg River, but warned that the water would have to be purified. In this regard, he referred back to his report of February 1938 in which he stated that the “Berg River water”, according to the Department of Public Health “is now ‘a menace to the public health’ and ‘extremely … dangerous’ … enteric [fever] is rife from Wellington right to the sea”.\(^62\) He favoured the idea of bringing water to Saldanha Bay by laying a pipeline from the fishing company Irvin and Johnson’s waterworks at Oostenwal near Langebaan to Saldanha Bay. These waterworks, comprising two boreholes with an “unlimited” supply of fresh water and the necessary pumping equipment, was formerly used to supply water to the whaling station at Donkergat, but was up for sale at that stage since the whaling station had been closed down in 1937.\(^63\) What made this source particularly attractive to Fincham, was that the water from the boreholes

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60. Visser, “Bewakers van die Baai”, p 57.
61. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
62. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Director of Irrigation, 24 February 1938.
was tested by “a Public and Consulting Chemist (in 1937) … [and found to be] ‘free from animal and surface pollution’” and perfectly safe for domestic consumption without purification. Should thorough testing of the boreholes prove that the Oostenwal supply was insufficient, Fincham recommended that “the Berg River proposition be tackled by a survey party to contour … a mile wide strip – to allow for a swinging pipeline – from a mile above Berg River Station to Saldanha”. It was, in his opinion, “unlikely that a straight line could be laid down and kept below the hydraulic grade”.

With the ever-increasing military population at Saldanha Bay, the Department of Defence was by early 1941 paying serious attention to the question of a sufficient supply of fresh water, estimated at about 27 000 to 45 000 litres per day, to the “Military Camp, Saldanha Bay” situated approximately four kilometres outside the town. Vredenburg Municipality was at that stage also contemplating a scheme to supply both Vredenburg and Saldanha Bay with water, which was a serious financial challenge to two such small communities. When the Municipal Council got wind of the Government’s intention of building “some sort of a military base” at Saldanha, it immediately saw an opportunity to make its own water scheme viable. The Council consequently approached the local Member of Parliament, F.C. Erasmus, to enquire on their behalf how much water the state would require and whether the Government would assist them to finance and push through the water scheme.

The defence authorities had in the meantime tested various wells and boreholes in the vicinity of the military camp, but the results were disappointing. In some cases, the water was too brackish, while some of the sources yielded either too little water or were too far from the camp. The most promising, if rather expensive, prospect at that stage was utilising a barge (as Irvin and Johnson had done at Donkergat) to

64. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
65. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
66. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
67. SANDFA: DC 3395, DC2305/51/2, I, Anonymous - Secretary for Defence, 3 April 1941.
68. SANDFA: DC 3395, DC2305/51/2, I, Town Clerk, Municipality of Vredenburg - F.C. Erasmus, 24 March 1941 (Author’s translation).
70. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
convey water from Oostenwal. 71 The Department of Defence, after careful consideration, decided not to buy into the Vredenburg water scheme, but to pursue the Oostewal option. 72 The military subsequently acquired the services of a privately owned vessel, the *Ironic*, with a capacity of 18 tons to shuttle water drawn from a borehole at Oostenwal across the Bay. The water was then pumped from the *Ironic* into storage tanks on Hoedjes Kop, from where it was relayed to the various military installations. 73

![Figure 2: The Berg River-Saldanha Bay water pipeline, 1942/1943](image)

71. SANDFA: DC 3395, DC2305/51/2, I, Anonymous - Secretary for Defence, 3 April 1941.
72. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Secretary for Mines, 19 September 1941.
With the decision to develop Saldanha Bay as a “military and shipping centre”, it became clear that the Oostewal scheme was far from adequate. By June 1942, Government therefore granted the Department of Defence permission and funding to lay a 55 kilometres long pipeline (Figure 2), interspaced with storage reservoirs at various points, from the Berg River to bring an estimated 4 550 000 litres of fresh water per day to Saldanha Bay.

**Servitudes and construction sites for Berg River pipeline**

In terms of the *South African Irrigation and Conservation of Water Act*, Number 8 of 1912, the Union Government’s rights regarding Berg River water were confined to using the water for strictly riparian purposes. The state could not use water from the Berg River for irrigating non-riparian land or sell such water to third parties who were not riparian owners. The Secretary for Defence therefore requested the Department of Irrigation to advise the Department of Defence “what steps should be taken ... in regard to reparation [sic] rights, i.e. tapping the river”. The Director of Irrigation, T. Hopwood, advised that in his opinion the Department of Defence could extract water from the river without obtaining any permission in terms of riparian rights, since “any water flowing down the point of abstraction and not being used there or thereabouts, would flow into the sea, consequently it would be difficult for any owner to show that he was prejudiced by any extraction”. The Department of Defence thus assumed that the Berg River was “a public stream and ... [riparian owners had] no proprietary right in the water as such”.

