It was originally a water receiving and distribution point. Water received at the depot was pumped eastward, northward and westward. However, these operations had already been halted in 1934. The machinery was dismantled in 1939-40. By the 1970s the board’s pipelines still traversed the property, but hardly any control was exercised on the process from that particular point. Consequently the main pump house on the property was being used as a store.\(^\text{178}\)

Overall the available facilities were too small and the available floor space of 950 m\(^2\), as well as a mezzanine floor of 300 m\(^2\), proved to be totally insufficient for the purposes of storage. At the depot there was a real shortage of working space. Room had to be provided for storekeepers. There were workshops for plumbers, welders, fitters, carpenters and painters, as well as an electrical workshop and meter testing section.\(^\text{179}\) Furthermore, better compound facilities were necessary for the 40 black employees at the depot. The eight houses on the property, which had been used by white employees, were vacated in 1964 when the people were moved to new houses and apartment buildings at Forest Hill.\(^\text{180}\)

In 1973 the board’s engineering division was of the opinion that the property could still be used as a depot for the storage of vehicles used by the head office staff. It was also conveniently situated in what was Johannesburg’s ‘Motor Town’ and could thus serve as a useful point for obtaining spares, vehicles and machines.\(^\text{181}\) Ultimately the objective was to sell it. Because of earlier mining operations in the area it was not possible to construct any high-rise buildings on the site.\(^\text{182}\)

Austerity measures and new priorities with


the rising demand for water had the effect that the project was only implemented in phases by the late 1970s. It all started with the transfer of a transport depot to the Zwartkopjes pumping station where repairs to heavy vehicles were done.\textsuperscript{183}

The move to Zwartkopjes marked the start of a process, which would within the next decade lead to the relocation of the Rand Water Board’s headquarters to one of the most scenic areas on the Witwatersrand.

**Tariffs**

In the 1970s and 1980s the issue of rising water tariffs became a controversial matter that was frequently debated in the public domain. In many respects the concerns of the users were justified. However, the accomplishments of Rand Water Board did provide evidence of an organisation that was not primarily intent on exploiting its consumers in the interest of profit-making strategies. Instead, the board proved itself to be a responsible organisation that had the interest of its consumers constantly in mind when water tariffs were increased. Table 9.2 sheds light on the historical development of tariffs. (See Table 9.2)\textsuperscript{184}

From the illustration it is evident that there was a marked drop in the price of water after the Rand Water Board started operations in 1905. The tariff increase in 1925 was the result of the need to obtain the funds necessary to pay for the construction and development of the Vaal river Barrage scheme. Subsequently the price of water consistently declined. This trend persisted until the 1960’s. Inflation and the rapid industrial and commercial development of the Witwatersrand were some of the major contributing factors that caused tariffs to increase. What was of more importance at the time was that the available supply of water was decreasing rapidly. More frequent drought conditions forced the board to introduce water curbs. It was symptomatic of the increasing shortfall.


\textsuperscript{184} Compiled from information in a table contained in RWA, Annual report balance sheet and accounts of the Rand Water Board for the financial year to 31st March, 1975, p. 47.
Provision for more sophisticated water projects, costing substantially more than the board could afford, was the only solution to halting the trend.

Table 9.2 Trend in water tariff increases 1905-1975

An important factor that also played a role was the oil crisis that started in 1973. The rapidly rising cost of energy had a direct influence on the cost of water distribution. By the late 1970s another factor also came into play. It was the need to develop the previously disadvantaged black townships of the Witwatersrand. This required large capital investments. Another important factor in the phase of spiralling costs was the fact that the board was subject to tariff increases imposed by its national provider, the department of water affairs.

At the start of 1977 tariffs were again increased. It was now required of foundation members to pay 8,05 cents per kℓ (6,36 cents previously), preferential consumers 8,83 cents (6,95 cents

185. Personal disclosure V.J. Bath, Westcliff, 2003.03.07.
The increases of the board came after the department of water affairs had increased the tariff on raw water by about 33 per cent. The board also had a number of loans to pay and with the increased interest rates the higher price for water was considered justified. The board in committee acknowledged that it was important to keep tariff increases as low as possible. Consequently it instructed management to keep capital expenditure to a minimum.

In the 1980s water tariffs rose sharply. This was directly due to one of the longest drought spells in the history of the board. The responses to the increases are dealt with in detail later. It is important at this point to take note why increases were announced in 1983, before the restrictions were introduced. It was pointed out that the directorate of water affairs had raised its tariffs to the board. The rate of inflation had the effect that the board’s capital commitments were subjected to spiralling cost increases. Most important was the increase in consumption. In the years to come a system of water demand management was to be introduced as the only effective means of securing a continued supply of an increasingly scarce though ubiquitous commodity.

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188. RWA, Komitee van die algehele raad, vergadering, 1977.04.29, p. 3405.
Chapter 10

Preparing for substantive change 1984-1989

In the post-Soweto era South African society increasingly had to contend with anomalous conditions. On its borders the government was faced with newly independent black governments who were Marxist in orientation and were supportive of the banned African National Congress’ struggle against the white South African state. In an effort to contend with the ‘total onslaught’ of what was perceived as the communist threat, the government embarked on a course of wide-ranging and expensive military operations that were to be maintained until the early 1990s.

As far as its planning for water was concerned, the government was in an anomalous position. It had to negotiate agreements of friendship with the landlocked neighbouring kingdom of Lesotho in order to secure for the interior of South Africa a strategic water supply, without which the country’s economy would have been hamstrung. It was possible to get the water from Lesotho when it flowed into the rivers crossing into South Africa. However it was more cost-effective to transfer the water from the Lesotho Highlands by gravity to the tributaries of the Vaal river, via tunnels under the Maluti mountains. There was also the enduring benefit that the water was always flowing downhill. This would have implied saving substantially on distribution costs. It meant the conservation of energy.\footnote{Personal disclosure V.H. Bath, Westcliff 2003.05.07.} For the Rand Water Board the water that
was to be provided by what came to be termed as the Lesotho Highlands Water Project (LHWP) became an issue of crucial importance, if it wanted to provide a sustained water supply under drought conditions to millions of consumers within its limits of supply.

Within the borders of the country the government had to promote policies aimed at the creation of a stable black middle-class and at the same time promote continued growth under circumstances of increasing economic stagnation in the face of international isolation. On the Witwatersrand – the country’s economic hub – chronic water shortages prevailed for the greater part of the 1980s. Government policies aimed at promoting industrial decentralisation were partially successful, but there were concerns about the viability of a proposed ‘constellation of states’, which was considered to be a cosmetic device to cover up an outdated apartheid style of government. The Rand Water Board had a special role to play under these circumstances. It had to be instrumental in preparing the way for the creation of responsible black local authorities. At the same time the organisation had to continue playing its ubiquitous role of supplying the all-important commodity – water – to its consumers. In preparing itself to cope with the rapidly changing socio-economic and political landscape in the country, the board was itself subject to a number of significant changes.

It required a special type of person to provide visionary leadership in the organisation at the time. That person was L.D. (Dale) Hobbs, who succeeded H.C. Stegmann as chairman of the board in December 1980.² Until 1993 he was to be a key role player, up front and behind the scenes, in many of the processes that were aimed at strategically positioning the organisation in a stormy sea of socio-economic and political change. One of the board members of many years observed at the end of the twentieth century that:

the big change ... came about with the appointment of Dale Hobbs as Chairman. Hobbs, with great courage, broke the

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² RWA, Komitee van die algehele raad, vergadering, 1980.12.19, p. 103.
pattern of the Department of Water Affairs having a great deal of control over the Board, and persuaded the Minister to broaden the expertise base and bring it more in line with Boards in the private sector.³

Before his appointment as chairman he was deputy director general of the department of water affairs. Hobbs, an engineering graduate of the University of Natal, had 31 years of experience as civil servant. He had worked for 20 years on construction sites of several large projects of the department of water affairs. These included the raising of the Vaal dam’s wall as an assistant engineer, and then as resident engineer for the construction of the Beervlei flood control dam and the Paul Sauer dam, on the Kouga river. In 1964 he was appointed resident engineer for the Hendrik Verwoerd (Gariep) dam project. In 1969 he was appointed chief engineer of the department of water affairs.

Illus. 10.1 L.D. (Dale) Hobbs.
Source: Rand Water

In 1974 he became deputy secretary for water affairs and in 1980 was promoted to secretary of water affairs before retiring and taking up the chairmanship of the board.⁴ A World War II veteran with a friendly disposition, Hobbs was a good choice. He was able to articulate government thinking and apply it in the context of the workplace. As he matured in his role of leader at the helm of the board, it was possible to make some important management changes to position the organisation better towards coping with the challenges of a changing political landscape.

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It was as if the board had gained a new sense of direction. This was exemplified in 1984 when definitive steps were taken to place the board, in a transparent fashion, in full view of the society it served. One implication of the new approach was that there was a businesslike approach to operations.\(^5\) In the process the organisation started re-inventing itself against the backdrop of society’s requirements on the one hand, and major South African corporate trends in government and business on the other.

**Organisational change**

Since the late 1970s the government started preparing the way for establishing certain sectors of the state’s operations to become public utilities that could compete in diverse contexts of the free market system. At the same time there was a need to work towards decentralised structures of service delivery. Plans had been formulated in consultation with the country’s business sector.\(^6\) Getting government institutions such as the railways, the electricity supply commission and even the Rand Water Board into the new framework of thinking proved to be problematic. The new direction of the state was partly a result of attempts to redress the socio-economic and political structural discontinuities that had given rise to the Soweto uprisings in the first place. It was also the result of attempts by government to address financial problems experienced in the era of increasing international economic boycott actions on grounds of the government’s discriminatory racial policies.\(^7\)

In November 1976 a report was submitted to government by a committee under the chairmanship of J.L. Stallebras, an adviser to the minister of water affairs. The report itself was never made public, but many of the proposals were discussed in board meetings and on various levels of management planning within the

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Preparing for change 1984-1989

organisation. In respect of the Rand Water Board the committee recommended that its statutes, along with the *Water Act*, No. 54 of 1956, be amended to make provision for a new statutory, multi-purpose water-management regional authority for the Southern Transvaal. The functions of the new institution were to be diverse. It included the abstraction and distribution of bulk potable water and bulk wastewater collection, as well as its purification and reclamation. The ‘new’ utility had to see to bulk urban solid and industrial toxic waste disposal and control. Furthermore the utility would typically have to control pollution by wastewater and solid wastes over a specific demarcated area.

A second recommendation of the Stallebras committee was that consultations should take place with the provincial administrations of the Transvaal and the Orange Free State with a view to any amendments, which could be considered necessary in the respective local government ordinances that authorised local authorities to carry out sewage purification and refuse disposal functions. Consideration was then to be given to make amendments to other legislation.

From the discussions by the board in committee, it appeared as if the government was eager for the new system to be introduced as soon as possible. Behind it all was a plan to introduce a new system of regional services councils in the course of 1985. However, the latter was delayed to 1987 because of the government’s fears of a conservative white backlash.

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11. Ibid., p. 17. Gesamentlike verslag deur die sekretaris en hoofingenieur.

12. Ibid., p. 18. Gesamentlike verslag deur die sekretaris en hoofingenieur.

The proposals of the Stallebras committee had been designed to be easily absorbed into the policy framework, once regional services councils were given the green light. One dynamic aspect of the proposals was that they made provision for regional authorities to be responsible for the bulk supply of water. There were no plans to replace the board as a bulk regional service provider. In the planning phases of the project, though, management appeared to be open to different permutations. It was felt that the bulk purification of water on a regional basis was an ideal function for a regional service council. Simultaneously there were more conservative thinkers. One noted:

The Board is essentially a service organisation and it has never in its long and distinguished history taken the initiative to expand its distribution network or area of supply to promote the use of water. Without exception it has seen its duty to be to meet demand that is created by any other factor than simply the availability of water and it has always applied for extensions to its area of supply as a result of a request to meet demand.

This mode of thinking was only temporary. Within the next three years, after extended internal and external negotiations, a changed attitude was noticeable in the corridors of power at the Rand Water Board. A number of recommendations were made to government in respect of the way the organisation saw itself in the future. These were ready to be taken up in the board’s statutes once the government gave its approval. The board was later informed that the proposed amendments were acceptable. But there was a proviso in respect of the board’s right to the purification of effluent.

The department of water affairs recommended to government, and it was approved, that the activities of the board in respect of the treatment of effluent would be in line with the water legislation of 1956. The board in committee discussed the matter extensively and expressed the opinion that the purification of sewage had to comply with the standards laid down by a central authority. The

15. Ibid., p. 20. Gesamentlike verslag deur die sekretaris en hoofingenieur.
Rand Water Board could not be subjected to the approval of the department of water affairs. This was seen to be in conflict with two principles: the board’s autonomy, and the government’s policy of deregulation. It was argued that to place the board under a specific authority implied that these principles were to be ignored. It was consequently decided that the board would make representations to the minister of water affairs on the matter. If that was not successful the committee decided that the matter would be stated on behalf of the board at meetings of the standing committee on water affairs.

In view of the fact that the proposed legislation was to be discussed by the standing committee in January, for final approval in February, it was decided that the board had to be kept posted on the matter. They had to know when the proposed changes to their recommendations would go through.\(^\text{16}\) At the same meeting the board was informed that the department of water affairs had agreed to change the proposed amendment as the board wished.\(^\text{17}\)

**Amendments to the statutes**

Following extensive discussion, the board between August and October 1986 agreed to a number of changes to the statutes. Provisions were made for:

1. Increasing the membership of the board from nine to 12 members;
2. The consolidation of tariffs to bring foundation and preferential consumers into a uniform tariff structure;
3. Increasing the amount that could be spent by the finance and executive committee under the general authority delegated by the board, from R10 000 to R100 000; and

\(^{16}\) RWA, Komitee van die algehele raad, vergadering 1988.01.28, p. 133.

4. Empowering the board to dispose of wastewater, sewage effluent, etc. on a regional basis.\(^{18}\)

At a meeting of the board that was held in August 1987 it was decided that the proposed amendments would be submitted to the department of water affairs on 1 September 1987. All that remained then was for the government to give its approval. At the time Section 33 of the existing statutes was considered the most problematic. The section stipulated that the board could appoint a finance and executive committee to regulate and control the finances of the board. All orders intended for payment by the board had to go through the committee with the understanding that sensible recommendations would be made to the board on matters of financial expenditure.\(^{19}\)

Further changes to the statutes followed in 1989 to provide the legal basis for substantial changes in the management structure of the board. It was the culmination of a long process. This will be dealt with in detail in the next chapter.

**A new approach to management**

In July 1987 board chairman, Dale Hobbs, took the process of change management further when he explained to the board that numerous technological changes had taken place in the context of development planning. It was consequently necessary for management to master new skills. He recommended to the board, that senior management staff be sent for training to the Business School of the universities of the Witwatersrand and Cape Town. The board approved of the expenditure of R26 000 for the purpose of this training.\(^{20}\)

The following month Hobbs further expanded on his thinking in a memorandum to the board in which it was recommended that

\(^{18}\) RWA, Committee of the whole board, meeting 1987.09.25, p. 79. Secretary’s report no. 8033. G.J. van der Westhuizen.

\(^{19}\) Ibid., p. 79. Secretary’s report no. 8033. G.J. van der Westhuizen.

\(^{20}\) RWA, Committee of the whole board, meeting 1987.07.31, p. 44. Chairmans report. L.D. Hobss.
certain changes be made to the structure of the board’s management. The objective was to create a more effective type of structure in which a single chief executive was solely responsible for the operations of the board. At the same meeting it was proposed that the structure of the management of the board had to make provision for a publicity division in order to create a favourable image of the organisation. It was also recommended that the structure of the management of the board be revised annually.\textsuperscript{21}

Up to that point in time the executive management of the board comprised a twin stream structure in which two executive managers were responsible to the finance and executive committee as well as the board.\textsuperscript{22}

In the new dispensation envisaged by Hobbs in 1988, the chief executive was to be headed by a single general manager. Reporting to him was to be a management committee comprising three branch managers. Each was responsible for specific functions.\textsuperscript{23}

In the new dispensation the structure was to be as follows: General manager: A.J. de Witt; Manager engineering: A.B. Hardwick; Manager operations: E. Myburgh; and Manager finance and administration: G.J. van der Westhuizen.

With the basic structure in place, a number of managerial changes came into effect. At the end of 1988 V.J. Bath was appointed the new manager (subsequently the chief executive) in the place of A.J. de Witt who was retiring. A.S. Smit succeeded A.B. Hardwick, the manager of the engineering division, and L.M. Bakkes in May 1989 succeeded G.J. van der Westhuizen as manager of the finance and administrative section. J.L. Gardiner succeeded E. Myburgh as the manager of operations, at the beginning of April 1989.\textsuperscript{24}

\begin{itemize}
  \item \textsuperscript{21} RWA, Komitee van die algehele raad, vergadering, 1987.08.28, p. 70.
  \item \textsuperscript{22} RWA, 83nd annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1988, pp. 8-9.
  \item \textsuperscript{23} Ibid., p. 9.
  \item \textsuperscript{24} RWA, 84th annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1989, p. 9.
\end{itemize}

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changes proved to be a timely arrangement. With a basic structure of management and carefully selected management leaders in place, it was possible for the organisation to contend with the important changes that were to take place within the next months to prepare the way for a new South Africa.

**A new head office**

In many respects the ‘redefinition’ of the Rand Water Board as an organisation was also manifested in a creative semiotic environment of structure and form. This is best typified by the plans introduced to build a new head office. The first plans were made in March 1981 when the board was informed that the existing accommodation at the head office in Fraser Street, which had been occupied for almost three decades, was no longer sufficient. It had been policy for a long time to keep the number of employees of the board to a minimum. Between 1970 and 1980 the people employed at the head office increased only from 209 to 216. It was consequently possible to cope with the existing accommodation in Fraser Street. By 1981 circumstances had changed. The secretary to the board, A.J. de Witt, told a meeting of board members that because of the rapid growth in the operations this situation could no longer be maintained. New appointments had to be made. Especially in the engineering section it had become essential to employ more people. Subsequently it was accepted in principle that more office space, near the headquarters be rented to accommodate the enlarged employee component.

In July 1981 the board was asked for its approval for negotiations to purchase stand 230 in Market Street Johannesburg, adjacent to the

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headquarters. The board had earlier purchased stands 231 and 232 but was not prepared in 1971 to purchase stand 230 for what it considered the exorbitant price of R410 000. When the sale of the property once again came up in 1981 there were indications that it could be acquired for R335 000. In view of the benefits to the board, permission was given to the chairman, Dale Hobbs, to enter into negotiations for the acquisition of the property. 28 An independent investigation was conducted and management was advised that consideration be given to the construction of an entirely new head office. In May 1985 the matter was taken to the board.