Hopwood further advised the Department of Defence that, for the construction of the pipeline, the Department of Defence had to obtain servitudes from all the landowners whose properties the pipeline would traverse over the approximately 55 kilometres from the intake on the Berg

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75. SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 7 November 1942.
76. SANDFA: DC 3395, DC2305/51/2, I, Deputy Chief of Staff - Secretary for Defence, 14 April 1942.
77. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Director of Irrigation, 3 July 1942; SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 7 November 1942.
78. SANDFA: DC 3395, DC2305/51/2, I, E.S. Henochsberg (Defence Legal Adviser) - Local Representative, Estates and Negotiations Sections, 16 March 1944.
79. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Director of Irrigation, 3 July 1942.
80. SANDFA: DC 3395, DC2305/51/2, I, T. Hopwood (Director of Irrigation) - Secretary for Defence, 10 July 1942.
81. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - L.J. Molyneux, 4 November 1943.
River to the bulk storage reservoir at Saldanha Bay. This included “servitude of abutment” on the land on which the proposed weir was to be constructed, “servitude of storage” on the land that would be submerged by water upstream of the weir, as well as “servitude of aqueduct” over the strip of land occupied by the pipeline and additional works. The Department also had to purchase the site on which the pumping plant was to be erected, as well as the sites on which storage reservoirs were to be constructed.

The Department of Defence commenced the negotiation process immediately and obtained the required servitudes – a total of 170 – and sites from the various landowners to construct and maintain the pipeline and associated installations. It was a drawn-out process, and the construction process, on the grounds of military necessity, had to commence long before the servitudes had been registered against the title deeds of the respective farms. In fact, the pipeline had been completed more than a year before all the servitudes had been registered. As can be imagined, the landowners tried to gain maximum advantage from the state, by setting high prices and trying to elicit other benefits such as free water supply from the pipeline. The state undertook to carry out the construction and maintenance of these installations with great care and as little disruption of agricultural activities as possible, including minimum damage to crops and grazing land, and full rehabilitation of the land on completion of the construction work. The state would also compensate landowners for any damages caused to growing crops.

82. SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
83. SANDFA: DC 3395, DC2305/51/2, I, T. Hopwood - Secretary for Defence, 10 July 1942.
84. SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 14 July 1942; SANDFA: DC 3395, DC2305/51/2, I, W.E. Ball - Secretary for Defence, etc., 9 February 1943.
85. SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
86. SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 14 July 1942; SANDFA: QMG (Gp 19) 158, DC(E)671/2/105, Anonymous [C. Halse] - General Manager and Secretary, S.A. National Trust and Assurance Company (hereafter SANTAM), 24 July 1942; SANDFA: DC 3395, DC2305/51/2, I, General Manager and Secretary, SANTAM - C. Halse, 10 August 1942; SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 21 August 1942; SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - General Manager and Secretary, SANTAM, 30 September 1942; SANDFA: DC 3395, DC2305/51/2, I, General Manager and Secretary, SANTAM - C. Halse, 20 October 1942; SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse (two letters) - Secretary for Defence, 5 August 1942; SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 12 November 1942.
The Department of Defence selected a site about one and a half kilometres upstream from Berg River Station on the farm Jantjesfontein as intake site for the Berg River pipeline. The proximity of the station was, of course, important with a view to the heavy piping and other supplies and equipment that had to be hauled to the construction site. The Department of Defence purchased approximately 8.5 hectares (10 morgen) of the farm Jantjesfontein (including a large, five-bedroomed farmhouse and outbuildings) from the brothers Martin and Arthur Melck to erect the pumping plant and purification works and also acquired servitudes on the farms Jantjesfontein and Fresh Water for the construction of the pipeline from them. The Melcks granted servitude free of charge to the state for a period to one year after the war, but anticipated that the water scheme would then be extended to supply water to the farmers over whose properties the pipeline passed, as well as to the municipalities of Vredenburg and Saldanha Bay. Should that happen, they would ask for compensation. That could, however, only apply to the passing of the pipeline over their properties, since, as indicated above, the water in the river was not theirs to sell.