It was explained that the board’s property at Rietvlei was conveniently located, close to main communications routes. Moreover, the site where the new building could be built was in a natural environment where sufficient parking facilities could be provided. It was estimated that the new building would cost about R25 million. 29

In outlining certain principles deserving consideration the board’s consultants on the project explained that when the organisation was established in 1903 the headquarters had to be situated in close proximity to the important mining houses in central Johannesburg. There was also probably no sufficient site available outside the business centre of Johannesburg. Over the years all the board’s activities were conducted from the head office. Gradually it started changing and decentralisation started taking place. Administrative tasks were performed at the pumping stations. The consultants also explained that from a planning perspective the project had to be financially attractive. Moreover, the complex had to be easily accessible and within easy range of the pumping station and distribution mains, reservoirs, depots and sites. It was thus advisable for the head office to be situated where traffic congestion would not be a problem. It had to be sufficiently remote from

28. RWA, Committee of the whole board, meeting 1981.07.31, pp. 39-40. Secretary’s report no. 7376 and Approval.

residential areas so that it was still possible to attract potential staff. In making provision for the site, it was advised that long-term requirements be taken into consideration. There had to be sufficient possibilities to add on to the new complex.\(^{30}\)

Consequently the board agreed that its farm, Rietvlei 101 JR, be used for the purposes of the new head office. It was environmentally suited and considered one of the most scenic spots on the Witwatersrand.\(^{31}\)

When the first information about the building plans in July 1985 leaked to the media, *The Star’s* environmental journalist, James Clarke, took stock of the situation and came to the conclusion that there was a general flight from the city centre. He explained that Eskom in 1975 moved to Sandton. Sasol followed by moving to Rosebank. Johannesburg’s municipality also set the trend when it moved the Civic Centre to Braamfontein.\(^{32}\) Little could be done to reverse the trend. It was an era of change in developmental thinking in the corporate world of South Africa. Decentralisation was a term that was frequently used in government circles. At the same time it made sense to get the organisation into an environment where new ideas could be cultivated for a utility that was inclined towards promoting harmony between the forces of nature and those of human culture. What was even more important was that the board’s management had consulted the employees extensively on the matter. They were predominantly in favour of the move.\(^{33}\) Perhaps one of the major advantages was the fact that the head office would be situated at a location considerably easier to reach from the various stations. It implied that the staff would have shorter distances to travel between the different points of operations.\(^{34}\) Management considered it to be the real centre of


\(^{33}\). *Ibid*.

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gravity of the board’s regional operations. There were good access routes for staff and service providers.  

Illus. 10.2 The new Rietvlei headquarters under construction. Source: Rand Water

The architects and principle agents for the new Rietvlei project were Stauch Vorster & Partners Inc. They were to be assisted by the quantity-surveying firm of Farrow Laing and Partners. The civil and structural engineers were Ove Arup & Partners while the electrical engineering was to be done by Charles Pein & Partners. A sub-committee consisting of a number of board members were appointed to give the formal approval for the drawings. The committee was also responsible for appointing additional consultants.

By March 1986 the estimated costs had increased to R32,5 million. This was after some facilities in the original plan, such as a swimming pool and squash courts, had been scrapped in order to save money. Among the board members the opinion was expressed that costs would go up even more before the building was completed. In March 1986 the board approved the expenditure of an amount of R32,5 million for the construction of the new headquarters at Rietvlei. A further R4 million was set aside

35. Personal disclosure V.J. Bath, Westcliff, 2003.03.07.
36. RWA, Minutes 1985-6, p. 109. 1 035th ordinary meeting, headquarters, Johannesburg, 1985.05.30. Chief engineer’s report no. 7390. L.H. James and decision
38. RWA, Minutes 1985-6, p. 512. 1 044e gewone vergadering, hoofkwartier, Johannesburg, 1986.03.27. Hoofingenieursverslag nr 7549. L.H. James.
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for the furniture. When the project started there was a downturn in the economy. The building industry was particularly hard hit. It was considered to be a favourable situation in which to have the construction work done.

The architects were over-optimistic in their prediction that the work could be executed within the space of 12 to 18 months. In February 1988 the board started planning for the official opening, scheduled for 22 November 1988. The minister of environment affairs and of water affairs was identified as the celebrity guest for the occasion. Then, somewhat later, it was reported that the contractor was unable to complete the new building in time. Consequently only some portions of the new building were prepared for occupation. The new date for occupation was set for 30 November.

Because of the delays it was eventually decided that the building would be occupied in phases as the contractors completed the work. The first staff started moving in at the end of 1988 and towards mid-1989 the building was completed. The senior management, in consultation with their staff decided on the furnishing and colour schemes they preferred. A few guidelines were laid down, but it did not constrain the creative awareness of aesthetics that had been nurtured with the head office staff. In 1991 the board approved a further expenditure of R300 000 on the purchase of 34 oil paintings, 61 watercolours and lithographs, 500 prints 12 murals and five statues. Aesthetically the Rand Water

40. RWA, Komitee van die algehele raad, vergadering 1990.11.29, p. 100. Report V.J. Bath: Legal division.
41. Ibid., p. 100. Report V.J. Bath: Legal division.
42. RWA, Committee of the whole board, meeting 1988.02.25, p. 141.
43. RWA, Komitee van die algehele raad, vergadering 1988.09.29, pp. 96-7.
44. Personal disclosure Dr H.T. Ramsden, Cape Town, 2002.12.01.
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Board had become not only an environmentally conscious undertaking, but it also strove to create conditions where the accomplishments of human culture were celebrated in forms of art.

Becoming part of the African landscape: the LHWP

In the 1980s the South African government had to look over its borders, to a neighbouring black state for crucial water supplies. The process of Africanisation that had started in the 1970s was now more than mere political posturing. If the country wanted to keep on growing economically it had to acquire water at a reasonable cost. The best option at that point in time was getting the required water from its neighbouring state, Lesotho. Otherwise South Africa was faced with an impediment to its growth because of potentially prohibitive water costs.46

By the 1980s the idea of getting water from Lesotho had been around for a long time. Already in a 1954 report by the Natural Resources Development Council it was proposed that international co-operation might have to be sought in future when it was necessary to find additional sources of water for the Vaal catchment area. At the time it was proposed that the Caledon river – perhaps even the protectorate of Basutoland – could be considered.47 At the time however little came of the proposals.

In outline the scheme tabled in the 1980s comprised a series of four dams that were to be used in transferring water over a distance of some 400 km from the Highlands of Lesotho by means of tunnels to the Vaal dam.48 Added to the project was a 120 MW hydro-electrical power station costing R250 million close to the Caledon river.49 It was a massive project. The scheme was intended to transfer \(2.2 \times 10^9\) m\(^3\) of water annually from the Malibamatso river, a major tributary in the headwaters of the Orange river in Lesotho, to the

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46. Personal disclosure V.H. Bath, Westcliff, 2003.03.07.
49. Ibid., p. 9.
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Ash/Liebenbergsvlei river, a tributary of the Vaal that rises in the Free State close to the Golden Gate Highlands National Park. In the first phase of the scheme the Katse dam was to be used to impound tributaries of the Orange river (Senqu in Lesotho). The Katse dam, one of the chief components of the scheme, was to become the tallest dam on the African continent, surpassing in height the Cahora Bassa dam by 14 metres.

This project, scheduled for completion in 1997 was intended to supply 18 m³ per second from the Katse dam in Lesotho to the upper parts of the Liebenbergsvlei river. From there the water was set for gravitation to the Vaal dam. Initially it was estimated that it was to cost in the order of R9,1 billion. A further R7 billion had to be earmarked at the time for further phases. In view of the high costs involved it was accepted from the outset that the water would be earmarked for industrial and domestic consumption in the Gauteng region. It was considered far too costly for agricultural purposes.

Negotiations for the development of the scheme started towards the end of the 1970s. Judging from newspaper reports it seems as if political factors played an important role in the process that paved the way for the conclusion of an agreement. In January 1986 there was a military coup in Lesotho. According to media reports the chances were much better of South Africa reaching a better working relationship with the new government than with that of the former ruler, Leabua Jonathan. At the time the South African government, according to press reports, was negotiating with

50. B. Davies and C. Douie, Vanishing waters, p. 300.
51. Ibid., p. 300.
52. RSA, Department of Water Affairs and Forestry, Vaal river: life-blood of a nation, p. 13.
53. B. Davies and C. Douie, Vanishing waters, p. 300.
54. Ibid., p. 300.
success on the issue of keeping the ANC at bay. It wanted to prevent cross border attacks from being launched by ANC cadres.\textsuperscript{57} For South Africa the negotiations were sensitive and it required great political and diplomatic skills. It had to establish sound relations with the Lesotho government to secure a stable supply of water. At the same time the South African negotiators had to aim at creating the type of bilateral trust that would prevent the ANC from attacking the water supply to the republic from within the borders of Lesotho. In political circles it was agreed that King Moshweshwe, who became the executive ruler of the country after the coup, was sympathetic towards the ANC.\textsuperscript{58}

Externally the project was designed in such a manner that the European Union, the United Nations Organisation and the World Bank would be involved in pilot studies to determine the viability of the project. South Africa was precluded from making any investments in the capital costs of the project. Instead it was to pay indirectly for the scheme as an end user making use of water supplies from Lesotho.\textsuperscript{59} Substantial support was available to the Lesotho government. The World Bank indicated in 1986 that it was prepared to put up funds for the construction project. On the South African side the Trans-Caledon Tunnel Authority was established for the construction of the tunnel for water into South Africa.\textsuperscript{60} Later it was reported that South Africa was to invest R49 million in the project while Lesotho’s government would invest R6,4 million. The rest of the funds had to come from international agencies that were prepared to invest in the project.\textsuperscript{61}

In political circles the conclusion of the treaty was an important breakthrough for the government. Its announcement was made public by the then state president, P.W. Botha, at a conference of the

\textsuperscript{57} Ibid., p. 9.
\textsuperscript{58} Ibid., p. 9.
\textsuperscript{59} Ibid., p. 9.
\textsuperscript{60} A. SENDZUL, “R3bn water fund on tap” and “West to help water scheme” in Business Day, 1986.08.21.
National Party held at East London at the end of September 1986. At the time it was accepted that the undertaking was the largest of its kind to be initiated by South Africa and any of the neighbouring states in the Southern African region. The treaty was formally signed on 24 October 1987. At the time it was estimated that Lesotho stood the chance of earning R150 million per year from the scheme. For South Africa it meant that the water-hungry Witwatersrand was being given a water lifeline. A downside of the project was that about 8000 residents in the region where the Katse dam was to be constructed were to be relocated. The Lesotho government did however give the undertaking that the process would be conducted in an equitable manner. It also promised that jobs would be available for the local residents who could be employed on the construction of some 390 km of roads.

The Witwatersrand region where the Rand Water Board’s operations were mostly conducted was to be the major beneficiary. There was appreciation for this fact. Consequently, in 1989, a levy was added when the tariffs of the board were reviewed. All urban and industrial users of the Vaal river water system, such as Parys and the Free State goldfields, were affected by the new arrangements. It had to help pay for the LHWP. There were no complaints from consumers. The first increases on the levy were announced in October 1990. By 1991 it had risen to the payment of seven cents per kilolitre. This was four cents up from the previous year’s levy. In October 1992 the board was forced to add another

63. B. DAVIES and C. DOUIE, Vanishing waters, p. 299.
four cents per kilolitre after notice had been given by the government of the rise in order to accommodate the cost of the proposed scheme. The LHWP made it possible to cope with the practical necessity of a viable source of consistent water supply for South Africa. Ultimately, water was to be a means of bringing communities in southern Africa together in order to secure the continued growth of prosperity in the subcontinent.

**Addressing the issue of pollution**

In April 1985 a combined report by the chief engineer and secretary to the board was tabled to the board. This followed when one of the members of the board, G.C.D. Claassens, had earlier submitted a motion in which it was stated that the quality of water discharged into the Vaal river system contributed to the deterioration of the board’s water. It directly affected the quality of the type of service the board could provide to its consumers. Underlying the motion was the suggestion that the board should be placed in a position to take over control of sewage treatment plants. If necessary, the board should also be placed in a position to operate the plants. Finally, the board was to have been placed in a position to dispose of the effluent in the most efficient manner. In the light of the motion it was recommended that the board proceed with legislation to give it the necessary powers to own, acquire, operate and control those sewerage treatment plants it deemed necessary to rationalise within its area of jurisdiction. The fact of the matter was that the motion was an attempt at getting local authorities to conform to the recommendations of the Stallebras committee.

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In the report to the board the officials explained the existing state of pollution caused serious problems in the PWVS region. The options open to the board were: to introduce stricter effluent standards; improve the standard of water supply; demineralise mine pumpage; and/or re-use the water of the PWVS region.\(^{74}\) Overall, it was recommended that the board should identify areas, with a view to long-term planning, where treated effluents could be used as a secondary source of water. Then regional treatment plants could be planned and provide the water to consumers who would make use of it. It placed the board in a position to start acting as a consultant.\(^{75}\)

In the submission to the board, the chief engineer, L.H. James, quoted from a paper he had presented earlier in which it was stated:

> Perhaps the central problem for water resource management in the Republic of South Africa in the coming decades will be how to turn large quantities of effluents – i.e. industrial sewerage and mine effluents into a routine part of the country’s water supply. Policies directed at management of this source of water will of necessity, change in time and different policies may apply to different regions.\(^{76}\)

He was in line with what the department of water affairs was propagating at the time. In January 1985 Hendrik Best, the director of water pollution control in the department of water affairs, stated that effluent had become an indispensable supplement to the natural water supply.\(^{77}\) The *Water Amendment Act* that had come into effect in 1984 gave the department of water affairs the right to halt the water supply to consumers who did not wish to make a contribution towards limiting pollution.\(^{78}\) For the board there however was more at stake in respect of using effluent.


\(^{75}\) *RWA*, Komitee van die algehele raad, vergadering 1985.04.26, p. 15. Gesamentlike verslag deur die sekretaris en hoofingenieur.


Illus. 10.3 After encountering problems with sludge pollution in the 1980s, Rand Water invested extensively with the development of its Panfontein sludge disposal site. By the 1990s it was a well-managed system. Source: Rand Water.

Keeping in mind the process of regional government that was in the pipeline, the board held extensive discussions with the city councils of Johannesburg, Germiston and Pretoria. There were also talks with officials of the department of constitutional development and planning. The objective was to get consensus on the purification and re-use of sewage effluent in the supply area of the board.\(^79\) In September 1985 the board was informed of talks that had been held with the local authorities. There was consensus that a single regional authority was to see to waste water treatment this was the most desirable dispensation.\(^80\) In discussions the idea was mooted of having one of the larger local authorities taking control of wastewater treatment. The indications were that they preferred

\(^80\) RWA, Committee of the whole board meeting, 1985.09.27, p. 99. Chief engineer’s and secretary’s report.
the responsibility being transferred instead to a regional services council.\footnote{Ibid., p. 100. Chief engineer’s and secretary’s report.} In view of the state of development of the system of regional services councils, the board decided that it was not going to make any proposals to government. Instead certain recommendations could be made if it was required. There did appear to be agreement on one crucial issue. The board was not going to take over the responsibility of seeing to the treatment of wastewater.\footnote{RWA, Committee of the whole board meeting, 1986.08.29, pp. 61-2.}

In August 1986 the board contemplated taking over the regional sewage scheme for the PWVS region. In order for this arrangement to be legal, however, it was necessary to amend the statutes of the board. In preparation for the proposed creation of the regional services councils, the board was also asked to consider enlarging the membership from nine to 12. Finally, it was also recommended that a uniform tariff be introduced for both foundation and preferential consumers.\footnote{RWA, Committee of the whole board meeting, 1986.08.29, pp. 60, 62-9. Secretary’s report, no. 7919. A.J. de Witt.} The recommendations seemed to come at an unexpected time and Alderman J.F. Oberholzer, one of the board members, questioned the matter of taking over existing purification works from local authorities. He expressed some doubts about the board’s ability to pay for it from the funds that the works could generate. He also had doubts about the viability of amending the statutes of the board. The matter should rather be left in abeyance, he felt, until such time as it was known what authority would be responsible for the region’s water treatment. The board as a whole decided that the remaining amendments to the statutes were also to stand over.\footnote{RWA, Committee of the whole board meeting, 1985.09.27, pp. 100-1. Chief engineer’s and secretary’s report.} It remained an issue that posed numerous problems in the years of political transition that followed.

Over and above its institutional plans to cope with pollution, the board was faced with other challenges. Chemical substances
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proved to be a great threat. At the start of 1985 it was estimated there were about 70,000 to 80,000 chemicals in use in the country and a further 1,000 was added to the list every year, according to W.O.K. Grabow of the National Institute of Water Research. This was a potentially dangerous situation with which the board had to contend. It had implications for the water cycle.

In 1986 Sasol 1 announced that it intended spending upward of R1 million over a period of five years in order to come into line with the new water pollution limits that were to come into effect in October 1988. The company let it be known that the measure was part of its social responsibility in respect of clearing the pollution of the environment.

In the board’s annual report for 1983-4 it was noted that the fish mortality in the Barrage was investigated, but no clear reasons could be found for the deaths. It was later investigated in collaboration with the Transvaal Department of Nature Conservation and the Rand Afrikaans University. However, there was no conclusive evidence of precisely what factors were responsible for the fish deaths. In 1988 the opinion was expressed that ammonia poisoning was responsible for the fish deaths in the Leeuwspruit, one of the tributaries of the Vaal river on the Free State side. Sasol responded immediately and stated that it intended investigating the matter. Tests showed that the ammonia levels in the Leeuwspruit were 20 times higher than amounts allowed in Europe. Richard Carolin, chairman of the River Property Owners’ Association stated that the problem had been noticed a month earlier and residents on the banks of the river started complaining

86. ANON., “R100 milj. Vir skoon water” in Vaalweekblad, 1986.06.13.
about the situation. Sasol still maintained at the time that it was not necessarily responsible for the state of affairs. It did concede that one of its dams had recently been repaired. The company gave the assurance that it at all times tried to conform to the to requirements for treating effluent, as laid down by the authorities, a spokesman of Sasol was reported to have said.91

To some extent the responsibility for the fish deaths could not be directly placed on the shoulders of any particular water consumer. In the drought conditions that started in 1983, local authorities experienced considerable problems with pollution from factories with effluent and from the purification process at sewerage works.92 There were insufficient supplies of raw water available to dilute the high toxic content of the effluent. Consequently the danger of pollution was intensified.

In particular, the salinity of the water posed a serious problem. Using data that dated back over a period of more than 50 years, researchers found that the salinity of the water in the Barrage had increased substantially. By the 1980s, to ensure that the overall quality of water supplied by the board was satisfactory, it was possible to extract a third of the Rand Water Board’s water supply from the Barrage. The balance was to be made up by water obtained directly from the Vaal dam which did not have the same high levels of salinity. The resultant mix was of a quality acceptable for water in the developed world.93 The greater salinity in the water came from point source and diffuse source pollutants. The point source salinity was highly mineralised mine pumpage, as well as industrial and domestic effluents. The underground water of the mines was as a rule very salty containing from 4000 to 5000 mg/ℓ. It was a significant volume considering the fact that 40 million cubic metres were discharged into the Klip and Suikerbosrand rivers

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93. ANON., “PWV will foot the bill if salinity takes hold” in Business Day, 1989.08.10; Personal disclosure V.H. Bath, Johannesburg, 2003.03.07.
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each year. It was accepted at the time that the acceptable standard of saline content was 300 mg/l. The best way to achieve these levels was considered to be by means of blending the water. Highly saline water tended to cause scaling and corrosion that caked pipes and heating elements. This reduced their effectiveness and increased electricity costs. At the time it was also a costly undertaking to desalinate water.

One of the major problems was that experts increasingly contended that the Vaal dam itself was in danger of becoming more saline. It was predicted that by the year 2000, urban and industrial consumers could be asked to pay as much as R100 million per annum to desalinate the water. This was because of the coal burning operations of the power stations on the Eastern Transvaal Highveld. At the time it was considered that the power stations in the Eastern Transvaal (currently Mpumalanga) were producing more sulphur (SO₂) than the Ruhrgebiet in Germany, considered to have been amongst the most polluted industrial environments in the world. In March 1990 agriculture minister, Jacob de Villiers, addressed the president’s council on the matter. The council was at the time busy with the formulation of an environmental policy for the government. De Villiers explained that the power stations of the Eastern Highveld also threatened farming operations. Agricultural production was on the decline. New high-technology coal mining operations, because of pollution, inhibited the fertility factor of plants. The media described Brugspruit at Ferrobank, as ‘South Africa’s most polluted river’, where the acid factor of the river was compared with ‘battery acid’.

94. ANON., “PWV will foot the bill if salinity takes hold” in Business Day, 1989.08.10.
95. Ibid.
96. Ibid.
101. T. ANDERS, “River water is like battery acid” in The tar, 1990.09.06.
When Willie Hoods in October 1990 became the first person of colour to be administrator of the Transvaal, he promised that his administration would do everything in its power to contend with pollution which cost the state R80 million per year.\textsuperscript{102} Later the department of water affairs and forestry launched an investigation into the pollution levels and water quality in the streams and rivers in the area of Witbank. One of the objectives of the research was to determine what were the best plans to help in the rehabilitation of the environment of abandoned mines.\textsuperscript{103}

In view of the serious nature of the pollution threat the water research commission conducted extensive enquiries in the Vaal Triangle.\textsuperscript{104} Investigations were made into the groundwater supply, the salt content of water in the Barrage system and the financial implications of using water with a high salinity content for domestic and industrial purposes.\textsuperscript{105} Researchers were of the opinion that it was advisable for the board to let water of the Vaal dam into the Barrage in order to dilute some of the salinity of the Barrage. The effect of this arrangement was such that when the water available from the Barrage contained more than 300 mg/l of saline surplus Barrage water would be released and more water from the Vaal dam was to be used.\textsuperscript{106} The lower salt content in the water implied that the board could incur a saving of as much as R100 000 on chlorine consumption. More importantly, the lower salt content ensured a better quality of industrial and domestic water quality.\textsuperscript{107}

\textsuperscript{102} C. Botes, “Morsjorse kos R80 m er jaar” in Transvalers, 1990.08.25.
\textsuperscript{103} Anon., “Water quality tested in Witbank area” in The Citizen, 1991.11.08.
\textsuperscript{104} RWA, Committee of the whole board, meeting 1988.08.25, pp. 83-4. Information A.J. de Witt.
\textsuperscript{105} Ibid., p. 83. Information A.J. de Witt.
\textsuperscript{106} Ibid., p. 84. Information A.J. de Witt.
\textsuperscript{107} Personal disclosure, V.H. Bath, Westcliff, 2003.03.07.
**Providing additional water to industry**

When the 1982 additional water supply scheme was originally approved, the Rand Water Board had set for itself the objective of providing large amounts of non-potable water to consumers in the Northern Orange Free State and Southern Transvaal. It required a number of innovative measures. This scheme provided for the construction of a barrier in the upper reaches of the Barrage reservoir. It had to segregate the polluted flow from the tributaries of the Vaal river in the Barrage area from the water flowing into the Barrage from the Vaal dam. The scheme further made provision for a low mineralised water supply to the Vereeniging pumping station. The main objective of the scheme was to supply 210 Mℓ/d of raw water to Eskom’s Lethabo power station in the Vaal Triangle. This power station, the largest of its kind in the southern hemisphere, was a high-efficiency low water-consuming installation. Because of the service it rendered the board was forced to make plans for an exceptionally large supply of water to a single consumer. The one advantage was that the power station was situated not too far from the Barrage. Another responsibility of the board was to provide a further 52,3 Mℓ/d to the Vanderbijlpark plant of Iscor.108

In terms of its own supplies the 1982 scheme, as adjusted in 1983, had to upgrade the pumping and purification system of the board by 850 Mℓ/d to meet the demand of 4195 Mℓ/d envisaged for the year 1990.109

In the process of getting the water supply to Eskom’s Lethabo power station, the board had to contend with a revised dispensation in terms of water consumption, which ultimately implied that a loss of more than R2 million had to be cushioned by the board in order to maintain the business of a valuable customer. In 1934 Eskom entered into the first of its agreements with the board to extract 84,1 Mℓ/d of water from the Barrage. It made


provision for the supply of water to the Klip power station and any other power station that was to be erected. Then in 1983 the board and Eskom entered into a new agreement for the additional supply of a maximum of 210 Mℓ/d of raw water to the Lethabo power station.¹¹⁰ Subsequent to the closure of the Klip power station and the gradual withdrawal of the Vaal, Taaibosch and Highveld power stations since the 1970s the raw water extraction of Eskom had fallen to well below 84 Mℓ/d. The effect was that by March 1988 the board had unconsumed rights of water to the value of R2,38 million. Eskom summarily reported this to the department of water affairs and requested to be credited with the amount.¹¹¹

Eskom had also meanwhile acquired the right from the department of water affairs to extract water from the Vaal dam instead of the Barrage. The board was not aware of this state of affairs when the Lethabo agreement of 1983 had been entered into between the board and Eskom. The department of water affairs tried to convince Eskom to revise the agreement with the board so that the responsibility for the R2,3 million debt could be for the account of the board. This implied that the board had to accept responsibility for the debit. It also had to make provision for the consumption by Eskom, at its Lethabo power station, for any water it still had in reserve.¹¹²

Illus. 10.4. The Lethabo intake from Rand Water was capable of providing 450 Mℓ/d with the support of a centrifugal pumping system. The power station at the time of its construction was one of the largest and most advanced in the southern hemisphere. Source: Rand Water

Similar problems were encountered with Iskor. In 1940 an agreement with the board led to Iskor having access to 34,1 Mℓ/d in exchange for the payment of an annual amount of R195 000.113 In 1981 Iskor requested the board for a supply of water from the Lethabo weir. It required an additional 29 Mℓ/d. Once the system was taken into use, Iskor also tended to use less water from the

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Lethabo weir. It had started making use of air-cooling processes, which were more cost effective. Consequently Iskor, just as Eskom, had built up a credit of R124 189 which was payable to the department of water affairs. The department consequently let it be known that it had no qualms if Iskor wanted to use its rights of extraction from the Lethabo weir instead of the Barrage. It also requested the board to honour the right. Ultimately it meant that the board also had to foot the bill of R124 189 in respect of Iskor.

Technically the 1982 additional water supply scheme also posed technical challenges. One of the subsidiary projects in the scheme was the construction of a tunnel under the Vaal river. In the original planning it was estimated it would cost R5,3 million to build the tunnel under the river near Vereeniging. Once work started, it proved to be a problematic undertaking. By 1987 it was necessary to raise the cost of the work to R7,2 million. At one stage work on the 146 m long tunnel had fallen behind because after less than 26 m of digging the tunnel, it was discovered that it was almost impossible to close the fissures in the rock immediately ahead of the excavation. There were attempts at filling the fissures with grout, but it did not work properly. By July 1987 it was estimated that no less than 130 000 pockets of cement would be required to complete the grouting. At that point in time it was estimated that expenses could rise to R11,5 million.

The board was of the opinion that the advice of a specialist-consulting engineer, Ross Parry-Davis, should be obtained to advise on tunnelling. He specialised in mining and tunnelling. Despite his assistance, it was difficult to find solutions to the many

problems encountered.\textsuperscript{118} The project was completed on 31 March 1988, well after the target date.\textsuperscript{119}

For the Rand Water Board the undertaking of supplying raw water was part of a new learning process. It was important to take note of the potential pitfalls of tunnelling when water distribution systems were developed. Perhaps more important was the fact that the board put its weight behind plans to build up the industrial capacity of the Vaal Triangle region. By the next decade, as the economy went into a temporary decline after the transition to a new multi-racial democracy, funds were less readily available to undertake large projects with a view to serving specifically the interests of industry.

\begin{flushleft}
\textsuperscript{118} Personal disclosure, V.H. Bath, Westcliff, 2003.03.07.
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Contending with drought conditions by means of water restrictions 1983-1987

At the start of 1983 there were reports of water shortages in the Vaal Triangle and the Witwatersrand. In January the Vaal dam was only 44 per cent full. At the time the drought appeared to be widespread. Reports from the Northern Transvaal and the homelands in the Eastern Cape, suggested that the drought was affecting the whole country. However, it was in the industrialised and most densely populated urban region of South Africa – the Witwatersrand – that the drought conditions were the most serious. By mid-January 1983 some 17 suburbs in Johannesburg were left high and dry after two major power failures that lasted three days disrupted the board’s distribution system. The water supply to the Witwatersrand dropped by 30 per cent overnight. As a result of the three-day breakdown people were angry at the authorities for not informing them of the causes of the breakdown. In the Rand Daily

Mail, an editorial comment noted that it was the responsibility of utilities such as Eskom and the Rand Water Board to serve the public. They were also accountable to the public. It was thus essential to pass on information. A report on precisely what was responsible for the breakdown was withheld from the press. Eskom later indicated that one of the power supply lines had overheated. Another contributing factor was that the Rand Water Board’s pumping operations were running at maximum output because of the hot and dry weather conditions. Then, when the power break came the emergency power supply was insufficient to keep the Zuikerbosch pumping station running at maximum capacity. After the power had been restored a spokesperson for the board told the press that although Zuikerbosch was in operation again, it could take a considerable period of time before the reservoirs would be filled properly. Three reservoirs of Johannesburg, Hursthill, Brixton and Northcliff, had dropped to well below their minimum levels. Members of the South African defence force, civil defence groups and workers of the council used 11 tankers to supply water.

In the wake of what was considered to be an imminent crisis 14 local authorities on the Witwatersrand started making plans to introduce water restrictions. Some implemented water restrictions despite good rains, but they were requested by the board to maintain light curbs similar to those of Johannesburg city council until such time the water supply was back to normal.

As the crisis deepened the government stepped in with the minister of the environment, Sarel Hayward, stating in parliament that the whole region served by the Vaal river would be subject to water


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restrictions. The measures were to come into effect on 7 March 1983 and implied that the Rand Water Board would, in terms of the government’s guidelines, be allowed to extract only 80 per cent of the volume of water it had consumed during the corresponding period in 1982. Taken in conjunction with the average population growth of 5.2 per cent for the Witwatersrand at the time, it implied that savings had to be made in excess of 27 per cent on the average consumption.

The manner in which local authorities were to be brought into line with the water restriction target was by paying high water tariffs. For example, at one point the Boksburg town council had to pay R2 million in fines after it had exceeded its monthly quota of consumption for a period of two consecutive years. It meant that ultimately consumers had to pay for over-consumption.

At the start of the water curbs the public participated in open discussion in the press. There were those who felt the fines that were to be imposed were insignificant. Officials acknowledged it and agreed that the fines should be increased substantially. There were also those who felt themselves to be ‘victims’ of the restrictions. They alleged that the local authorities were wasting much water as a result of rusted water pipelines. It was against this backdrop that the Rand Water Board resorted to warning consumers to use water sparingly. More stringent measures could be introduced. By mid-March 1983 wide-ranging measures were


introduced by all the local authorities that were customers of the board.\textsuperscript{18}

J.F. Oberholzer, chairman of Johannesburg city council’s management committee, who also served on the Rand Water Board, told the media that he had reason to feel cynical about the restrictions. He was of the opinion that the affluent class of people to the north of the city centre would continue using water, despite the restrictions. He was personally in favour of much stricter measures for transgressors. More expensive water, at the time, appeared to be some sort of a solution to the problem.\textsuperscript{19} Consumers argued that water curbs were downright frustrating, outdated and unacceptable. One consumer, Ms. Audrey Youngworth of Bryanston was adamant:

\begin{quote}
I say to the gardeners of the Rand: Don’t be so complacent, accepting without a murmur the ridiculous restrictions imposed by a body of people who didn’t even have the courtesy to include in their discussions various representatives from sectors of the community most likely to be adversely affected.\textsuperscript{20}
\end{quote}

Oberholzer was however convinced that strict measures such as jail terms for water misuse could provide a solution to the problem.\textsuperscript{21} Amid an air of controversy that hung over the Witwatersrand on the water matter, Dale Hobbs, chairman of the board, entered the fray and warned there would be a two-week period of grace before strict measures were introduced by the board. The objective was to put an end to water wastage.\textsuperscript{22} In the Vaal Triangle a helicopter was used to patrol the region and clamp down on water wastage.\textsuperscript{23}

\begin{itemize}
\item \textsuperscript{18} ANON., “Vaal dam may be empty in 1984” in \textit{The Citizen}, 1983.03.16; ANON., “Waterperke: só raak dit u” in \textit{Die Vaderland}, 1983.03.17.
\item \textsuperscript{19} ANON., “Duurder water vir die Goudstad” in \textit{Die Vaderland}, 1983.03.31; MUNICIPAL REPORTER, “Water-vasvat in Goudstad” in \textit{Beeld}, 1983.03.31.
\item \textsuperscript{20} CORRESPONDENCE: A. Youngworthy, Bryanston – Editor, “Water curbs are frustrating, outdated and unacceptable” in \textit{The Star}, 1983.03.30.
\item \textsuperscript{21} ANON., “Jail term wanted for water misuse” in \textit{The Star}, 1983.03.31; J. MINNIE, “Jo’burg clamps down on water” in \textit{Rand Daily Mail}, 1983.03.31.
\item \textsuperscript{22} S. MCQUILLAN, “Water chief warns of tough new curbs” in \textit{The Star}, 1983.03.25.
\item \textsuperscript{23} ANON., “Minder water uit Vaal: Kopter nou ingespan” in \textit{Vaalweekblad}, 1983.04.19.
\end{itemize}
In an effort to put a positive spin on a negative experience one of the Johannesburg dailies started a regular column in which readers were asked to share advice on how to save water. The newspaper, in conjunction with a food manufacturing concern, offered prizes for the best advice. In another newspaper a ‘water watch’ was introduced to keep its readers informed on handy methods of saving water. One hint was that hotels, offices and restaurants had to be more vigilant on water wastage. Incentives had to be introduced to get staff to help with saving measures. Another newspaper informed its readers of a soft flat type of plastic pipe that could be linked to roof drainpipes and be channelled to swimming pools. The pipe cost a mere 40 cents per metre. The CSIR even held a conference in Pretoria where experts from the United States of America informed South Africans on ways of saving water. They were told that water-efficient homes received awards. In some areas the authorities even subsidised water rates. In other places water and sanitary connection fees were reduced in proportion to the amount of water consumed.

With the level of the Vaal dam at the lowest since 1966 the management of the Rand Water Board were becoming concerned that the crisis could deepen. Dams close to the Witwatersrand were also low in contents. The Hartbeestpoort dam was only 36 per cent full. The Loskop dam had 21 per cent of its capacity and the Sterkfontein dam was 69 per cent full. Meanwhile popular holiday resorts, inter alia the Jim Fouché resort on the Free State side of the Vaal dam were closed down to visitors until such time as the water levels were up again.

In August 1983 the board gave the go ahead for an investigation into the system of sliding-scale tariffs for different categories of

consumers. It was a sensitive issue at the time. There were consumers who had made a substantial investment in the board over the years. Some were even founder members who had built up a special relationship going back to 1903. They were considered parties with fixed interests. It implied that there were in existence gentlemen’s agreements that qualified them as foundation members for special treatment. The problem was that if water restrictions had to be introduced along the lines of sliding tariffs for over-consumption, it had to be done in a manner that did not work to the detriment of consumers that paid higher tariffs. At the September 1983 meeting of the board it was explained that the introduction of a sliding scale tariff was intended to work to the benefit of consumers who were prepared to save on consumption. Sliding-scale tariffs were a controversial issue and the board recommended that a decision on the matter be postponed until December 1983. Another alternative was to let the matter constantly be up for consideration should there be a substantial increase in the consumption of water or should the drought conditions create more crucial water shortages.

Not all local authorities responded in the same way to the restrictions. As the summer of 1983 approached there were rumbles among the consumers. They wanted to start watering gardens. In terms of its statutes the Rand Water Board was allowed to place a ban on the use of hosepipes. Some of its municipal customers chose to save water by resorting to other means. They argued that they would be able to incur savings by other means. As matters unfolded the board became amenable to incurring savings in water consumption, as proposed by local authorities.

In Pretoria the acting town clerk L. Vos announced that his council had chosen not to impose the ban on hoses. Pretoria had other

32. Personal disclosure V.J. Bath, Westcliff, 2003.03.07.
water supplies that did not come from the board. Instead his council chose to warn its consumers that if they exceeded the limit sliding scale-tariffs would come into effect. The onus thus lay with consumers to act in a responsible manner. The politically dangerous situation created with the sliding scale tariffs later became evident when a number of office and apartment blocks in Pretoria were reported to be facing municipal water accounts of tens of thousands of rands. Other local authorities, such as Sandton, conformed to the restrictions and were able to save as much as 37 per cent on their monthly consumption. The council also gave its full support for the plans to save water. In Vanderbijlpark a record was set when the third week of September’s water consumption was 44.39 per cent lower than the previous week. Towards the end of September 1983 the first summer rains started falling, but the board maintained that it was insufficient to lift the restrictions. In October and November more good rains followed, but still the prospect of continued restrictions persisted.

In search of alternative sources

In October 1983 the board gave consideration to the opening up of alternative sources of water as the Vaal dam literally started drying up. There were in total six options that could be explored.

33. ANON., “Pretoria rejects hose ban” in Rand Daily Mail, 1983.09.08.
34. PRETORIA CORRESPONDENT, “R10 000 water bills fuel looming Pretoria clashes” in The Star, 1984.02.08.
The first was the opening up of the old Cornelia mine into which the board had been pumping sludge a number of years. At the time the New Vaal Collieries were preparing to turn the site into an open face mine. The mine was intended to supply coal to the new Lethabo power station of Eskom. A source of decanted water, available in the mine working at Cornelia colliery was available for extraction by means of borehole pumps. It was estimated that it would be possible to extract as much as 20 Mℓ/d from this source. An investment of about R1 million had to be made to install pumping equipment and pipelines. The scheme was in any case considered to be marginally cheaper than purchasing water on permit from the department of the environment at the time. Three boreholes were sunk in the course of 1986 and the water in the mineshafts was pumped into the Barrage.

The second option open to the board was extracting water from the Zuurbekom compartment. At that point the board had rights to extract 25 Mℓ/d. It was capable of extracting up to 45 Mℓ/d, but in order to do that permission first had to be granted by the state president. The department of environmental affairs estimated that it was possible to pump 80 Mℓ/d over a period of 16 months before the source was exhausted. It was to cost the board R6 million to drill boreholes and equip them with pumps and pipelines. The plan would have taken five to six months to be implemented. Three

39. At the beginning of 1983 the board had also started pumping water from the Betty Shaft of Cornelia Mine. RWA, Minutes 1982-3, p. 613: 1 008e gewone vergadering, hoofkwartier, Johannesburg, 1983.02.25. Hoofingenieur se verslag, nr. 6843. L.H. James.