Construction of the Berg River pipeline

No. 15 Field Company, South African Engineers Corps (eight officers and 85 men) under the command of Captain J.M. Stacey, subsequently succeeded by Major W.R.F. Connell, was summoned from Sonderwater north of Pretoria to Saldanha to construct the Berg River waterworks, pipeline and reservoirs and carry out other engineering tasks in the area. The construction of the waterworks at the intake site and the commencement of the pipeline from that end was entrusted to No. 2 Section (one officer and 21 men) under Lieutenant G.J.M. Kirk (later succeeded by Captain J.C.G. du Toit), who pitched camp at the Berg River on 11 August 1942. They were subsequently joined by 49 black workers (“unattested black labourers”) under a white overseer. The total number of black workers employed on the pipeline was initially 172, so the construction work started with an acute shortage of labour. More workers started arriving towards the end of September and by

87. SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, District Representative, Department of Public Works - Secretary for Defence, 4 September 1942.
88. SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse - Secretary for Defence, 5 August 1942; SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, Unsigned, undated copy of agreement (with map attached) by M. Melck and A.A. Melck.
89. SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse - Secretary for Defence, 5 August 1942.
6 November 1942 their numbers had risen to 729.90 The remainder of No. 15 Field Company was employed on various other engineer missions in the Saldanha Bay area, including constructing intermediate storage reservoirs along the course of the pipeline.91 The South African Defence Act, Number 13 of 1912 had entrenched racial discrimination in the military as it stipulated that only whites could enlist as combatants. Blacks, so-called coloureds and Asians were destined for inferior roles, being allowed to sign up for tedious supportive and unskilled roles only, both in uniform and as civilians. Thousands of these people of colour served as construction and other workers, guards, drivers, stretcher-bearers, cooks, orderlies, clerks and similar, non-combatant roles during the Second World War.92

The engineers surveyed and pegged the course of the pipeline between the Berg River and Saldanha Bay and pitched a number of intermediate camps at various intervals along the route in order to carry on with the construction work at several places simultaneously.93 The engineers and their black labour force commenced with the excavation of the trench, the laying of the 305-millimetre (12-inch) piping and the construction of the waterworks and intermediate storage reservoirs immediately.94 At the intake site, in addition to the purification works and pump installations, a rising main of about a kilometre and a half in length and a lift of some 60 metres (200 feet) had to be built to get over the ridge along the river.95 The pipeline, laid in sections and ultimately joined together,96 was buried to a depth of 0.91 metres (3 feet) so as not to

94. SANDFA: NAREP-UNFO 21, 15th Field Coy. SAEC, February-November 1942.
95. SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Acting Director of Irrigation, 24 August 1940.
Most of the excavation was done manually by the black workers, but a mechanical shovel arrived by train from Cape Town at Berg River Station on 25 September 1942 to excavate the settling tanks and filter beds at the intake. That helped a lot, but frequent breakdowns and the consequent falling back on manual labour, wasted a lot of valuable time. The severe shortage of workers slowed the work down, but reasonable progress was made from late September when more black workers joined the construction teams. The nature of the soil also caused some challenges and delays in excavating the trench for the pipeline. Long stretches of the line traversed soft, extremely sandy terrain and the engineers’ vehicles frequently got stuck in the loose sand. In the end, they had to buy straw from the local farmers to lay on the surface of the road along the pipeline to keep their vehicles moving. On the other extreme, they had to work 24-hour shifts with the only two jackhammers available when they had to work their way through a limestone layer for almost one kilometre. Though care was taken not to disrupt farming activities, the military construction teams sometimes caused inconvenience and even losses to farmers by damaging grazing land, soiling water points, cutting fences and allowing livestock to escape.

Presumably as a result of the aforementioned Anglo-South African decision to accelerate the military and naval developments at Saldanha Bay in the face of the increased German submarine threat in the South Atlantic, Captain J.M. Stacey, commanding officer of No. 15 Field Company, SAEC, received instructions from the Chief Fortress Engineer, Cape Fortress on 14 October 1942 to suspend all non-essential works and to speed up the work on the Saldanha Bay water scheme. Acceleration of the development of the Saldanha Bay area obviously