40. Personal disclosure V.J. Bath, Westcliff, 2003.03.07.

41. RWA, Komitee van die algehele raad, vergadering 1983.10.28, p. 106. Hoofingenieursverslag, nr 7015.

42. RWA, 82nd annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1987, p. 3.

boreholes were later sunk. The water was used to supply the Far West Rand.44

A third alternative was to make use of the Fountains, Doornkloof and Rietvlei dam in the Pretoria region. At the time the municipalities of Pretoria and Verwoerdburg were using 40 Mt/d. It was estimated that the sources could provide 38 Mt/d continuously, and an additional 137 Mt/d for a period of one year.45

The fourth potential source was the opening up of the Wonderfontein *spruit* and the Mooirivierloop.46 The department of environmental affairs informed the board that some of the eyes of the fountain had run dry, but there were still supplies in the dolomite layers of the region. The matter was to be investigated for the board.47

The fifth alternative was the exploration of the source of the Steenkoppies compartment that had an outlet at Maloney’s Eye and sources of the Magalies river. Because it was situated outside the limits of supply of the board water could not be extracted from this source until the statutes had been amended.48

Finally there were a number of dolomite compartments that were to be explored, such as the Sterkfontein and Clayville, Natalspruit and Kliprivier valley compartments. The exploration of these sources was to cost approximately R7 million.49

Ultimately the board decided that work would go ahead with plans to extract water from the old Cornelia mine at an estimated cost of

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44. RWA, 82nd annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1987, p. 3.
49. RWA, Komitee van die algehele raad, vergadering 1983.10.28, p. 108. Hoofingenieursverslag, nr 7015.
Water restrictions 1983-1987

R7 million. There were also to be negotiations with the municipality of Pretoria in order to open up part of its supplies to the Witwatersrand. An undisclosed amount of funds were made available for the exploration of potential sources of water in the dolomite areas of the Southern Transvaal.\(^50\)

**Boreholes bring relief**

Since the start of the drought conditions individual consumers resorted to sinking boreholes. Estimates suggested that once the drought conditions started in 1983 about 15 per cent of water consumed in the country came from boreholes. One borehole pump manufacturer (Mono) reported that it had sold as many as 15 000 pump units.\(^51\) Before too long the borehole sinking industry of the country was a force to reckon with. At one point in time, Mike Piche, president of the Borehole Water Association of South Africa predicted that as many as 45 000 boreholes could be sunk annually. On an average it was an industry that was worth about R400 million per year. In times of drought, estimates suggested, the figure could rise to as much as R600 million per annum.\(^52\)

In many residential townships on the Witwatersrand, boreholes were sunk with the assistance of the latest high-pressure drilling equipment. It became fashionable with ardent gardeners to have a borehole on the property. Also local authorities started relying on boreholes. By the end of the 1980s 105 towns in South Africa obtained all their water from underground sources.\(^53\) Other local authorities, such as those that relied on the Rand Water Board for bulk supplies, primarily used the boreholes to water the grounds of

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\(^{51}\) *L. CARLISLE, “Groundwater can offer better value” in Business Day, 1989.08.15.*

\(^{52}\) *Ibid.*

sports complexes, nurseries, fire stations and nature reserves under the prevailing drought conditions.  

With increasing water tariffs more homeowners started investing in the boreholes. It was estimated to be 10 times cheaper to use ‘municipal’ water. There were also strategic considerations that came into effect as the number of boreholes started proliferating. In the Vaal Triangle homeowners who had boreholes on their properties registered the asset with the local authority so that it could be put to public use in time of need. In Vereeniging the town council placed a temporary ban on the drilling of boreholes for fear that water extraction could lead to a drop in the town’s water table. A representative of the council stated that the sinking water table could have been the cause of the walls of houses in the town cracking. Moreover, there were fears that because the old mine shafts were not being used, sinkholes could form. 

In the media some consumers argued that with the substantial strikes of water being made, a local authority like Johannesburg could easily provide water to its gardeners. An official of the department of water affairs was of the opinion that the time would come when local authorities and individual domestic consumers would have to contemplate sharing the underground water that was available. Reports of substantial water strikes in Newlands


55. L. CARLISLE, “Groundwater can offer better value” in Business Day, 1989.08.15.

56. Ibid.


and Linden gave rise to speculation on the viability of using these water resources more comprehensively.  

The search for alternatives remained an interim solution. It was evident that local water supplies could ultimately be exhausted. What was necessary was instead a macro plan that could provide for the requirements of the Witwatersrand and the board’s limits of supply as a whole.  

**Stricter measures imposed**

As the summer of 1984 approached consumers became critical of the clampdown on the use of hosepipes in gardens. One critic was *The Star’s* James Clarke who was of the opinion that for many months people had carried around buckets instead of using their hosepipes. In the process they had saved merely a small amount of the Vaal dam’s water. In what was by that time described as the ‘decriminalisation’ of water consumption, the Sandton town council at one point unanimously agreed to scrap all water restrictions. However, residents were warned not to squander water. They were to pay severe penalties for abusing the privilege. Residents using 20 kℓ would pay 38 cents per kilolitre. If they used more than 300 kℓ per month they could pay as much as R2 per kilolitre.  

The unilateral action by Sandton drew an angry response. The Rand Water Board decided that if domestic consumers used its water for more than two hours per week, an additional levy over and above the basic charge would be levied. The additional rate was to be three per cent of the basic charge for each one per cent of the quotas determined for such consumers in terms of the Government Notice No. 709 of 5 April 1984. The rate was to be calculated on monthly consumption. Also, J.F. Oberholzer of the...
Johannesburg city council’s management committee and member of Rand Water Board was perturbed by the arrogance of the ‘mink and manure set’ who were under the impression that ‘they can buy anything – they think money is the only thing that counts’. At one stage he threatened to recommend to the Rand Water Board that it place Sandton’s town council under an obligation to make the differential tariffs more punitive. At the time the board had calculated that residents of Sandton were daily using on average 618 ℓ per capita, whereas other residents in the supply area were each using about 245 ℓ.

Following the example set by Sandton, Bedfordview, Boksburg and also Pretoria lifted bans on the use of hosepipes. Randburg chose to follow a conservative route by complying with the call for bans on hoses. As the Johannesburg and Sandton’s councils started weighing up each other in a tough political fight, one of the daily newspapers commented that Johannesburg could actually not point a finger at Sandton. Whereas Johannesburg was using 21 per cent above its quota of water, Sandton was using only 14 per cent over its quota. The political fight between Johannesburg and neighbouring municipalities tended to start taking on a party political character. This proved to be futile. The residents of Johannesburg were meanwhile also becoming tired of the water restrictions and a group representative of 15 ratepayers associations

handed a petition to the mayor, Councillor Eddy Magid, requesting limited access to the use of hosepipes for households.\textsuperscript{71}

An uneasy silence prevailed between the board and Johannesburg. In October 1985 Hobbs once again decided to start the debate and departed from the policy it had earlier formulated, namely of refraining from forcing any restrictions on local authorities. The board’s finance and executive committee had earlier given the chairman its support in respect of laying down certain guidelines for the maximum consumption by consumers. The chairman told the board that certain manufacturers of irrigation systems were arguing that micro irrigation systems working on mist irrigation were given preferential treatment. It was considered that the earlier decision of the board was discriminatory. Consequently it was decided in February 1985 that the basic water tariffs for the new financial year would be altered so that the additional tariff over the quota would be increased from one to one and a half per cent. The board furthermore decided that there would once again be a clampdown on the use of watering hoses and micro irrigation systems. The situation was to be monitored. If the arrangements did not have the desired effect the additional tariff was to be increased further.\textsuperscript{72}

Within the space of less than a week the storm in a teacup over Sandton was something of the past. After the alleged resignation of one of its councillors who had driven the campaign of resistance,\textsuperscript{73} it was conceded that permission first had to be granted by the provincial administration before restrictions could be lifted.\textsuperscript{74} What was in fact at stake was the request by the government for the


\textsuperscript{72} RWA, Komitee van die algehele raad, vergadering 1985.10.25, p. 108. Voorsitter se verslag.

\textsuperscript{73} Anon., “Valente sal nou bedank” in \textit{Beeld}, 1984.09.27.

absolute minimum use of water.\(^{75}\) By the second week of October 1984 the city council of Johannesburg also announced that residents could start making limited use of hosepipes.\(^ {76}\)

For the board the situation was one in which the municipalities as consumers in the space of seven months had to pay fines to the value of R3 million.\(^ {77}\) The overall objective of the board, to save as much as 30 per cent on water consumption, became a reality when the overall consumption in the board’s supply area was down to 1,6 per cent above the mark.\(^ {78}\) There were indications, by December 1984, that after 22 months of restrictions the board’s consumers were beginning to comprehend what it meant to save water. The consumption in the board’s supply area had only exceeded the target by six per cent.\(^ {79}\)

Meanwhile the levels of the Vaal dam which were at first rising,\(^ {80}\) by the end of February 1985 had once again failed to reach good levels,\(^ {81}\) in what was considered to be one of the major droughts in many decades.\(^ {82}\)

\(^{75}\) ANON., “Kwotas mag nie oorskry word nie: tuinslange is nie die grootste kommer” in Beeld, 1984.09.29.


\(^{80}\) ANON., “Vaaldam sak nog: damme is 8 p.s. voller” in Beeld, 1985.11.06; J. CLARKE, “As Vaal dam fills up, the waters let out” in The Star, 1984.11.14; ANON., “Natste Oktober in 5 jaar” in Vaalweekblad, 1984.11.06.

\(^{81}\) A. BEATTIE, “Hope fades as rainy season draws to close” in The Star, 1984.02.28.

\(^{82}\) N. WESSELS, “Drastiese plan om waterkrisis af te weer” in Die Vaderland, 1985.01.08.
‘Save more but pay more’: misunderstanding policy

One of the major obstacles in communications at the time of the restrictions in the 1980s was to make consumers aware that in future water was to cost more. Apart from the local authorities, also the government and some consumer groups addressed an audience that did not care to take note.

For example, in mid-November 1983 political tempers flared up when board chairman, Dale Hobbs, announced that PWV consumers faced substantial increases in water tariffs. The reason? They were using less water than before. Hobbs went on to suggest that the board was likely to announce higher tariffs before March 1984. The reason for this was the drop in revenue. Jan Cronjé of the South African Consumers’ Council described the attitude of the board as ‘astonishing’. Roger Hulley, spokesperson of the Progressive Federal Party on environmental affairs, who had monitored the situation carefully since March 1983, called on the government to introduce a co-ordinated national policy in respect of water consumption. He claimed that the government’s policy was erratic and there had to be fewer unfair restrictions on consumers in urban areas.

Hobbs was not alone in the plan to push up water tariffs. The inveterate city councillor, J.F. Oberholzer, who told the Johannesburg city council that the water tariff in Johannesburg could increase between three and 12 per cent in the new year, supported him. In addition he ascribed the increase to the drop in revenue. Consumer groups remained angry, however. The consumer council of Pretoria called on the board in February 1984 to shelve its proposed increased water tariffs. Alternatively, it was argued, the senior executive management could resign if they felt

themselves incapable of proper planning. The board did not respond to the call but instead let it be known that the water restrictions could be intensified. The season’s rainfall did not satisfy expectations. What made the situation worse was that at the start of 1984 the department of water affairs further limited the supply of water to the board. Consumption was now confined to 70 per cent of the average consumption of two years before. The board’s customers – 47 local authorities and more than 800 other large consumers of water – were subjected to severe restriction. Communicating a policy under these circumstances proved to be difficult.

As the tempers flaring up the government came under increasing fire. Dr Rob Laburn, the former chief engineer of the board, on receiving a prestigious award for service to the engineering profession from the Federation of Societies of Professional Engineers, stated that shortages of cash and bad government planning made a substantial contribution to the prevailing water crisis. In terms of the size of the national budget surprisingly little money was being spent on the strategic resource of water. Laburn was of the opinion that the state engineers and those engineers in the employ of water boards had to join forces by pooling their skills and knowledge and try to find some solutions. Consumers also let it be known that they did not like being threatened or intimidated by the Rand Water Board. A lot of the blame was also attributed to the Johannesburg city council. On 16 February the government responded when the prime minister P.W. Botha made a call in parliament to South Africans to participate in a national day of

87. ANON., “RWB urged to review new water tariffs” in The Citizen, 1984.03.15.
89. RWA, 80th annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1985, p. 3.
prayer for rain and relief. The date was scheduled for 22 February. In total 16 church denominations in South Africa responded.\footnote{PARLIAMENTARY REPORTERS, “Nasionale biddag vir reën en nood” in Die Vaderland, 1984.02.16.} According to some newspaper reports the rain started falling in some places as people gathered in churches to pray.\footnote{ANON., “Rain falls as people pray: prayers draw thousands” in The Citizen, 1984.02.23; ANON., “Reën val toe biduur begin” in Beeld, 1984.02.23.}

In March 1984 the board approved at an extraordinary meeting new measures aimed at reducing the consumption of water. It was decided that as from 1 April a differential system – the sliding-scale tariff – would be introduced for all water supplied to consumers. For every percentage point consumers exceeded their average target water quantity, a percentage point would be added to the tariff payable to the board.\footnote{RWA, Minutes 1983-4, p. 212: Extraordinary meeting, headquarters, Johannesburg, 1984.03.02.} The imposition of the sliding-scale tariff was not crucial at the time. Winter was approaching and it was possible to let domestic gardens stand over until spring.

As plans were put in place for more severe restrictions to start by April 1984 in the PWV region and on the Orange Free State Goldfields,\footnote{J. MINNIE, “New restriction come into effect on April 1: Tougher water curbs for Reef” in Rand Daily Mail, 1984.03.20; ANON., “Water: strenger perke, maar krag genoeg” in Beeld 1984.03.20.} reports came in of good rainfall recorded in large parts of the country.\footnote{ANON., “Wes-Transvaal se beste dié jaar: Die hele land nou nat” in Die Vaderland, 1984.03.23; ANON., “Dams boosted, farms helped as rain pours down” in The Citizen, 1984.03.23; C. HARPER, “Downpours lash parched Transvaal: Good rains, and more is on the way” in Rand Daily Mail, 1984.03.23; ANON., “Nog ‘n sikloon ... reën en koue hou aan” in Beeld, 1984.04.11.} Despite all the rain the indications were that the local authorities and the board were determined to increase the price of water in the coming financial year scheduled to start on 1

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
\textbf{Month} & \textbf{Consumption (cubic meters)} \\
\hline
January & 500 \\
February & 450 \\
March & 400 \\
April & 350 \\
\hline
\end{tabular}
\caption{Composite data on water consumption in cubic meters.}
\end{table}
April. The Board at its 27 April meeting took an important decision by agreeing that in future, it would not be the concern of the board how its consumers – the local authorities – went about implementing measures to stay within the target for maximum permissible consumption laid down by the board. They had to make their own decisions on meeting the objectives.

The first months of the drought conditions proved one point. It was clear that consumers were slow to realise that they had a basic responsibility to use less water. If they did not want to heed to the call for reduced consumption trends, they would have to pay more. It thus appears as if one of the elementary principles of water demand management were being ignored. It was not a shared responsibility in all quarters.

Responses of industry to the restrictions: attempts at saving

Since the imposition of water restrictions in March 1983 there had been frequent reports of large industrial concerns using innovative measures to save water. Not only were they showing a sense of social responsibility, they were in fact working at measures aimed at saving substantial money. This was a constructive development. It was no longer a matter of industry and commerce enjoying preferential treatment, as was the case in the 1960s when the government was intent on maintaining economic growth. It was because also they had to start paying more for over-consumption.

As early as May 1983 there were reports that in the Western Transvaal industries in the vicinity of Stilfontein managed to cut consumption of water by as much as 26 per cent. In the Vaal
Triangle several of the large industrial concerns reported that they were recycling water. At the Union Steel Corporation (USCO) in Vereeniging, water meters were monitored on a daily basis in order to check for potential leaks. Eskom, in turn, embarked on a R250 million scheme at its Kendall power station in the Eastern Transvaal to conserve water. Plans were set in motion to start one of the largest dry-cooled systems in the world. This project was intended ultimately to save 130 Mℓ/d. At the Matla and Tutuka power stations in the Eastern Transvaal the water consumption totalled 60 Mℓ/d. If the switch to a dry-cooled system could be implemented the water consumption of these power stations could be halved. This was to pave the way for considerable successful efforts by various industries to resort to dry-cooling methods instead of using valuable water.

On occasion the minister of environmental affairs, Sarel Hayward, in promoting the government’s decentralisation policy, called on industries to start contemplating moving away from the hubs of the South African economy to ease the strain on the over-extended water supplies. That appeared to be a sensitive matter and many captains of industry on the Witwatersrand did not like the sound of the proposal.

Public awareness of drought conditions

In the public sphere the drought phenomenon became a popular topic of discussion. As a result of the process of urbanisation that had been the order of the day on the Witwatersrand since the nineteenth century, many residents of the region had literally lost contact with nature. It was simply taken for granted that water should come from a tap. The process that the water had to go through before it ran through the mains of a factory or a domestic

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101 ANON., “Usko bespaar water vir 12 000 huisgesinne” in Vaalweekblad, 1983.09.23.
103 J. CLARKE, Coming back to earth: South Africa’s changing environment, p. 121.
104 S. MCQUILLAN, “PWV area system over-strained – Minister” in The Star, 1983.05.05.
environment had become irrelevant. The public awareness campaign of the Rand Water Board and local authorities on the Witwatersrand made the urbanites aware of the importance of water. An important ‘issue’ interested most people. Especially the drought became newsworthy to the media of the day.

Experts were of the opinion that the drought conditions were the worst in more than a century and it was anticipated that the next severe drought would only again manifest itself in about 150 years’ time.\(^{105}\) Prof. Peter Tyson, a climatologist of the University of the Witwatersrand, explained that droughts occurred in cycles of nine years. He was of the opinion that as the country approached the 1990s there would be a wet spell.\(^{106}\) Dr. Henk van Vliet, director of the Hydrological Research Institute, was of the opinion that expensive new technology would have to be introduced to find alternative sources of water. It was becoming an increasingly expensive commodity that could have a counter-productive effect in the economic processes of the country.\(^{107}\)

Despite all the knowledge that had been accumulated there was still uncertainty as to how drought conditions had to be dealt with. Suppliers simply had to contend with a basic planning matrix of water consumption. The problem could be addressed, it was explained, but it would be expensive to build dams and storage areas in advance to cope with potential droughts. The funds were simply not available to invest in spare dams over a long term.\(^{108}\)

While the experts expressed their opinions, the lives of ordinary people were directly affected by the drought. In October 1986 residents of smallholdings in Vanderbijlpark, close to the Vaal river, used wheelbarrows to cart their water supplies home for domestic consumption. Others collected water in drums in town. The residents had called in the help of the minister of agricultural economics and water affairs, as well as that of the local member of

\(^{105}\) ANON., “Eers weer oor 150 j. só droog” in Beeld, 1986.08.08.

\(^{106}\) S. MARTIN, “Cycle of wet years may be coming” in The Star, 1988.02.27.

\(^{107}\) S. LEEMAN, “Shortage of pure water may hit consumer” in The Star, 1986.05.14.

parliament. Schools started closing down after people had been forced by the drought to move away.\textsuperscript{109} The boreholes in the region were beginning to run dry. Many had been sunk at the onset of the drought, but they kept drying up.\textsuperscript{110}

**Relief at last?**

Towards the end of October 1986 there were outstanding rains. In the media commentators were confident that the worst drought was something of the past.\textsuperscript{111} The rains kept improving and in December it was reported that all parts of the country was receiving good rains.\textsuperscript{112} But restrictions were not lifted. Only on 30 October 1987 did the board lift all restrictions that had been effectively in force since 2 March 1983.\textsuperscript{113} This followed an announcement by the government that restrictions were to be lifted.\textsuperscript{114} The effect the water restrictions had had, was significant. When restrictions were introduced in 1983 it was decided that water consumption should be restricted to 70 per cent of the consumption in the corresponding months in 1982. By October 1987 the allocated quota of consumption stood on 1824 M\ell/d. The aggregate saving that had been achieved since 1 April 1984 had been 23.55 per cent.\textsuperscript{115}

The restrictions – even after being lifted in 1987 – still had a sting in the tail. When water tariffs were increased by 12 per cent in 1988,\textsuperscript{116}

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\textsuperscript{110} S. \textsc{Van Aardt} and A. \textsc{Kotzé}, “Droë boorgate: saak nou by Wentzel” in \textit{Vaalweekblad}, 1986.10.10.

\textsuperscript{111} ANON., “Pretoria gets 107 mm and Jo’burg 80 mm – and more to come” in \textit{The Star}, 1986.10.29; C. \textsc{Boshoff}, “Dit stroom na damme: uitkoms!” in \textit{Die Vaderland}, 1986.10.29; R. \textsc{Wigget}, “Strate word strome” in \textit{Vaalweekblad}, 1986.10.31.

\textsuperscript{112} I. \textsc{Koch} and A. \textsc{Venter}, “Riviere en spruite bruis en die damme word vol: Wonderlike reën!” in \textit{Beeld}, 1986.12.01.


\textsuperscript{114} Government notice 2264 of 9 October 1987.


\textsuperscript{116} \textsc{Municipal Reporter}, “PWV water price up 12 pc” in \textit{The Star}, 1988.04.13.
consumers did not hesitate to criticise the authorities. The Afrikaans daily newspaper, *Beeld*, commented in an editorial article that it was unfair to the consumer who was being crippled by inflation, to pay more for water. The newspaper felt the Rand Water Board had to investigate its cost-efficiency.\(^{117}\) The fact of the matter was that in the management structures of the organisation it was argued that the increased rainfall allowed water consumption to drop. Consequently the board had to secure revenue by means of raising water tariffs.\(^{118}\) Management stressed in the media that the levels of the Vaal dam were an entirely unrelated matter. The board was interested in coping with the increasing cost of processing water.\(^{119}\) Some local authorities, such as Edenvale and Randburg tried to accommodate domestic consumers either by not increasing the price of water, or increasing it by a fraction only.\(^{120}\)

The campaign of discontent however continued to gain momentum. In April 1988 Prof. J.A. Dockel, head of the department of Economics at Unisa, explained that the Rand Water Board had a monopoly of the water supply on the Witwatersrand and subsequently it was possible to push up the tariffs as it liked.\(^{121}\) Board chairman Dale Hobbs defended the increase by stating that the board had to pay 30 per cent more for the water it purchased from the department of water affairs.\(^{122}\) In May 1988 the government stepped in when the minister of environmental affairs and water affairs, G.J. (Gert) Kotzé, announced that the water tariffs

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122. Ibid.
of the department were to be reduced. Making the announcement in parliament the minister expressed the hope that water providers would also pass on the benefit of a lower price for water to the consumers.\textsuperscript{123} Rand Water Board did not respond immediately. Hobbs told the media that he first wanted to get the details from the department of water affairs before making an announcement on the situation of the board’s tariffs.\textsuperscript{124} The media seemed undecided about the issue. In its response \textit{The Star} thought that the Rand Water Board’s increase in the price of water to 62 cents per kℓ was moderate. It was, after all, providing water at a low rate in a semi-arid region, the newspaper claimed.\textsuperscript{125}

Even when the board ultimately reduced its increase by half of the original hike, there were still questions. The media now gave it some political spin with arguments that the opposition Conservative Party was taking the government to task for, in effect, promoting inflation by allowing increases in services such as water.\textsuperscript{126} For a while confusion ensued. Local authorities indicated that it was difficult to make adjustments to the tariffs. The new rate that the board had conceded to was an increase of 6,25 per cent. Some local authorities had already started charging the original increase of 12 per cent. Other councils had not yet introduced it.\textsuperscript{127} As the row intensified there were indications that the government and local authorities were beginning to respond to attempts to bring the consumer price index down.\textsuperscript{128} Ultimately the promised cuts did not materialise to their full potential.\textsuperscript{129}

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\textsuperscript{123} M. \textsc{Vermaak}, “Water tariffs are to be reduced” in \textit{The Citizen}, 1988.05.03; \textsc{Anon.}, “Prysverhoging van water teruggetrek” in \textit{Die Vaderland}, 1988.05.03.
\textsuperscript{124} \textsc{Anon.}, “Minister haal geld uit Hobbs se water” in \textit{Beeld}, 1988.05.03.
\textsuperscript{125} \textsc{Editorial Comment}, “Bargain basement water” in \textit{The Star}, 1988.04.18.
\textsuperscript{127} P. \textsc{Fray}, “Municipalities will pay for water hike” in \textit{The Star}, 1988.05.04; \textsc{Anon.}, “Watertarief’n dilemma” in \textit{Die Vaderland}, 1988.05.05.
\textsuperscript{128} \textsc{Editorial Comment}, “Play it again” in \textit{The Star}, 1988.05.04; P. \textsc{Delmar}, “Lower PWV water tariffs now likely” in \textit{The Citizen}, 1988.05.05; \textsc{Anon.}, “Jo’burg water may not cost much more” in \textit{The Citizen}, 1988.05.14.
\textsuperscript{129} \textsc{Anon.}, “Water duurder” in \textit{Die Vaderland}, 1988.05.25; \textsc{Anon.}, “Edenvale se water duurder” in \textit{Beeld}, 1988.05.26.
\end{flushleft}
Chapter 11

The tendency was for the price of water simply to increase. The management of the board persistently pointed out that the days of cheap water were something of the past. In an exclusive interview with an Afrikaans daily newspaper, it was explained that the cost of pumping water had not declined. It was still the same, despite a drop in the price paid for water. It was also anticipated that upon the completion for the Lesotho Highland Water Project which was scheduled to provide the Witwatersrand with 75 per cent more water, water could cost the consumer as much as 300 per cent more. In the process of preparing for the new supply the board incurred great costs in developing the water mains needed to transfer the water. According to board secretary Tony de Witt, the pipes used for transferring the water cost in the vicinity of R2000 per metre – about the same price as the construction of one metre length of a double highway.\(^{130}\) Beeld was still not satisfied with the reasons that had been given by the board and warned that it was this ineptness on the side of the authorities that angered people and brought governing bodies and boards into discredit with the people.\(^{131}\)

The public debate on the rising price of water did not bring down the price. In fact, the board’s tariff was increased in March 1989 by 16 per cent. Of that percentage four per cent was meant to cover a rebate offered to consumers in the previous year. It now had to be recovered.\(^{132}\) In the announcement the board also indicated that it was scrapping preferential tariffs for some of its consumers. This implied that municipal authorities, the transport services and the mines were to be most affected by the new measures. The reason for the step was that the board did not want to reduce its reserve funds.\(^{133}\) To make matters worse there were indications that the department of water affairs intended adding a levy to the tariff.\(^{134}\) The Consumer Council protested against the hike,\(^{135}\) and it was

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132. Personal disclosure V.J. Bath, Johannesburg, 2003.03.07.
133. Anon., “Water se prys styg met 16 persent” in Beeld, 1989.03.01.
134. B. Melville, “PWV water costs up by 16% from April 1” in Business Day, 1989.03.01.
pointed out in the media that consumers were now beginning to feel the pinch of a scarce commodity.\textsuperscript{136}

**Lessons learnt the hard way**

A few lessons were learnt from the period of 67 months between 1983 and 1987 in which restrictions had been in force. It was found that the most effective way of persuading consumers to limit water consumption was by means of keeping them informed on the availability and use of water.\textsuperscript{137} Consumers, it appeared, would cut down on water consumption if and when the tariffs rose significantly. Then, a period of exhaustion would eventually set in. Under these circumstances the price was of lesser importance than the need for the commodity. This is evident from the following data.\textsuperscript{138}

![Table 11.1. Water savings 1983-7](image)

\textbf{Table 11.1. Water savings 1983-7}

\begin{itemize}
\item \textbf{1983}\textsuperscript{138}.
  \begin{itemize}
  \item \textit{EDITORIAL COMMENT, “Vaal’s dirty washing” in The Star, 1989.03.02.}
  \end{itemize}
\item \textbf{1984}\textsuperscript{137}.
  \begin{itemize}
  \end{itemize}
\item \textbf{1985}\textsuperscript{138}.
  \begin{itemize}
  \end{itemize}
\end{itemize}
Experience also taught that after periods of restricted use, the return to the previous order of consumption takes a considerable time.\textsuperscript{139}

Not all consumers of water were affected in the same way by the measures to reduce water consumption. In 1986 the Water Research Commission had a research project done by the Bureau for Market Research on the socio-economic effects of water restrictions.\textsuperscript{140} The findings of the report were being kept under wraps until the end of the year. The reason was that it was feared the report could be sensitive. It could give an indication of how the restrictions were depriving some sectors of the population of a certain quality of living.\textsuperscript{141} The sectors of society to be investigated included irrigation, mining, electricity supply, central government, industries, local authorities and households.\textsuperscript{142} More important was the fact that the suppliers of water were becoming aware that black South African consumers could also be affected by rising water tariffs.

Between the severe drought conditions of the 1960s and 1983 the consumers of water from the Rand Water Board were subjected to water restrictions on no fewer than six occasions. In percentage timeframes it constituted a combined period of 34 per cent of the time over 17 years.\textsuperscript{143} For the planners at the Rand Water Board there was one truth that held and that was that the Witwatersrand, like most parts of South Africa, was a water-stressed region.

The 1980s were decisive years in the board’s history as far as water restrictions were concerned. Perceived as the result of the drought

\begin{footnotesize}
\begin{enumerate}
\item RWA, 84\textsuperscript{nd} annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1989, p. 13.
\item M. Collins, “Results of survey on water curbs to stay secret for now” in Business Day, 1986.05.15.
\item Ibid.
\item ANON., “Waterbeperkings se invloed onderzoek” in Vaalweekblad, 1986.05.23, p. 17.
\item RWA, 80\textsuperscript{th} annual report, balance sheet and accounts of the Rand Water Board. Financial year to 31st March 1985, p. 3.
\end{enumerate}
\end{footnotesize}
conditions that had started in the 1970s, the restrictions were to shape the way in which officials of the board, as well as the department of water affairs, would plan for water in future. One example of creative thinking was made public in May 1986 when Prof. D.C. Midgley, a celebrated hydrological engineer of the University of the Witwatersrand, told an engineering conference in Pretoria that bad distribution systems played an important role in the water crisis that prevailed on the Witwatersrand. He explained that the demand for water in the country as a whole far exceeded the yield. One method of addressing the need was to transfer water by means of inter-basin supplies in order to meet expected shortfalls. The greatest problems in terms of water supply were experienced in the PWVS region, he explained. He predicted that by 2020, there would be a severe shortfall in the water supply. This demand would be the result of the needs of the PWVS. The crucial question was the manner in which surpluses would be diverted to the areas experiencing shortages. He foresaw a probable solution in better relations between Southern African states. It could lead to the Okavango/Zambesi water system being brought in to help South Africa.

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Chapter 12

Black local authorities and the supply of water in the era of transition 1989-1994

The creation of black local authorities
Following the Sharpeville era of 1960-3, the government tried in a half-hearted manner to terminate its hard-line apartheid policies in respect of the country’s urban blacks by granting them some form of representative local government. Although urban blacks were still considered to be ‘temporary residents’ in urban areas, the Bantu advisory boards that had been created in terms of the Group Areas Act No. 41 of 1950, were replaced in the 1960s by elected Urban Bantu Councils (UBCs). These structures were still firmly positioned within the framework of the apartheid system. Representatives in multi-ethnic townships were elected in terms of their ethnic origins.¹ In the early 1970s administration boards replaced the UBCs. The members of these boards were appointed by the minister of Bantu affairs and were supposed, in

collaboration with the responsible officials, to apply the policies formulated by the government.²

After the Soweto uprisings in 1976 the government immediately revised the system. By introducing the Community Councils Act of 1977, the administration boards could no longer make decisions on local affairs in respect of housing and essential services such as water, sanitary services and refuse removal.³ These matters became the responsibility of community councils. Acting on the proposals of the Croeser committee that the government had appointed to investigate the finances of black local authorities, as well as the Riekert commission, the government prepared the way for the creation of responsible black local government.⁴ The Black local authorities Act of 1982 paved the way for new local government structures within the black community.⁵ There was resistance to this arrangement amongst the members of the black leadership. It gave impetus to passive resistance through rent boycotts and other measures they chose to use. It was primarily in Johannesburg that the resistance had a significant impact. Soon the rent boycott action also spread to the payment of water and electricity services. Municipalities suddenly found that this source of revenue in black areas had dried up. As will be seen later, these measures ultimately gave rise to the collapse of effective local government in black urban areas on the Witwatersrand.⁶

The original plan, in terms of the Black Local Authorities Act, was to create integrated services, such as water and electricity supply for black and white local authorities. However, there was resistance to the plan and it had to be shelved until the regional services council system was introduced in 1987. Between 1984 and 1985, as the government tried to introduce a new constitutional dispensation bringing coloureds and Indians into the political arena, township

². Ibid., p. 232.
⁴. Ibid., p. 96.
politics prevailed under the auspices of the United Democratic Front (UDF) and numerous civic actions.\textsuperscript{7} This prevented orderly local government from being introduced. Only when a situation of relative calm was restored, following a state of emergency announced by the government, was it possible to re-introduce local government. The regional service councils as a system of regional government did not operate effectively in all parts of the country. However, in the greater part of the area served by the Rand Water Board it did function properly.\textsuperscript{8} The councils resorted under the authority of the provincial administration.\textsuperscript{9} Consequently the province stipulated their territorial authority. It also defined the manner in which revenue would be accrued.\textsuperscript{10} Because of boycott actions by the residents of black townships, the Rand Water Board from 1989 increasingly had to rely on the Transvaal provincial administration for funds to supply these communities with water.

With the creation of black local authorities, it meant that there were new consumers of the board. The problem was that most of these authorities previously resorted under other municipal authorities that enjoyed foundation membership status. This implied that they were able to purchase water at cheaper rates. Now the new authorities were of necessity forced to purchase water at higher rates. In order to accommodate them the three-tier system of tariffs was changed into a two-tier structure.\textsuperscript{11} An increase in the tariff of foundation members to the same as the tariff for preferential members was the solution.\textsuperscript{12}

\begin{enumerate}
\item In the discussion to follow the reference is to the Transvaal Provincial Administration (TPA).
\item Ibid., p. 15.
\end{enumerate}
Providing water in a new local government framework

In July 1989 the chief executive official V.J. Bath informed the board of the assistance the board’s officials were providing the McRae Committee that had been appointed by the administrator of the Transvaal, on the measures necessary to place the provision of certain services to Greater Soweto on a sound footing. The board gave its complete co-operation.\textsuperscript{13} The Transvaal provincial administration (TPA) later issued warnings to all local authorities in arrears that steps were to be taken against them. The MEC in charge of local government, Olaus van Zyl, warned in particular that the TPA intended taking steps against non-payment for services. In the case of Soweto total arrears for services amounted to R279 million.\textsuperscript{14}

Eskom, one of the other major service providers, tried another approach. In an effort to get electricity to South Africa’s deprived black communities, the electricity commission opted for a privatisation venture. The idea was to transfer the responsibility for the payment for electricity from local authorities, to companies run by Eskom, the business community and the residents of the townships.\textsuperscript{15} Shortly afterwards the electricity utility also announced that black employees would advise its 11 management board members. The objective was to give the white leaders of the organisation an insight into the way in which black people thought on specific matters.\textsuperscript{16}

In June 1990 the Rand Water Board was notified that the TPA had notified black local authorities that the province would no longer be providing bridging finance to help them pay for bulk services.\textsuperscript{17} The matter had not been discussed beforehand with the board or

\textsuperscript{13} RWA, Committee of the whole board, meeting 1989.07.27, p. 46.
\textsuperscript{14} G. REILLY, “City councils are threatened by TPA” in \textit{Business Day}, 1989.11.01; E. BULBRING, “Decision soon on Lekoa and Soweto” in \textit{Business Day}, 1990.01.23.
\textsuperscript{16} R. LAING, “Eskom’s board gets black ‘mentors’” in \textit{The Daily Mail}, 1990.08.07.
\textsuperscript{17} RWA, Committee of the whole board, meeting 1990.06.28, p. 41; Also see ANON., “TPA withdraws aid for black municipalities” in \textit{The Citizen}, 1990.06.20.
with Eskom, one of the other major service providers. The members of the board agreed that the board could not summarily cut off the water supply to these areas. For the board it meant a loss of R7 million which represented about 20 per cent of its monthly income. In local government circles there was consensus that the prevailing situation was untenable. In the Johannesburg city council it was pointed out that local black government was collapsing rapidly. It forced the government to take ‘dramatic actions’ such as incorporating these towns into neighbouring white municipal areas.\(^\text{18}\)

One of the board members, A.P. Khumalo told the board that residents in the black townships experienced great difficulties in paying for services. The prevailing political situation had given rise to a complete boycott of the payment for any services. According to him, many black residents wanted to pay for the services, but if they dared to make payments they were sure to be victimised. The boycotts, he maintained, were part of the strategies applied by political movements in the townships.\(^\text{19}\)

**Tension between the townships and the TPA**

In July 1990 the Congress of South African Trade Unions (Cosatu) started making plans to form a national civic body in order to facilitate the process of potential conflict that was taking shape between the Transvaal provincial administration and the black township authorities.\(^\text{20}\) Meanwhile, delegations of Soweto residents and the TPA also held talks.\(^\text{21}\)

In view of the fact that it was unlikely that government would respond to representations on the matter, the board advised the chief executive to draw up a report and submit it to the provincial


\(^{19}\) RWA, Committee of the whole board, meeting 1990.06.28, p. 41.


administration in which the board’s opposition to the proposed ending of bridging capital be indicated.\footnote{RWA, Committee of the whole board, meeting 1990.06.28, p. 41.}

Meanwhile all eyes were focused on the way in which the local authorities would act, once they had the task of having to stand on their own feet.\footnote{B. TAYLOR, “Krag afgekap na swart dorpe: Lekoa se inwoners weier om te betaal” in Beeld, 1990.07.30.} The political confrontation between the provincial administration and the local authorities was seen as the spark that could potentially set the whole country alight with protest.\footnote{A. STOFBERG, “Huurboikot: TPA optimisties ‘n vergelyk is gou moontlik” and “Die kookpot wat in hele SA se gesig kan ontplof” in Beeld, 1990.08.22.} In other quarters it was argued that health services at hospitals and clinics were at risk. The boycott was to blame.\footnote{A NON., The Star, 1990.08.08.} The provincial administration launched an advertising campaign before the service payment blitz was to come into effect. The objective was, according to a spokesperson of the TPA, not to create confrontation, but instead to make consumers aware of the consequences of no services being available as from September 1990.\footnote{T. RAWANA, “Rent ad blitz ‘not a threat’” in Business Day, 1990.08.14.} What was increasingly being described as a ‘rent boycott’ led to the government announcing strict measures countrywide to get payments from consumers for services rendered.\footnote{ANON., “SP has ‘reinforced TPA rent action’” in The Citizen, 1990.07.21.} Rumours that the TPA was prepared to write off the debts of the black towns were denied.\footnote{ANON., “TPA denies agreeing write-off” in The Citizen, 1990.08.20.} Prominent political role players, such as Cyril Ramaphosa, were used to facilitate the discussions between the provincial administration and local black communities as the problem started becoming an issue in the national negotiations process.\footnote{G. EVANS, “High hopes of deal to end Soweto rents crisis” in The Daily Mail, 1990.08.09.}

A few days before the nationwide rent and services boycott was to come to a head, the Rand Water Board and Eskom indicated that they would not immediately suspend electricity and water supplies
to the black municipalities. Some local authorities however took a hard line. They threatened that they would prevent services from being delivered.  