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97. SANDFA: QMG (Gp 19) 158, DC(E)671/2/105, Anonymous [Major C. Halse] - General Manager and Secretary, S.A. National Trust and Assurance, 24 July 1942.
100. SANDFA: QMG (Gp 19) 158, DC(E)671/2/105, I.C. Rust - General Manager and Secretary, SANTAM, 28 September 1942.
102. SANDFA: WD 127, War Diary 15th Field Coy. SAEC, 14 October 1942.
meant more people and more construction work, and thus an increased demand for water. To that end, the number of black workers had in the meantime been increased from 172 by mid-September to 616 by 9 October of the same year. A month later, No. 1 Section was transferred from Saldanha Bay to the intake site to increase the workforce further. Despite the fact that his black workforce had risen to 729 – *inter alia* through the recruitment of 94 men in the black township of Langa near Cape Town on 5 November 1942 – Major Connell reported that a shortage of black workers was hampering his progress considerably when he struck limestone north of the main road to Vredenburg in early November. By the end of November 1942, he consequently asked for 200 more workers to speed up the excavation work and complained that his work was also delayed by the non-delivery of jackhammers. More workers were indeed recruited during the next month or two as a result of his plea, bringing the total to 1,200 by May/June 1943. He succeeded in making good progress despite all the difficulties and the first water from the Berg River pipeline reached Saldanha Bay on 7 February 1943, rendering the military “a satisfactory and adequate water supply.” Pipes were laid right down to the jetty to enable the water barge to ferry water to ships in the harbour. First to sample a glass of water from the Berg River at this historic milepost, was the Saldanha Sub-Fortress Commander, Lieutenant Colonel J.H. Wicht.

**Water to the local communities**

Everybody understandably wanted to cash in on the Berg River water scheme. Martin Melck and other farmers over whose properties the pipeline passed applied to tap water from the pipeline, but the Department of Defence turned them down on the grounds of military priorities. They

105. SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, Acting (?) Director of Fortifications and Coastal Works (Cape) - Secretary for Defence, 9 June 1943.
106. SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 9 October 1943.
were advised to raise their needs again after the cessation of hostilities.\textsuperscript{108} On 22 September 1942, the Saldanha Village Management Board enquired from the Secretary for Defence whether it could buy water for the use of the town residents.\textsuperscript{109} A day later, the Municipality of Vredenburg enquired whether the course of the pipeline, which would be missing Vredenburg by about ten kilometres, could be slightly adapted to include the village in the water scheme. The argument was that once the war was over, the military would not need so much water and it thus made sense to plan the water supply of the whole area with a view to the post-war situation. This made sense indeed, since the Department of Public Health had been hammering the local municipalities for years to make provision for a proper water supply system with a view to the danger of enteric fever and other heath risks.\textsuperscript{110} Requests to share in the water scheme were subsequently also received from Langebaan and Velddrift.\textsuperscript{111} Though the Department of Defence was in favour of making water available to the surrounding communities, this had to be postponed until after the cessation of hostilities. Military necessity made it impossible to set aside time for additional construction work to include the surrounding municipalities in the scheme. Furthermore, from a security point of view, no connections could be made that could possibly interfere with the military water supply for whatever reasons. Funding and the availability of the piping required for such additional connections also posed a problem.\textsuperscript{112} Lastly, it would have been a breach of the agreement with the Melck brothers to supply water to the local authorities before a year after the termination of the war.\textsuperscript{113} Not even a plea from the

\textsuperscript{108} SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 20 November 1942; SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, Secretary for Defence - M. Melck, 3 April 1943; SANDFA: DC 3395, DC2305/51/2, I, J.W.L. Krige - Secretary for Defence, 13 September 1943; SANDFA: DC 3395, DC2305/51/2, I, R. Steven - J.W.L. Krige, 25 September 1943.

\textsuperscript{109} SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Defence, 22 September 1942.

\textsuperscript{110} SANDFA: DC 3395, DC2305/51/2, I, Town Clerk, Municipality of Vredenburg - Minister of Defence, 23 September 1942; SANDFA: DC 3395, DC2305/51/2, I, E. Fincham - Director of Irrigation, 24 February 1938; SANDFA: DC 3395, DC2305/51/2, I, Secretary for Public Health - C. Hoffe, 14 August 1942.

\textsuperscript{111} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 7 November 1942.

\textsuperscript{112} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 7 November 1942.

\textsuperscript{113} SANDFA: DC 3395, DC2305/51/2, I, C. Halse - Secretary for Defence, 20 November 1942; SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse - M. Melck, 18 May 1943; SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Secretary for Public Health, 6 July 1943.
Secretary for Public Health pointing out the risks that the unsatisfactory water arrangements in Saldanha Bay held for the large concentration of military personnel in the Bay could persuade the Secretary for Defence to supply water to the Village Council of Saldanha.\textsuperscript{114}

As the water supply at Saldanha Bay (apart from that acquired through the Berg River pipeline) was, according to the Secretary for Defence, “notoriously inadequate for even the normal population”,\textsuperscript{115} it became necessary for the Department of Defence to sell water to civilian contractors, hotel-keepers, shipping and others, in order for them to serve the needs of the military.\textsuperscript{116} By August 1943, the South African Railways and Harbours (SAR&H) were receiving water through a branch pipeline to their offices, while the two local hotels, the Saldanha Bay Hotel and the Hoedjes Bay Hotel, had occasionally been given permission “to cart water from the Defence pipeline to keep the hotels going when they were full of military personnel”.\textsuperscript{117} Other consumers that received water supplies were the Saldanha Railway Station, Globe Engineering Company, National Portland Cement Company and Saldanha Lime Company\textsuperscript{118}, all clearly role players in military construction and related activities in and around Saldanha Bay. The Department of Defence had, furthermore given in to pressure from Martin Melck and had “given [him] a ½ ″ cock on the scour system for occasionally watering stock … as part of the negotiations for the acquisition of the [intake] site”.\textsuperscript{119} In addition, water had been provided “to certain individuals from time to time during periods of drought”.\textsuperscript{120} Generally speaking, however, the military pipeline was not yet benefiting the civilian communities, since the local municipalities were still denied access\textsuperscript{121} for the reasons stated above. A small quantity of

\textsuperscript{114} SANDFA: DC 3395, DC2305/51/2, I, Secretary for Public Health - Secretary for Defence, 1 July 1943; SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Secretary for Public Health, 6 July 1943.

\textsuperscript{115} SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse - M. Melck, 18 May 1943.

\textsuperscript{116} SANDFA: QMG (Gp 19) 155, DC(E)671/2/101, I, C. Halse - M. Melck, 18 May 1943; SANDFA: DC 3395, DC2305/51/2, I, Acting(??) Director of Fortifications and Coastal Works (Cape) - Secretary for Defence, 9 June 1943.

\textsuperscript{117} SANDFA: DC 3395, DC2305/51/2, I, Estates & Negotiations Section - Lewis, no date [circa August 1943].

\textsuperscript{118} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 18 December 1943.

\textsuperscript{119} SANDFA: DC 3395, DC2305/51/2, I, Estates & Negotiations Section - Lewis, no date [circa August 1943].

\textsuperscript{120} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Fortress Commander, Cape Town, 13 April 1944.

\textsuperscript{121} SANDFA: DC 3395, DC2305/51/2, I, Estates & Negotiations Section - Lewis, no date [circa August 1943].
water was, however, sold to the Saldanha Village Management Board in May (12 700 litres) and September 1943 (9 100 litres).\textsuperscript{122}

**Strategic change released water for local communities**

The unconditional surrender of the German and Italian forces in North Africa in May 1943 re-opened the Mediterranean for Allied shipping and thus deprived the Cape sea route of the critical strategic importance it had occupied since the Italian declaration of war in June 1940. As a result, Saldanha Bay lost most of its value as a military port and the bulk of the military personnel gradually departed, allowing Saldanha to slip back into its pre-war quietness and tranquillity.\textsuperscript{123} The military water requirement dropped to a mere 455 000 litres per day against the Berg River water scheme’s capability of supplying 4 550 000 litres per day. There was thus a huge water surplus available in the Saldanha Bay military base amidst the ever-present water starvation of the local communities.\textsuperscript{124} The local municipal authorities consequently raised the issue of connecting the communities of Saldanha Bay, Vredenburg, Langebaan and Velddrift to the Berg River water supply with the Department of Defence once more.\textsuperscript{125} The Quartermaster General pointed out that, although the strategic situation had changed and the military at Saldanha Bay as a result required less water, it had been “counter-balanced … by the decision to site the G.R.O.T.U. [Ground Range Operational Training Unit] at Langebaanweg”.\textsuperscript{126} The Department of Defence thus decided to postpone the inclusion of these villages in the Saldanha Bay water scheme for a further six months to assess the situation.\textsuperscript{127}

\textsuperscript{122} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 18 December 1943.

\textsuperscript{123} Visser, “Bewakers van die Baai”, p 57.

\textsuperscript{124} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 9 October 1943; SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 10 December 1943; SANDFA: DC 3395, DC2305/51/2, I, Anonymous memorandum, no date [circa March 1944].

\textsuperscript{125} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 9 October 1943; SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943; SANDFA: DC 3395, DC2305/51/2, I, Estates & Negotiations Section - Secretary for Defence, 29 November 1943.