**Consensus between the TPA and the Soweto Peoples’ Delegation**

A day before the service cut was to be enforced, it was announced that representatives of the Transvaal provincial administration and the Soweto Peoples’ Delegation had reached consensus on issues after talks lasting more than 14 hours. These talks effectively brought to an end the Soweto rent boycott that had lasted for five years. During the negotiations it was agreed that uniform tariffs were to be charged in the areas of Soweto, Deepmeadow and Dobsonville. For September 1990 it was agreed the uniform tariff would be R55. Thereafter an interim service charge of R23 per month, plus electricity costs, was to be introduced. A special fund was to be established in Soweto with the objective of raising from consumers a levy of R5 per month initially to promote community development. One of the main outcomes of the talks was that it was agreed that the rent debt of Soweto was to be written off. In the case of the larger Soweto it was estimated the arrears amounted to R615 million.

In other parts of the Transvaal the outcome of the talks about the rent boycotts had not yet been passed on. The consequence was that by the start of September 1990, some 50 black local authorities were facing cuts in services. The government and the United

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Democratic Front however reiterated that essential services to these townships would not be terminated.\textsuperscript{35} Rightwing governed local authorities who refused to make concessions were taken to task in the media for their ‘heartless’ attitude, but ultimately it was pointed out that the ‘mess’ was the responsibility of the government, which had tried to pass the responsibility to the TPA.\textsuperscript{36} In addition in local government where more moderate parties ruled, there was a strong stand against rent boycotts. Especially in respect of the payment for electricity accounts, there were strong threats that consumers’ supplies would be cut off.\textsuperscript{37} As the power cuts started taking effect, civic bodies in black townships warned that fresh boycotts would be introduced. They wanted services to be restored summarily.\textsuperscript{38} At Vosloorus near Boksburg a mass meeting of some 5000 residents indicated that they were prepared to make payments for rent and services to the authorities, but at a lower rate of R50 instead of the R60 demanded by the authorities. Similar offers were made by residents of Duduza township near Nigel.\textsuperscript{39} In Benoni the local authorities of Benoni, Daveyton and Wadeville decided to join forces and consolidate their interests with Benoni providing services at the same rate for all. In the case of the water supply, sewage and refuse removal provision was made for a fee of R97 rate per month, which was considered to cover all the basic costs.\textsuperscript{40} By the end of 1991 the central Witwatersrand regional services council took over the electricity supply system from the Soweto city council.

\begin{itemize}
\item \textsuperscript{35} SAPA, “Township services will not be cut off” in \textit{The Daily Mail}, 1990.09.04; ANON., “TPA won’t cut off water, lights to townships” in \textit{The Citizen}, 1990.09.05.
\item \textsuperscript{36} EDITORIAL COMMENT, “Lights and water” in \textit{Business Day}, 1990.08.31.
\item \textsuperscript{38} L. BURGERS, “Civic bodies warn of fresh boycotts over service cuts” in \textit{The Star}, 1990.10.18.
\item \textsuperscript{39} ANON., “Rent boycott meetings” in \textit{Business Day}, 1990.11.05.
\item \textsuperscript{40} ANON., “Benoni takes over admin functions for satellites” in \textit{The Citizen}, 1991.08.19.
\end{itemize}
Responses of frustration

In the case of cuts in the water supply to the black townships, the initiative was the onus of the white local municipalities. At Eminzinoni near Bethal there was confusion and desperation as 30 000 residents had to contend with conditions of no water supply as the Conservative Party-controlled local authority cut off the water supply.\(^{41}\) In an effort to find relief for the crisis caused by non-payment, Eskom in October 1990 took legal steps against black local authorities that owed the utility more than R23 million in arrear service fees.\(^{42}\) In an effort to bring relief, the regional services council of Petoria provided the black townships of Atteridgeville, Mamelodi and Zithobeni with loans to the value of R17 million in an effort to pay for water and electricity.\(^{43}\) Unlike the Provincial administration that was prepared to scrap the payment of arrear rents, Eskom refused outright to clean the slate on arrear payments.\(^{44}\) In contrast, the Rand Water Board took the view that it was not prepared to let any debt build up. It insisted on payment for water supplied. It argued that if it allowed one of its municipal consumers not to pay for water, it would become a general trend for others to follow suit. Accordingly the board took a view with its municipal customers that payment had to be made promptly. Notwithstanding that the members knew that many of the local authorities were clearly unable to make the payment because of very low water revenues from black townships. The Rand Water Board thereupon embarked on negotiations with the TPA in an effort to ensure that inflammatory actions such as water cut-offs to large sections of urban society could be averted. It argued with some success that the province, which was already assisting many municipalities in a number of ways, would have no better way of recourse to them than that of a primary municipal service such as water supply. The province and government gradually accepted

these arguments. Arrangements were then made to cover water bills of struggling local authorities. 45

**Founding a Metropolitan Chamber**

One of the outcomes of the new consensus that had been reached between the Transvaal provincial administration and the peoples’ representatives for Soweto was that a Metropolitan Chamber was established towards the end of September 1990, to establish a regional non-racial and democratic policy on the metropolitan level in respect of rents and the payment for services. 46 The Rand Water Board played an active role in the establishment and subsequent functioning of the chamber. It had observer status in some of the plenary meetings and participated in the deliberations of many committees of that chamber. 47 The concept of a metropolitan chamber was seen as a blueprint for similar initiatives that could be taken in other urban centres in the Transvaal. 48 It was also at the first meeting of the new chamber in August 1991 where the chairman, Dr. F. van Zyl Slabbert, read a statement warning that the financial crisis could lead to the collapse of all municipal services being rendered to the members of the chamber. The members of the chamber at that point were representatives of Soweto, Deepmeadow and Dobsonville city council, the Transvaal provincial administration, the Soweto People’s Delegation and the Soweto Civic Association. 49 In the greater Soweto region about 45 per cent of consumers paid their electricity bills while between 60 and 65 per cent of consumers paid for the other services that were

45. Personal disclosure, V.J. Bath, Westcliff, 2003.03.07.
47. Personal disclosure, V.J. Bath, Johannesburg, 2003.03.07.
49. SAPA and CITIZEN REPORTER, “Soweto crisis may lead to collapse of services” in The Citizen, 1991.08.15.
rendered. Similar circumstances were reported from the central Witwatersrand area at Thokoza.

As it increasingly started becoming evident that it would be difficult to extract payments for services from consumers, the government indicated in January 1991 that it intended an amendment to its promotion of local government affairs amendment bill, to start with a privatisation plan aimed at getting the private sector to buy shares in rendering services to local communities. The service companies to be created would then give to local authorities the freedom to perform other important tasks necessary for the efficient functioning of local authorities. The bill, however, also made provision that the local authorities, despite the privatisation process, would maintain a substantial shareholding in the companies’ responsible for providing water and electricity.

The Rand Water Board responds to non-payments

At the board’s committee meetings information was usually shared in respect of the arrears of black local authorities. In April 1991 Bath told the board that talks had been held with the administrator of Transvaal and members of his executive committee. There were indications that the board was to be paid R3 million for arrear payments for the months of June, July and August 1990. At the time the board was not operating at a loss because of the fact that the reserve fund was used to secure shortfalls. In the annual report, board chairman Hobbs warned that a dangerous situation was developing which the board could not tolerate. The board was a self-financing, non-profit organisation that could not afford to be faced with a loss of income. One effect of the situation was that

50. A. Botha, “Dienste op Tokoza kan ook gou in duie stort” in Beeld, 1991.08.16.
51. Ibid.
54. RWA, Komitee van die algemene raad, vergadering 1991.04.25, p. 5.
the board was literally forced to start pushing up its tariff to consumers across the board.56

In June 1991 management recommended to the board that approval be given for the notification of cabinet that the board would be forced to increase its tariffs, or halt the water supply to black communities if payments were not made. The CE, Vincent Bath, warned that both alternatives had very specific political implications.57

Hobbs explained that in fact specific channels of communication with the government did not exist. In his capacity as chairman of the board, he had written a letter on the matter to the responsible minister in which the serious nature of the issue was outlined. A reply had been received from the ministry that the matter was receiving attention. General consensus existed at the monthly meeting that the board had been lenient on the matter. The chairman then suggested that consideration be given to discussing the matter with the presidency. One of the board members, M. Erasmus, pointed out that the board was an autonomous institution operating under its own private law. It consequently would have to make the decision for itself. But, it was merely the decent thing to do for the board, he explained, to inform the minister of water affairs of its proposed plan of action.58

Eventually it was decided that an appointment was to be arranged with the state president. If the arrears were not paid a date would be set for halting the water supply. It was agreed that the administrator of the Transvaal and the minister of water affairs would be notified in advance.59

In August Bath submitted a confidential report on progress that had been made. Two documents were drawn up and sent to the members of the board as well as to the state president and the

56. CITIZEN REPORTER, “PWV consumers face increase on water bill” in The Citizen, 1991.03.07.
57. RWA, Komitee van die algehele raad, vergadering 1991.06.27, p. 50.
58. Ibid., p. 50.
59. Ibid., p. 50. Board decision.
members of cabinet. In it the government was informed that as from 1 October, if payments were not forthcoming, the price of water would have to be increased by as much as 23 per cent. Other alternatives were to discontinue the supply of water to the black townships. A final alternative was to replace the defaulting local authority as water supply authority.  

The legal situation was that the supply of water could not be summarily withheld for any length of time. Some alternative supply had to be provided. However, it was possible to make it inconvenient for the consumer to get to procure water. During negotiations with Eskom officials it became apparent that a uniform tariff structure could do much to level the playing field for consumers. Another possibility was that the board should take over the service of water provision in areas where non-payment was the order of the day. The government would then have to take the responsibility of paying for the water supplied. It transpired that the problem of non-payment that the board was faced with, was minimal in comparison with the problems Eskom experienced. The electricity utility had outstanding debts of R250 million.

At its September meeting the board in committee decided that in view of the deteriorating financial position in which the board has been placed through non-payment of water accounts by certain local authorities it will be compelled to discontinue the supply to the defaulting local authorities on 1 November 1991 unless the August accounts are paid in full and arrangements to the Board’s satisfaction are made to liquidate the arrears.

60. RWA, Komitee van die hele raad, vergadering 1991.08.29, Annexure A, between pp. 70-1. Minutes finance and executive committee meeting.
61. RWA, Komitee van die hele raad, vergadering 1991.08.29, Annexure A, between pp. 70-1. Minutes finance and executive committee meeting.
62. Ibid., Annexure A, between pp. 70-1. Minutes finance and executive committee meeting.
63. Ibid., Annexure A, between pp. 70-1. Minutes finance and executive committee meeting.
64. RWA, Committee of the whole board, meeting 1991.09.26, p. 87.
On 31 October 1991 a meeting was held with Olaus van Zyl and the responsible minister, General Magnus Malan. Van Zyl gave the undertaking that an amount of R4 million was to be paid over to the board by the provincial administration. The board was also given the undertaking that the cabinet would on 20 November 1991 consider the memorandum that had been submitted to it. The board in committee then decided that the decision to stop the water supply to defaulting authorities would be withdrawn. The likelihood of further measures was to be considered after the cabinet meeting of 20 November 1991.

In February 1992 Vincent Bath reported to the board that an amount of R17,5 million had been received from the Transvaal provincial administration. The board had also been given the assurance that further additional funds were to be paid over to regional offices of the provincial administration in order to cover the debts that had been incurred over January, February and March 1992. There were at the same time arrangements to meet the chairman of the East Rand regional services council. Bath told the board that a publicity campaign had been prepared to notify consumers that water supplies would have to be reduced or terminated completely if the board did not receive its payments. More information in respect of the next steps was to be provided to the board via the finance and executive committee. The board then decided that letters had to be sent to all the black local authorities in question. They were to be informed that cheques for their outstanding water had to be sent on immediately.

**Board mounts pressure on TPA**

In March 1992 the board considered proposals by the finance and executive committee. It was suggested that the TPA had to provide...
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further funds, made available by the state, to meet the payments due to the board. The board and the provincial administration could decide between themselves from time to time which supplies were to be cut off or reduced. However, there was to be an understanding that the cut-off would be of short duration. Finally, it was to be determined in the meeting that the Transvaal provincial administration took the necessary steps to ensure that no property of the board was damaged.\textsuperscript{70}

In May 1992, following talks with Olaus van Zyl, Bath told the board that further meetings were scheduled with the cabinet ministers, General Magnus Malan and Leon Wessels. The provincial administration was beginning to distance itself from local authorities that were not directly under its jurisdiction.\textsuperscript{71} At the same time regional services councils were coming under greater pressure. John Griffiths, one of the veteran MEC’s of the Transvaal provincial administration who was one of the leading experts in the field, explained to the board that regional services councils could simply not cope with the situation. The only solution to the problem was, according to him, the merging of white and black local authorities.\textsuperscript{72} The committee of the board agreed on one issue: the board was not to take one-sided action. There was first to be negotiations and advance information before any limitations were to be introduced.\textsuperscript{73}

The management persisted in negotiations with the provincial authorities and central government and in July 1992 the board was told a further R12 million had been received in payment from the provincial administration. Furthermore, the central government had given an indication that it was prepared to pay R5 million. Board members were delighted and one, A.M.D. Gnodde,

\begin{flushright}
RWA, Komitee van die algehele raad, vergadering 1992.03.26, p. 147. Board decision and report by V.J. Bath coming from the finance and executive committee.\\
RWA, Komitee van die algehele raad, vergadering 1992.05.27, p. 26.\\
Ibid., p. 26.\\
\end{flushright}

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congratulated Bath on what had been achieved.\textsuperscript{74} By August 1992 there was a considerable improvement in the state of affairs when little more than R4 million was outstanding. Vincent Bath informed the board that the matter was receiving attention and recalcitrant local authorities received funds from the provincial administration in order to pay outstanding accounts.\textsuperscript{75} It was only a temporary arrangement.\textsuperscript{76} Throughout this period the board made it clear that it was not averse to making available supportive services to communities that were ostensibly homeless, squatters or impoverished people. It did however require payments for services received.

**Operation Masakhane**

In 1993 a representative of Operation Masakhane approached Bath and asked for a supply of water to the homeless people near the Holomisa Camp and two sites near Woolf’s Estate. The plan was to provide water to the community through a local committee and with the aid of a number of standpipes. The committee was to be responsible for the metered water. It was then decided that the service could be provided, but there had to be a firm undertaking that the supply of water could be discontinued if the community fell in arrear with payment for the service.\textsuperscript{77}

In June 1993, with more than R5 million in outstanding water payments the board once again held an extensive discussion on the matter of arrears. Dr. N.H. Motlana gave an historical exposition of the rent and service boycott in the townships. He explained that the whole issue revolved around the legitimacy of the government that was being questioned and indicated that the people had become unaccustomed to paying for services and ‘some means consequently had to be found, perhaps with the help of the

\begin{itemize}
\item \textsuperscript{74} RWA, Komitee van die algehele raad, vergadering 1992.07.30, p. 44.
\item \textsuperscript{75} RWA, Committee of the whole board, meeting 1992.08.27, p. 58.
\item \textsuperscript{77} RWA, Committee of the whole board, meeting 1993.03.25, p. 239.
\end{itemize}
liberation movements ‘to induce payment’. Motlana also offered to approach the politicians involved to support the issue of payment for services. There was with him no doubt that it had become essential for the payment for services to start again. A.P. Khumalo explained to the board that the local authorities were inefficient. The people had become used to being without water over weekends. He also contended that if the water were to be cut off, it could have a similar response as that against the electricity utility. He explained the latter statement by saying that the people had destroyed everything they came across that had a bearing on the electricity supply.

A spokesperson for the South African Institute of Race Relations warned that negotiation forums had to give urgent attention to issues of rent and service boycotts in the black townships. Shaun MacKay explained that the Rand Water Board and Eskom had to be brought into the negotiations in order to prepare the way for proposed future city and metropolitan councils in a new political dispensation. At the time white local authorities were not keen on getting involved in negotiations for fear that they would be faced with massive debts before too long. He was of the opinion that it was important for black local authorities to start operating in a well-organised manner.

**Board takes steps against non-payment**

A comprehensive plan for steps to address the issue of non-payment for services was disclosed to the committee of the board in July 1993. In the Vaal Triangle residents of Sebokeng, Boipatong, Sharpeville and Bophelong were confined to daily water supplies for three hours. Water consumers in the region, who on average had to pay R1.2 million per month for their water supplies, only paid R200 000 a month. Despite all efforts payment arrears had

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78. RWA, Komitee van die algehele raad, vergadering 1993.06.24, p. 54.
79. Ibid., p. 54.
81. RWA, Committee of the whole board, meeting 1993.07.29, pp. 139-40.
82. B. TAYLOR, “Vier swart dorpe se water gerantsoeneer oor skuld” in Beeld, 1993.07.27.
continued to climb. By August 11 local councils in total were an estimated R40 million in arrear in water service payments.\(^{83}\) It was then that the Rand Water Board sent letters to the local authorities explaining their responsibilities for providing emergency supplies in the event of curtailment of bulk supplies.\(^{84}\) Discussions were to be held with the minister of water affairs and information had to be given to the minister of law and order, the defence force and the peace secretariat. All stakeholders, including the ANC, Inkatha Freedom Party (IFP), PAC and all relevant extra-parliamentary organisations, were to be informed of the situation. A media campaign was to be launched. The deadline for taking steps was set for 1 September.\(^{85}\)

At the time news reports suggested that only three of the local authorities served by the Rand Water Board in the PWV region were prepared to start making payments. It was then that an agreement was reached between the TPA and the Rand Water Board in which the provincial administration consented to pay for the water provided to eight local authorities. They had been unable, because of lack of money, to pay for two months’ water supplies.\(^{86}\)

**Responses regarding payments after the 1994 elections**

In May 1994 the new democratic dispensation in South Africa came into effect after elections had been held a month earlier for representatives for the national assembly. In July of that year it was reported that Rand Water was receiving payments for its supplying water to consumers.\(^{87}\) There was a sense of anticipation in Rand Water that the attitude towards payment for services would become normalised.\(^{88}\) By August 1994 there were once again local authorities that had fallen in arrears with payments for services.