\textsuperscript{126} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 9 October 1943.

\textsuperscript{127} SANDFA: DC 3395, DC2305/51/2, I, Secretary for Defence - Quartermaster General, 21 October 1943.
Given the perceived intransigence of the Department of Defence, the Saldanha Village Management Board had in the meantime appealed to the Secretary of Public Health to use their “good offices to prevail upon the Military Authorities to permit my Board to purchase water from them.” The grounds offered for the appeal was that the Board had been informed by the South African Railways administration that it was unable to continue hauling water from Kalahaskraal at the reduced rate like before. The implications were that, unless the Board was allowed to buy water from the military, “a water famine will occur amongst the coloured fisher folk [sic].” Furthermore, the Board was faced with a serious need for fresh water to flush the abattoir regularly and “cleaning … the lavatory pails at the night soil disposal site”. One of the factors that put pressure upon the latter services, the Board contended, was the “increased activity caused by military operations.” If the military was contributing to the problem, then the suggestion seemed to be that it should also assist in resolving the matter.

On 20 November 1943 the Saldanha Village Management Board informed the Secretary of Public Health by telegram that the District Surgeon had ordered that the well on which the “Coloured community wholly depended for drinking water” be closed immediately since pathological examination had revealed that it was “grossly contaminated”. The Board therefore again appealed urgently to be allowed to purchase water from the military. The Minister of Public Health immediately enquired from the Secretary for Defence why the village could not be linked with the military water scheme without further delay. As sufficient water was available, as indicated above, the Department was not only able, but also willing to assist the local communities. The Department indeed considered the water scheme of “immense value to the area as a whole” and realised that it “will permit the Saldanha Bay community, which had been hampered since its

128. SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943.
129. SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943.
130. SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943.
131. SANDFA: DC 3395, DC2305/51/2, I, Secretary, Saldanha Village Management Board - Secretary for Public Health, 13 October 1943.
132. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Public Health - Secretary for Defence, 20 November 1943.
133. SANDFA: DC 3395, DC2305/51/2, I, Secretary for Public Health - Secretary for Defence, 20 November 1943.

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existence through lack of fresh water, to forge ahead”\textsuperscript{134}. The issue was that it was legally not possible to supply water to the local communities in view of the servitudes obtained from the landowners over whose properties the pipeline traversed. These servitudes stipulated, \textit{inter alia}, that the water would be used for military purposes only, that the servitudes held good for the duration of the war plus one year thereafter and that they had to be redrawn if the scheme was to be perpetuated after the war.\textsuperscript{135} Furthermore, as pointed out earlier, the \textit{South African Irrigation and Conservation of Water Act}, Number 8 of 1912 prohibited Government from selling water from the Berg River to third parties who were not riparian owners.\textsuperscript{136} Though legally barred from linking the Saldanha Bay community with the military water scheme, the Department of Defence was quite prepared to supply water to the Saldanha Village Management Board on a fetch-and-carry basis if the water situation of the so-called coloured community became more serious.\textsuperscript{137}

\textit{Saldanha Bay Water Supply Act, Number 23 of 1945}

The water crisis of Saldanha’s so-called coloured community was in a way a turning point in the whole Berg River water saga – admittedly in conjunction with the change in the strategic situation and consequent decrease of military activities and priorities at Saldanha Bay. From the outset committed to the necessity of linking local communities with the military water scheme with a view to post-war development, and prompted by the predicament of the so-called coloured community and the prevailing conditions of drought at the time,\textsuperscript{138} the Department of Defence in early 1944 proposed that an act be passed by Parliament to legalise and manage the provision of water to the Saldanha Bay and surrounding communities.\textsuperscript{139} Government subsequently decided to follow

\begin{itemize}
\item \textsuperscript{134} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
\item \textsuperscript{135} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
\item \textsuperscript{136} SANDFA: DC 3395, DC2305/51/2, I, E.S. Henochsberg (Defence Legal Adviser) - Local Representative, Estates and Negotiations Sections, 16 March 1944; SANDFA: QMG (Gp. 19), DC(E)671/2/285, I, Commandant Cape Fortress - Town Clerk, Vredenburg Municipality, 18 April 1944.
\item \textsuperscript{137} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
\item \textsuperscript{138} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 15 February 1944.
\item \textsuperscript{139} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Secretary for Defence, 17 March 1944; SANDFA: DC 3395, DC2305/51/2, I, C.H. Blaine - Secretary for Lands, 31 March 1944.
\end{itemize}
that route\textsuperscript{140} and the \textit{Saldanha Bay Water Supply Act}, Number 23 of 1945, was passed on 25 May 1945 “to provide for the abstraction of water from the Great Berg river [sic] and the distribution thereof; for the expropriation of servitudes of aqueduct required in connection therewith; and for matters incidental thereto”.\textsuperscript{141} The Act empowered the Minister of Defence to extract a maximum of 4,550,000 litres of water per day from the Berg River and to convey it to Saldanha Bay or any other area and distribute it as he deemed fit, including selling it to the “Railway Administration, any local authority, company or [private] person for use on any land and for any purpose, irrespective of whether … such land is riparian to the said river”.\textsuperscript{142}

The passing of the Water Bill was a timely step, since Langebaan’s water supply had in the meantime all but collapsed in December 1944 through increased consumption, the termination of the water supply contract by a local supplier (boreholes) and the caving in and contamination of the boreholes at Oostenwal.\textsuperscript{143} Perhaps more so than the other communities, Langebaan thus looked forward eagerly to the completion of the branch pipelines that would bring the coveted Berg River water to its doorstep. It took several years, however, for the entire administrative process to fall into place and to connect the various municipalities to the Saldanha Bay water scheme in the aftermath of the war. By July 1948, the people from Saldanha, for instance, still bought their water from the military on a fetch-and-carry basis. As always, there was an entrepreneur to exploit the business opportunity. One Klaas Badenhorst residing at Kalkrug on the fringes of the village fitted a 2,300 litre (500 gallons) water tank to his lorry and bulk buyers enlisted his services to collect the water and pump it into their storage tanks. Some inhabitants brought 200 litre containers to be filled, which they then rolled home if they had no other means of transport.\textsuperscript{144} Many of the poorer people, especially from the so-called coloured community, no doubt bought their daily water supply in whatever small containers they had.

\textsuperscript{140} SANDFA: DC 3395, DC2305/51/2, I, Quartermaster General - Fortress Commander, Cape Town, 13 April 1944.
\textsuperscript{142} Union of South Africa, Act Number 23 of 1945, pp 77-78.
\textsuperscript{144} J.P.P. Rabe, interview with G.E. Visser, Saldanha, 15 May 1995.
The Department of Defence handed control of the Saldanha Bay water scheme to the Department of Irrigation on 1 November 1951, which eventually brought permanent running water and indoor plumbing to all formal homesteads in Saldanha Bay and the surrounding communities, changing peoples’ lives for the better.

**Basis for post-war development**

The much-cherished provision of an adequate fresh water supply to Saldanha Bay established the basis for the economic development that its inhabitants had been yearning for decades, even centuries. “The surge of activity during the war”, as Burman and Levin observe, brought high hopes “that Saldanha would forge ahead when peace came.” The existing fishing industry certainly benefited from the availability of the water, but the “expected [new] development failed to materialise.” It was again the military that put more feet on the ground and thus brought some economic advancement to Saldanha in the wake of the Second World War. The Naval Gymnasium, established in Cape Town in January 1951, was transferred to Saldanha in June of that same year, where a marine wing was added to it in 1953. At the end of 1957, the South African Military Academy, established in Pretoria in 1950 and temporarily relocated to Stellenbosch in 1956, also found a new home at Saldanha. None of these military developments would have been practicable without the Berg River water that the Second World War had brought to Saldanha.

The first significant industrial development came to Saldanha in the mid-1970s. Officials from the then South African Iron and Steel Industrial Corporation (Iscor) had already explored Saldanha Bay during the Second World War with a view to developing it as an iron-ore export harbour. By the 1960s, serious investigations were underway with a view to connecting the small town of Sishen in the Northern Cape, 850 kilometres away, with Saldanha Bay by rail and to develop Saldanha Bay as an export harbour for the rich Sishen iron-ore reserves.

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A decade later, on 4 April 1973, the *Sishen-Saldanha Bay Railway Construction Act*, Number 28 of 1973, was approved for the construction of the railway.151 Burman and Levin celebrate the implementation of this project as the long-sought opportunity through which “Saldanha could fulfil her destiny as a great harbour”.152 An expansion of the existing reservoirs of the Berg River water scheme allowed an increase in the water supply,153 which carried the Saldanha-Sishen iron-ore development for a few years. However, a new pipeline was built during the late 1970s as a result of the expected increase in the demand for water associated with the Sishen-Saldanha railway and the fact that the water quality at the Berg River pump station had deteriorated progressively through the years, with the water becoming increasingly impregnated by salt. The new Saldanha water scheme was implemented in 1978, whereby water is extracted from the Berg River and pumped to the Voëlvlei Dam near Gouda, from where the water is then relayed to the reservoirs of Saldanha Bay Municipality via the Misverstand Dam near Moorreesburg. Since 2001, four mega litres of water is also contributed to the system per day by two boreholes sunk into the underground aquifer near Langebaanweg.154