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84. Personal disclosure, V.J. Bath, Westcliff, 2003.03.07.
85. RWA, Committee of the whole board, meeting 1993.07.29, pp. 139-40.
86. ANON., “Randwaterraad en TPA kom ooreen oor skuld” in Sake-Beeld, 1993.08.31.
87. RWA, Komitee van die algehele raad, vergadering 1994.07.28, p. 53.
88. Personal disclosure, V.J. Bath, Johannesburg, 2003.03.07.
The management of the board was consequently informed by the provincial government that the matter would be addressed in due time. By the end of September the arrears once again totalled R3,48 million and local authorities were informed that their supply of water could be halted. Towards the end of 1994 members of the South African National Civics Organisation (SANCO) were taken on a tour of Rand Water in order for them to be informed on the nature of the board’s operations.

South African local government had changed substantially since the elections. For all practical purposes there were no longer white and black local authorities. They were integrated after the national elections.

89. RWA, Committee of the whole board, meeting 1994.08.25, p. 60.
90. RWA, Committee of the whole board, meeting 1994.09.29, p. 76.
91. RWA, Committee of the whole board, meeting 1994.11.24, p. 109.
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The transition to a new South Africa 1989-1994

The year 1989 was a memorable one in the history of the twentieth century. Internationally there were indications that the traditional East-West capitalist versus communist international political divide was in the process of becoming extinct. Instead, environmental politics was reported to be the current rage in the USA and the USSR. In South Africa, at the time, there were experts who even ventured to predict that green politics would become a powerful factor in the near future.¹ In October 1989 the Institute for a Democratic Alternative in South Africa (Idasa) invited the West German green politician Ursula Eid to address a meeting in Pretoria. André Zaaiman, a spokesperson for Idasa, said the organisation was aware of the fact that it had tended to neglect green politics in discussions on the future of South Africa. It now wanted to address the matter.² For the Rand Water Board this was an important development. Although the utility was not inclined towards supporting extreme forms of political radicalism, it was in favour of promoting greater understanding on the side of the country’s citizenry of the dangers of particularly water pollution.

Internally, by 1989, it seemed as if the Rand Water Board had embraced the spirit of the new era. Because of the numerous changes that had earlier taken place in management and internal restructuring, it was an organisation poised for change. At the helm was the new chief executive officer Vincent Bath (49), operating under the watchful eye of the board’s chairman Dale Hobbs who

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2. Ibid.
tended to play the role of the elder statesman in the board environment. As a team they were to operate together until 1993. They were ideally positioned to cope with the demands of external forces for change in the wake of political moves that were afoot to transform the country’s government into a multi-racial democracy. Bath was an insider who had worked his way up in the structures of the Rand Water Board. He joined the board in March 1966. Before that he had been working in the Johannesburg city engineer’s department as a motorway designer and constructor. Thereafter he spent a short period with the Hume Pipe Company as manager of its pre-stressed concrete products division. He had studied hydraulic engineering at the University of the Witwatersrand under the highly respected Prof. Desmond Midgley.\(^3\) His early work in the service of the board saw Bath specialising in the design and construction of pipelines. One of his first projects was the construction of the Randfontein-Rustenburg pipeline to supply the platinum mines in the Rustenburg area in the late 1960s. Another was the new technology high-pressure pre-stressed concrete pipeline conveying water from the Zuikerbosch area to the Witwatersrand. He simultaneously was involved in the construction of the first 2286 mm diameter steel pipeline from the Vaal dam to the Zuikerbosch pumping station.\(^4\)

**The new style of management**

By 1989 there was a new spirit afoot at the Rand Water Board. It was one of a new body of people responsible for a good organisation. They had in mind working as if they were in the private sector, despite the fact that they were in the service of the public. Management considered it necessary to take the view that a thorough review of the way of doing things in management terms was desirable. The team then set out at looking critically at coming to the fore with innovative strategies aimed at improving operations. They examined the interrelationships within the

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different divisions of the organisation. They wanted to determine better ways of interacting and clarifying accountabilities and responsibilities. There was furthermore an indication of a fresh start in looking at the way in which the customer could be served.\(^5\)

Illus. 13.1. By the end of the 1980s media cartoonists, such as Andy in *The Star*, started seeing the humour in tariff increases. Source: Rand Water

The shift from the twin stream management system of secretarial and engineering, to a unitary system under a chief executive official, was considered successful in terms of overall performance. There was first and foremost in the ranks of the management team a readiness for a new approach towards developing sound relationships with the growing black unions.\(^6\) This was despite the fact that there had been ‘serious industrial unrest and associated problems’.\(^7\)

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5. Personal disclosure, V.J. Bath, Westcliff, 2003.03.07.
The structure of the management hierarchy was adjusted. By 1990 there were five divisional managers: a general manager engineering, a general manager for operations, one each
respectively for the administration and finance sections, as well as a legal advisor.  

In the financial area there was also a strategy to bring tariff increases more in line with the current consumer price index (CPI). In the field of labour there was also a productivity index (PI) based on the quantity of water sold during a given financial year and the number of employees necessary to do the work. In the working environment a rational approach towards an awareness of the task at hand was the way things were done. In the course of 1993 it was considered critical for job descriptions to be written. This was one way of ensuring effective selection and recruitment of staff. There were also other spheres that received attention. In the annual report of 1993 it was reported:

> Staff well-being has also been addressed with a view to implementing effective support systems for staff affected by stress related diseases such as drug and alcohol abuse, and other hardships (illness, death, financial burdens), to ensure that they are loyal, motivated and productive.

To a considerable extent this was the aftermath of the war conditions that had prevailed in South Africa for almost two decades.

The organisation became more focused. It was preoccupied with identifying crucial aspects of the essential tasks the board had to perform. It was explained that the Rand Water Board was:

> a leader in the field of purification and supply of potable water in the southern hemisphere. Geared up for future demands, the organisation is dynamic, open and aware of its vital role in society.

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12. Ibid., p. 19.  
The prevailing state of consciousness was that the Rand Water Board:

supplies more than 2 million m$^3$ of water (per day) to approximately 8.2 million people in an area of 17 000 km$^2$, which forms the economic heartland of South Africa. Employing a staff of some 3 500 people, the Board’s primary function is the abstraction, purification, pumping and distribution of potable water in bulk to local authorities, mines and large concerns.\(^{14}\)

Once the contemporary self-perspective of the organisation had changed, so did its historical perspectives. Where for many years it had been customary to provide a brief exposition of the history of the board since 1903 in the annual reports, it was now instead important to provide the reasons for the establishment of the board.\(^{15}\) The new philosophical depth and insight made way for the fundamental questioning of what in fact it was that the utility had to do. In the chairman’s report in 1990, for example, it was considered essential to give a brief outline of the water supply infrastructure.\(^{16}\)

At the time there were people who were questioning the relevance of the Rand Water Board. Many poor people who did not enjoy water services were unable to see the significance of the board. It had after all, in their eyes, failed to provide them with water. They did not understand the role played by the organisation as a bulk supplier to local authorities. It was in fact the task of the municipalities to provide the required services. The board then attempted to become proactive in trying to address the needs of the disadvantaged people. In some cases the board found itself being criticised by local authorities for taking the first steps towards support. Even senior government officials were unsure of the interrelationship of institutions in the water sector. In due course a better understanding would emerge.\(^{17}\)

\(^{17}\). Personal disclosure, V.J. Bath, Westcliff, 2003.03.07.
The Rand Water Board as an institution was clearly making a concerted effort to move away from the division between people on racial grounds. In May 1989 the board was informed that a multi-racial recreation club had been established at the new Rietvlei headquarters. It was reported:

> It is noteworthy that these activities have been opened up to all staff at Rietvlei black or white and irrespective of whether they work in the engineering, accounting or administrative branches. This has led to a better understanding and ready co-operation between the staff.\(^{18}\)

The objective of the exercise, according to the chairman of the board, was to foster ‘a head office *esprit de corps*’.\(^ {19}\) In many respects the club was representative of the mind shift that had taken place since the new management team started giving direction in the institution. One area of the new headquarters building was allocated as a clubroom. They also requested to make use of the dining room of the complex and applied for a liquor licence.\(^ {20}\)

In June 1989 the board agreed to the amendment of the statutes of the board. The major changes that were to be reflected in the new statutes had a bearing on a new management structure. In the second place the members of the board were to receive remuneration for the services they rendered to the utility. Finally contracts of the board would be considered as having been properly executed if the chairman or more members of the board or a person who had been granted permission by the board to do so had signed them.\(^ {21}\)

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18. RWA, Committee of the whole board, meeting 1989.05.25, p. 17. Report V.J. Bath.
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The way was also paved for bringing in people of colour on to the board. The first plans had been mooted in October 1983 when board member J.F. Oberholzer proposed to the board that steps be taken for the amendment of the statutes in order to enlarge the membership and make provision for the appointment of people of other race groups to serve on the board. After the matter was discussed at the following month’s meeting of the board in committee it was decided that the proposal could not be supported because it was considered the prerogative of the state and the board’s statutes precluded it from making such appointments. There were however suggestions that the chairman of the board discuss the matter informally with the minister when the opportunity presented itself.22 By 1989, as the country was preparing itself for substantive political change, the incorporation of people of colour was substantially easier.

The Rand Water Board started positioning itself in such a manner that it was no longer ‘invisible’. This gave rise to a very particular identity and sense of focus taking shape. It was underlined from the outset that a new philosophy was in the process of taking shape. Whilst the board was ‘not supposed’ to make a profit, it was a responsibility of management to promote cost-effectiveness throughout all levels of its personnel.23 This ultimately paved the way for a more intensified drive towards profitability.

One of the most important identity-shaping processes was the formulation of a mission statement, a philosophical problem with which the management and board had been grappling with since 1988.24 In 1990 the mission statement was outlined as:

To supply water in bulk from the available sources at optimum quality and cost to consumers within the limits of supply.25

22. RWA, Committee of the whole board meeting, 1983.11.25, p. 131.
The peripheral conditions for the board to realise its objectives were outlined in terms of:

- Developing a business-orientated management style in respect of the provision of staff, budgeting, control and management, and management information;
- Striving continually to improve quality and service, productivity and efficiency;
- Motivating staff through effective delegation and training;
- Adopting a frank open door approach to communication;
- A formal policy of equal opportunities for all employees;
- Achieving consumer satisfaction;
- Building up a team of employees committed to achieving the board’s mission; and
- Promoting among its consumers an awareness of the real value of water and the need to use it with discretion.\(^\text{26}\)

In February 1991 the board approved a new mission statement for the institution. It read:

Realising that water has an intrinsic value and is a limited resource essential to life and economic progress, the mission of the Rand Water Board is –

To ensure a consistent and reliable supply of good quality, clean and healthy water to meet the present and future social and economic needs of all consumers within our supply area at an affordable price that permits the continued viability of the operation.\(^\text{27}\)

In the process an organisation of substance had identified the ubiquity of the commodity – water – that it worked with in the interest of society.

After a period of re-defining itself, the Rand Water Board was preparing to re-invent itself. This was evident in the manner in which the organisation presented itself to its consumers.

\(^{26}\) Ibid., p. 4.

\(^{27}\) RWA, Komitee van die algehele raad, vergadering 1991.02.28, p. 186. Board resolution.
Re-invention: the birth of ‘Rand Water’

Since the early 1980s when the prevailing drought featured prominently in the public sphere of the news media, the management of the Rand Water Board was aware of the need for effective marketing. At the time the organisation had to cope with severe criticism from the public. It then became apparent to management that the institution was in need of an altered identity. It was against this background that Dr. R.A.P. Fockema a member of the board in April 1988, pointed out how essential it was for the board to brush up its image.\(^\text{28}\) In the person of Bath as the CEO the board had an outstanding communicator. He was able, in the eye of fierce criticism from consumers, to present the Rand Water Board as an institution interested in rendering a valuable service to its consumers.\(^\text{29}\) One of his skills was the ability to communicate bad news without personally losing face.\(^\text{30}\) It was necessary to re-invent its identity.

The idea of the creation of a new corporate identity was part of the process of moving into the public sphere. Plans for the new identity were mooted for the first time in September 1989. At the time major changes were introduced in the management structure of the organisation. Further developments that marred the plans were the move of the institution to the new headquarters at Rietvlei and, the tumultuous global political changes that were the order of the day after November 1989. Consequently not much was done at the time to implement the plan.

In April 1992 Bath submitted a report to the board in which an outline was given of a four-phase plan for the transformation of the identity of the board. In the first phase, he explained, research had to be conducted. Data had to be collected, followed by presentation to management on whether changes had to take place. In the second place – if the response was in favour of change – an investigation was to be launched into the formulation of a new

\(^{28}\) RWA, Committee of the whole board, meeting 1988.04.28, p. 7.


\(^{30}\) Ibid.
name. A new logo would then be designed with all the necessary stationary, documentation, uniforms, vehicles, signage and livery. There was then to be a presentation to the management. The consultants then had the task of drawing up a set of guidelines according to which the materials would be designed and implemented. Already in December 1990 the management committee of the board gave the firm of Pentagraph Design Consultants instructions to prepare a presentation for the board in April 1992.\footnote{RWA, Minutes 1992-3, p. 30. 111th ordinary meeting, headquarters, Johannesburg, 1992.04.30. Report V.J. Bath: Corporate services division.}

The board’s first response was conservative. At first it was not eager summarily to give its approval for the proposed change. Consequently it delayed the presentation until such time that ‘all members’ could be present at a board meeting.\footnote{Ibid., p. 30. 111th ordinary meeting, headquarters, Johannesburg, 1992.04.30. Report V.J. Bath: Corporate services division. Board decision.} The following month the board once again let it be known that the whole process was going to be expensive. A minor change to the signage (lettering) was recommended and it was decided that a further presentation was to be made later on in the year.\footnote{RWA, Minutes 19901-2, p. 79. 1112e gewone vergadering, hoofkwartier, Johannesburg, 1992.05.25. Algemeen.}

In September 1992 a special presentation was made to the board in committee. There were also a number of recommendations that had far-reaching implications. For a start it was proposed that the name of the organisation be changed from Rand Water Board to Rand Water. The existing heraldic devices of the board were to be maintained. They would still be used on ceremonial and other occasions. Forthwith, however, it was recommended blue and green pantone be the colours of the board. The board also agreed to give consideration to further recommendations on a logo to accentuate the new identity of Rand Water.\footnote{RWA, Komitee van die algehele raad, vergadering 1992.09.24, p. 72.}
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Once there was consensus on the new design the board made available more than R51 000 for new letterheads, business cards, compliment slips and office buying orders. The security staff had to be provided with new badges and throughout the board overalls, protective gear and messenger uniforms had to be replaced. New vehicles were to be in the new livery. In order to save costs existing vehicles were to be kept in the old colours for the next three years.³⁵ In July 1993 it was decided that as from 1 October 1993 the new name of the organisation would be in use.³⁶ At the start of the October 1993 meeting a presentation was made to the board and each member was given a gift to commemorate the 90th anniversary of the founding of Rand Water.³⁷

![Figure 13.4 The new logo of 1993. Source: Rand Water.](image)

Bath later explained to the public at large that there had been an incongruity in the manner consumers saw the organisation for many years. A board governed the organisation, he explained. It set the policy. Referring to the organisation as ‘the board’ led to confusion and ‘together with a perceived need to be overtly in tune with modern times, it has been decided to shorten the name Rand Water Board to Rand Water’.³⁸

³⁵. RWA, Committee of the whole board, meeting 1993.03.25, pp. 236.
³⁶. RWA, Committee of the whole board, meeting 1993.07.29, p. 136. V.J. Bath: Corporate services division.
³⁷. RWA, Minutes 1993-4, p. 141. 1 128e gewone vergadering, hoofkwartier, Johannesburg, 1993.10.28. Presentation general manager corporate services.
It was admitted at the end of the first financial year in which the change of name was introduced that the process had not been easy after a period of 90 years.\(^{39}\)

At the end of the 1994 financial year Rand Water had the image of an undertaking that was intent on aggressive marketing. The ‘invisible public water utility’ had flowered into a wide-awake organisation that was part of the new dynamic South African society. In the 1994 annual report Bath gave a motivation for an aggressive and highly effective advertising campaign.\(^{40}\) He explained:

Rand Water’s advertising campaign is not directed towards promoting either the sale of water or the excellence of Rand Water as an institution... If Rand Water wishes to manage the demand of the end user for water in terms of availability of end resources it has to advertise to make that end user aware of the reserves of water available, of what can be done to augment these resources and at what cost, and in what manner the public can co-operate to curtail their water use.\(^{41}\)

The underlying message conveyed had a direct bearing on the scarcity of water as a resource and people were invited to contemplate what a world without water would be like.\(^{42}\) Rand Water was in search of the informed consumer who knew what the implications were of mercury and trihalomethanes in pristine water sources.\(^{43}\)

**Industrial unrest**

The re-invention of the organisation also went hand in hand with management’s taking note of its black workers’ aspirations. After the government in the 1970s had made provision for the establishment of trade unions, a variety of workers’ unions started

\(^{39}\) Ibid., p. 4.

\(^{40}\) ANON., “Vindingryke bemarking in veldtog van Rand Water” in Sake-Beeld, 1994.03.09.

\(^{41}\) RWA, Rand Water Board: annual report 1994, p. 4.

\(^{42}\) Ibid., p. 4.

\(^{43}\) Ibid., p. 4.
canvassing employees of the board. Although the Rand Water Board provided services to local authorities it was by no means a local government institution. It tended to be an industrial installation with a strategic role to play, outside the political arena of the day. For the employees of the board, who had only recently been given the opportunity to articulate their opinions as workers in an organisation operating essentially under the structures of state, there were opportunities.

The construction of the board’s new headquarters at Rietvlei as from 1986-7 was also marred by industrial unrest and stay-aways. It caused delays in the construction work for the contracting company LTA Construction Limited.44 In 1986 there were complaints by trade unionists in the farming industry that they had been refused permission to communicate with their members who were employed on the board’s farms.45 At the time the board seemed to take a high-handed approach to the request of the Orange Vaal General Workers’ Union (OVGWU), which claimed that it had complete control in as far as membership of all the board’s farming operations were concerned.46

Already at the start of 1988 there were indications that strike actions throughout the country would be increasing. Labour consultants warned that wage disputes would be one of the major causes for strikes.47 In 1988-9, in anticipation of increasing trade union activities the management of the Rand Water Board, with the support of labour consultants, started a comprehensive training programme for certain members of staff. It was in place before the

44. RWA, Komitee van die algehele raad, vergadering 1990.11.29, p. 100. Report V.J. Bath: Legal division.
46. Ibid.
Municipal, State Farm and Allied Workers Union started with activities in the board’s structures.\(^{48}\)

The labour disputes were directly related to the political situation in the country. In the first part of 1989 trade unions were in fact the only legitimate institutions that black people could use to vent their political anger. Experts in the field warned that the trade unions wielded more political power than ever before in the country.\(^{49}\)

On 19 September 1989 the South African security police arrested a senior shop steward, Richard Ramaqabe, at the Zuikerbosch pumping station.\(^{50}\) This was notwithstanding representations made by the board to the police for the release of the person.\(^{51}\) On 21 September the workers at the pumping station came out in strike in what was later considered the most dedicated and effective strike action of that period.\(^{52}\) This resulted in the dismissal of 400 workers who had refused to return to work. It was reported to the board on 28 September that consideration was being given to the re-employment of the workers. The board’s water supply was not disrupted by the strike.\(^{53}\) The industrial court later gave a judgement in favour of the board in the case that had been made against it by the Municipal State Farms and Allied Workers Union for the reinstatement of the dismissed workers.\(^{54}\)

At the start of 1990 there were indications that the government was in the process of backtracking on some of its proposed legislative measures to keep organised labour under relative control. It was


\(^{50}\) The author is grateful to Mr Johan Kohl of Rand Water who provided information on this matter on 2003.04.07.