**Conclusion**

Saldanha Bay had historically been unable to establish a sustainable fresh water supply as a result of climatic and geological conditions, which in turn had inhibited economic development and significant utilisation of the best natural harbour in South Africa from the Dutch settlement at the Cape in the mid-seventeenth century right up to the Second World War. The dream of accessing the water of the Berg River for Saldanha Bay’s needs was almost as old as the Dutch settlement itself, but remained forever elusive due to the scale and cost of such an endeavour. It was never a priority for the successive governmental authorities and always unaffordable to the small community itself. War reaffirmed itself as a powerful agent of change when the water of the Berg River was finally brought to Saldanha Bay during the Second World War on the grounds of military necessity. The availability of a sufficient fresh water supply opened a potential pathway for post-war economic development and the

realisation of Saldanha Bay’s full potential as a harbour, but the water supply could not bring about such development on its own. Saldanha needed an external input such as the Sishen iron-ore export project to realise a degree of economic development, an opportunity that took three decades to present itself. That development did not bring an earth-shattering boom either. In the final analysis, the greatest revolution wrought by the Second World War Berg River water project was perhaps bringing running water into the hotels and businesses of Saldanha, but most of all into the homes of the its inhabitants, enhancing their quality of life and forging social upliftment.

Abstract

Saldanha Bay is one of the best natural harbours in the world and was known as such by the French even before the Dutch set foot at the Cape in 1652. However, when the British first occupied the Cape almost one and a half centuries after the Dutch arrival, no development had yet taken place at Saldanha Bay. The British saw great potential in Saldanha Bay as a naval base, but never exploited it. The principal reason for this lack of development was the absence of fresh water. Even Saldanha Bay’s early Khoikhoi inhabitants had to seek greener pastures during the dry season. The prospect of diverting water from the nearby Berg River to Saldanha Bay had often been contemplated even from the time of the Dutch settlement, but never came to fruition until the mid-twentieth century. The fact that war is a powerful agent of rapid and profound change was clearly illustrated when Saldanha Bay acquired access to a sustainable supply of fresh water during the Second World War. This article traces Saldanha Bay’s “waterless” history to 1943 and explores the Bay’s acquisition of strategic importance during the Second World War, resulting in the South African Engineer Corps being tasked to tap into the Berg River to quench Saldanha’s thirst. The article then concludes with a brief overview of the immediate and longer-term impact this wartime lifeline had on Saldanha Bay and its inhabitants.
vlootbasis gesien, maar nooit dié potensiaal ontgin nie. Die hoofrede vir hierdie gebrek aan ontwikkeling was die afwesigheid van ’n volhoubare bron van vars water. Selfs Saldanhabaai se vroeë Khoikhoi inwoners moes ’n ander heenkome gedurende die droë somerseisoen vind. Die moontlikheid om vars water van die nabygeleë Bergrivier na Saldanha weg te keer, is reeds sedert die Hollandse nedersetting herhaaldelik geopper, maar het eers teen die middel van die twintigste eeu ’n werklikheid geword. Die Tweede Wêreldoorlog het die verskynsel van oorlog as ’n kragtige instrument van vinnige, ingrypende verandering duidelik gedemonstreer toe Saldanhabaai plotseling in 1943 ’n volhoubare toevloei van vars water ryker geword het. Hierdie artikel skets Saldanhabaai se “waterlose” geskiedenis tot 1943 en toon aan hoedat Saldanhabaai gedurende die Tweede Wêreldoorlog van sodanige strategiese belang geword het dat die Suid-Afrikaanse Geniekorps opdrag gekry het om water vanaf die Bergrivier na die baai aan te lê. Die artikel sluit af met ’n beknopte oorsig van die onmiddellike en langtermyninvloed wat hierdie oorlogstydse ontwikkeling op Saldanhabaai en sy inwoners uitgeoefen het.

**Key words**

Berg River; harbour; naval base; Saldanha Bay; Second World War; South African Engineer Corps; water.

**Sleutelwoorde**

Bergrivier; hawe; Saldanha; Saldanhabaai; Suid-Afrikaanse Geniekorps; Tweede Wêreldoorlog; vlootbasis; water.