\(^{51}\) Disclosure Dr H.T. Ramsden, panel discussion, Rietvlei, 2003.02.07.


\(^{53}\) RWA, Committee of the whole board, meeting 1989.09.28, p. 88.

apparent that in the near future workers would have greater freedom of action in organising steps against employers.\textsuperscript{55} On 22 February 1990 employees of the board (excluding those of Zuikerbosch) participated in a march from Zwartkopjes to the headquarters of the board at Rietvlei. They demanded the reinstatement of the workers who had been dismissed at Zuikerbosch pumping station in September 1989. V.J. Bath then informed them that the case was to be heard in the industrial court on 18 July 1990. The marchers were advised to let the industrial court decide on the matter.\textsuperscript{56} In April 1990 the board was once again informed of industrial action, which started at Zwartkopjes and Vereeniging pumping stations in the week of 23 April. There was a tense atmosphere and the management indicated that all the principles of legal and administrative procedures had been adhered to in the process of the activities.\textsuperscript{57}

At the end of April 1991 the labour unrest had declined substantially. Bath told the board that there was a more positive and helpful climate in the institution as a whole. The air had been cleared with the introduction of new pension scheme amendments for employees as well as new bursary schemes for children of employees.\textsuperscript{58}

In 1992 the board terminated its closed shop agreement with the unions constituting the Rand Water Board’s Unions Joint Committee and entered into separate agreements with the constituent trade unions.\textsuperscript{59} The Mine Workers Union of South Africa and the Union Workers Union of South Africa (subsequently changing its name to the United Chemical Industries and Allied Workers Union of South Africa) were recognised for the purposes


\textsuperscript{56} RWA, Committee of the whole board, meeting 1990.02.22, p. 147.

\textsuperscript{57} RWA, Committee of the whole board, meeting 1990.04.26, p. 10.

\textsuperscript{58} RWA, Komitee van die algehele raad, vergadering 1991.04.25, p. 7.

\textsuperscript{59} RWA, Rand Water Board: annual report 1993, p. 21.
of collective bargaining. The result of the new dispensation was that a fragmented bargaining structure started taking shape. The Rand Water Staff Association represented the officials of the board. The operators and the artisans were represented in turn by the National Employees Trade Union, South African Electrical Workers’ Association and the Mine Workers Union. The support staff were represented by the South African Municipal Workers Union, Municipal State Food and Allied Workers’ Association and the United Chemical Industries and Allied Workers Union of South Africa. 60

Most of the disagreements that arose were the result of wage disputes. In April 1994 as South Africans prepared to go to the polls for the country’s first democratic elections the chairman of the board was given permission to ratify a wage agreement with the artisan/operator class of employees in which they were to receive an eight per cent increase. 61

The 1992 additional water supply
In performing its basic responsibilities the Rand Water Board remained alert to the potential growth in demand for water. Although the 1980 additional water scheme was finally wrapped up when General Magnus Malan, the minister of water affairs, officially opened the scheme on 10 August 1992 at a cost of R1,5 billion, plans were underway for the next phase of development. 62 In effect the 1992 additional water supply scheme, as the new plan came to be known, was intended to contend with the growth in supply if and when the new Lesotho Highland Water Project started supplying water to the Witwatersrand. Towards the end of 1991 a report had been submitted to the board in which estimates were given of the anticipated water requirements up to

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60. RWA, Committee of the whole board, meeting 1996.11.28, p. 112. Report V.J. Bath: Human resources division.
61. RWA, Committee of the whole board, meeting 1994.04.28, p. 10.
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the year 2010. Whereas the actual water consumption for 1991 was 2328 Mℓ/d, the estimates of all the board’s major consumers, in the planning for what was to become known as the 1992 additional water supply scheme, suggested that by 2010 the daily consumption figures of 4872 Mℓ/d would be more than double the 1991 figure. Crucial shortages could develop by as early as 1994 when it was estimated that 2812 Mℓ/d would be required. Past consumption figures were used as well as per capita water consumption, population growth rates, densities, urbanisation rates, as well as population density estimates. A factor that was of vital importance in the calculations was the drought conditions prevailing between 1983 and 1987 when water restrictions were the order of the day. All the indications showed that it was necessary to develop yet another additional water supply scheme if the region that the board served wanted to prevent situations of water shortage. According to the planners the scheme, estimated to cost in excess of R1,6 billion, would be able to supply sufficient water until 31 March 2005.

The existing purification and pumping infrastructure of the board appeared to be satisfactory over the short term. Zuikerbosch and Vereeniging were quite capable of coping with the demand. However, it was estimated that as from 1998 the system would be unable to provide for the requirements. It was thus proposed that with the development of the new additional water supply scheme,


there should be sufficient purification and pumping facilities available to cope with additional peak demands from 1995.\footnote{69} As far as the pumping mains were concerned, special attention had been given to the old pipelines of the board. A number of mains between Zwartkopjes and the Benoni reservoirs had been installed between 1922 and 1938. They passed through wetlands and there were indications of fractures in the walls of one of the pipelines. The growth of supply through the Benoni-Mapleton pipeline was relatively slow at the time. Consequently it was suggested that the route through Natalspruit could be secured at a relatively low cost to supplement the supply of water to the East Rand by bleeding from the higher pressure Benoni system into the system to the east and the north of Brakpan. This deferred the need to duplicate the Zuikerbosch/Mapleton/Vlakfontein system at a much higher capital cost.\footnote{70} A number of pipelines were considered necessary in order to establish a link to the Mapleton system.\footnote{71}

The area to the north and the west of Pretoria had to be provided with more water and it was necessary to increase the capacity of the Klipfontein-Brakfontein pipeline as well as the Kwaggaspoort-Gomsand pipeline. The pipeline between Klipriviersberg and Modderfontein, as well as between Modderfontein and Klipfontein, also had to be upgraded.\footnote{72}

Overall more storage facilities had to be provided. In 1991 the storage capacity of the board was 3813 Mt. At the time a number of reservoirs were under construction. Upon completion these storage units were to be able to hold 4113 Mt. However, in order to cope with a 36-hour average demand the reservoir capacity of the board


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had to be stepped up to a maximum of 5013 Mℓ. For this purpose it was recommended that in terms of the new scheme new reservoirs had to be added to the system at Brakpan (200 Mℓ), Klipriviersberg (650 Mℓ) and Libanon (50 Mℓ).\textsuperscript{73}

Towards the end of 1992, the detailed calculations had been completed. The total estimated cost of the scheme was now considerably higher. It stood at R1693 million. The supply capacity now stood at 5395 Mℓ/d – sufficient to last until May 2005.\textsuperscript{74} The increased cost of the scheme was due to the need to increase the capacity of the pumping and purification plant at Zuikerbosch. An additional pumping main had to be installed at Zwartkopjes. At the Eikenhof and Palmiet pumping stations additional work had to be done. One of the major new expenses was the addition of a pumping plant and mains from Palmiet pumping station to Klipfontein reservoir and from Eikenhof pumping station to the distribution system near Baragwanath.\textsuperscript{75}

Local water supply systems for Deneysville and Heilbron

In 1992 the department of water affairs, as part of its rationalisation process, transferred the Heilbron/Deneysville government water scheme to the Rand Water Board. This was a new field of concentration for the organisation. The scheme which at the time comprised four submersible pumps located in the outlet tower of the Vaal dam, a water treatment works capable of processing 5,2 Mℓ/d, a pumping plant that could provide water to Deneysville, Heilbron and the state department’s complex at the Vaal dam, as well as a 200 mm mains delivery system covering a distance of 50,5 km, was completed at a cost of R2,72 million in 1978. The department of water affairs earlier had developed similar schemes,


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but as they started toning down their operations in order to focus on the essential work at hand, the system was transferred to the board. The board in turn was prepared to take the responsibility for the scheme, but indicated that it could only be done if the government paid all the outstanding debt for the scheme. Furthermore it required of the department to secure sufficient funds for the upgrading of the system so that it could provide sufficient water for at least the next 10 years. Possible funding could be arranged through the Free State’s provincial administration. At the same time the board insisted that the necessary arrangements had to be in place in order to accommodate the water requirements of the townships of Phiritona and Refengkgotso of Heilbron and Deneysville respectively.  

In 1995 the municipality of Deneysville indicated it was no longer interested in having Rand Water take over the town’s water supply. It intended maintaining the system itself. This was also applicable to the township of Refengkgotso, which had been incorporated into Deneysville with the transition to a new dispensation.  

The Heilbron local authority was still interested in maintaining its links with Rand Water. During negotiations the local authority requested the utility to construct a water supply system. The cost of the project was to be covered by means of a R3,9 million grant from the Northern Free State regional services council, a R5,5 million subsidy from the department of water affairs and forestry as well as a loan from the Development Bank of Southern Africa (DBSA). At the time the scheme was estimated to cost in the order of R24,06 million. In April 1995 the board subsequently gave its approval for the construction of a pumping station at Rand Water’s Sasolburg reservoir. It also approved the construction of a 56 km pipeline with an internal diameter of 376 mm. Although the major

portion of the costs for the project were to be paid by the Heilbron municipality, Rand Water was to make a contribution towards paying for the extra costs of laying a larger pipeline.  

Magalies Water  
Since 1991 officials of the government’s department of water affairs and forestry, the ministry of planning and provincial affairs, as well as the town council of Rustenburg, the Rustenburg-Marico regional services council and Rand Water had been in talks on the need for an efficient water supply to the region. In terms of section 110 of the board’s statutes it was required of the provincial administration as the administering authority to make a substantial financial contribution towards the development of a water supply system. The problem was, however, that the provincial administration, as it had previously been constituted, no longer existed. The Rustenburg-Marico regional services council now had to stand in for the provincial administration. In the gradual process of political transition, provision had to be made for what was to become known as the Northwest Provincial government. That was only scheduled for introduction in 1994.

The department of water affairs and forestry made the recommendation that in view of the rapid growth that was taking place in the region of Rustenburg where platinum mining had boosted the regional economy substantially, it was necessary to give consideration to supplying the region from the Vaalkop dam where water was being treated. It implied that the Magalies Water Board, as well as the department of water affairs of the

Bophuthatswana government, had to negotiate with the authorities in Rustenburg and surroundings.82

It was estimated that the water supply system of Bophuthatswana, as well as the Magalies Water Board could make available a supply of 120 Mℓ/d that would cost about R121 million to upgrade.83 For Rand Water the additional supply was to cost in the order of R40 million to step up its provision from 7,5 Mℓ/d to 17,5 Mℓ/d.84

In January 1994 it was possible for Rand Water to incorporate the water supply for the Bafokeng region that came from the Crocodile river, via Magalies Water. The board consequently made a contribution of R58 million towards the Bafokeng regional water supply scheme. This made it possible to make available additional water storage facilities for the region.85

After the first multiracial democratic elections in April 1994, the Bafokeng claimed that they had no need to pay for the provision of water on the grounds that they had historically been resident on the land for longer than the residents of Rustenburg. They also noted that historically they had been provided with water by the Rustenburg local authority, and finally they felt that they had been ill-treated in view of the fact that a higher tariff was levied from them.86 It seemed as if the proposed meeting for the establishment of a water authority was doomed to collapse. This was but one of the new discourses to follow after the establishment of a new democratic dispensation.

Disaster at Meredale

Over a period of a century Rand Water had built up a reputation as an organisation that has put safety first in all its operations. It was therefore an event of substantial proportion when a number of workers were killed on a construction site in 1993.

In the 1980 additional water scheme provision had been made for two 100 Mℓ reservoirs at Meredale. In 1989 the plans were revised and it was decided instead to build one 200 Mℓ reservoir on the site of more than 2000 ha, south of Johannesburg. The excavation of the site started in 1991 and progressed well. Then on 26 May 1993 the roof of the reservoir that was under construction collapsed. Five workers, Messrs Joseph Mayikane, Madedzane Ntlekiso, Amon Nyanga, Mgqisheni Ndwandwe and Hennie Mokoena were killed in the accident. Two others, Messrs Abiel Mphosi and Isaac Setati later succumbed in the Garden City Clinic. Another two, Messrs Abiel Manyisanwe and George Valashiya were airlifted to the Milpark Hospital where Valashiya died. The board’s flag flew half-mast on the day of the accident and again on 3 June when the operations were halted after 12:00 for a memorial service close to the construction site. The board paid the costs of transporting the families of the injured and dead workers to Johannesburg. The families of the deceased later received financial support from Rand Water.

Shortly after the disaster workers on the site of the reservoir went on a sit-in strike. They demanded that a foreman be removed off the site. When the report of the inquest into the accident was completed the court held that some of the responsibility for the

89. RWA, Komitee van die algehele raad, vergadering, 1993.06.24, p. 56. Report V.J. Bath: Human resources division.
92. RWA, Komitee van die algehele raad, vergadering 1993.06.24, p. 59.
accident lay with Rand Water, some with the responsible engineers and some with the contractor who had supplied a truss that had failed. The accident was an added responsibility for management. It contributed to the decision, based largely on economic considerations, to discontinue undertaking construction of reservoirs itself.93 Increasingly the opinion was expressed that by giving contracts to outside contractors, Rand Water was in effect protecting itself from disasters of this kind. The report on the Meredale accident was not flattering to the board and implied that many more safety precautions had to be introduced.94 By outsourcing construction work of this nature it was considered possible to promote affirmative action in the form of empowerment programs in the private sector. It also enabled Rand Water to confine itself to doing the work it did the best – distributing water to its consumers within the existing limits of supply. In the years to come it was to prove a wise decision. With the transition to a new South Africa there was an increasing demand in the construction industry to transfer skills to previously disadvantaged entrepreneurs. By 1997 Rand Water was singled out by the construction industry as a trendsetter.95

Technological innovation: looking underground

In 1993 the water mains of Rand Water covered a distance of more than 2510 km. Some of the pipes had been laid as early as 1907. It was estimated at the time that the value of the mains were about R307 million. In order to replace them, at the time, it was

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considered the board would have to be prepared to pay R2600 million. 96

In 1991 the engineers made a number of recommendations to the board. It was suggested that, in order to optimise the management of the board’s pipeline system, the causes of hydraulic and water quality problems had to be investigated afresh. Special surveys had to be done in some sections of the system and the areas, which incurred high operating costs, had to be investigated. Realistic forecasts had to be done on the long-term financial requirements in respect of the renovations and improvement of the pipelines. The engineers also suggested that appropriate economic rehabilitation strategies be devised in order to improve the condition of the mains. 97

The engineers then set up an internal working group. One of the first recommendations to come from the group, which was interdisciplinary in terms of the members’ fields of specialisation, was that the existing arrangement of ad hoc renovation had to be halted. 98 It was consequently recommended to the board as follows:

> It is clear that because of the age and extent of the Board’s distribution pipeline network it is necessary that a properly structured long term planned pipeline renovation programme be embarked upon and that because of the work and the techniques and technology involved the responsibility for this work appropriately lies with the pipeline section. 99

It was recommended that a further three posts be created in the pipeline section. Furthermore, specialised equipment had to be purchased to investigate the performance of the pipelines. There was a need for a mobile underwater video camera with lighting

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equipment to facilitate the internal inspection of pipelines.\textsuperscript{100} The working group had also meanwhile identified a number of pipeline systems that were in need of repair and recommended to the board that these be given attention as soon as possible.\textsuperscript{101} The board accepted the recommendations,\textsuperscript{102} and the programme was introduced with considerable success.

**Informal urban settlements**

In the early 1990s Rand Water was increasingly faced with the task of providing additional water in areas where the new informal and semi-formal settlements of black people were mushrooming after the government had scrapped the influx control laws that formed one of the cornerstones of the former apartheid system. Political parties, some local authorities and residents of affected white townships opposed township development. Rand Water found itself having to negotiate a course through a political minefield by simply being prepared to facilitate an opportunity of supplying water to the new urban settlements. Its role was in essence that of an honest broker intent on providing service. Underlying this approach was a definitive philosophy. It started taking shape once the government introduced plans for the urban accommodation of blacks in new townships.

In June 1988 the government announced that it was in the process of making available extensive land on the Witwatersrand for the development of black townships. It was considered that about three million people would have to be accommodated in the region in the near future. In total some 13 000 ha were to be made available in addition to 16 000 ha that had been made available in 1985 by the government. The proposed ‘Norweto’ township, to the north of

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\textsuperscript{100} Ibid., p. 25. 1 118e gewone vergadering, hoofkwartier, Johannesburg, 1993.04.29. Report A.S. Smit: Engineering division.


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Pretoria, had been scrapped earlier. Instead the government now intended making available smaller pieces of land where nuclear communities could settle. Land was also to be made available for the settlement of more affluent black people. The one major new elite township was to be Diepsloot, to the south of the Pretoria-Krugersdorp highway. More land was also made available for townships to the south and to the west of Johannesburg. The westward expansion was intended to link Kagiso near Roodepoort and Mohlakeng near Randfontein. On the eastern side the government had made land available to the south of Alberton, Boksburg, and Brakpan. Land was also made available to the east of Benoni and to the north of Brakpan. Further development plans for 13 new residential sites for townships were made known towards the end of December 1991.

In April 1990 the Chairman of the free settlement board, Hein Kruger, announced that Diepsloot had been declared a free settlement area. Residents of Sandton, supporting the Democratic Party (DP), opposed the measure. The Conservative Party (CP) also opposed the decision. In some quarters this step was seen as an alternative to the controversial Norweto-plan announced in 1986. The township was intended to accommodate 250 000 residents. Many white communities in the area opposed the plan. The Diepsloot settlement, it was feared, was the forerunner of the government’s original scheme being introduced under a different name.

Also in 1990 the Central Witwatersrand regional services council gave permission to proceed for the development of a township to the south of Johannesburg where some 600 000 people could be settled. The accent was no longer on race, according to an official. Instead it revolved around offering people the opportunity to

104. Ibid.
acquire their own homes in a project which was to make provision for 90,000 housing units. An important feature of the plan was that it made provision for industrial development, close to the settlement, thereby ensuring that residents could find employment close to their homes.  

Rand Water, because of its monitoring operations, had been aware of the threat to health inherent in the new development. In 1990-1 there were reports of the deterioration of the existing wastewater reclamation system in the Vaal Triangle region. This was ascribed to the increase in urbanisation in the semi-formal sectors of the region. It was perhaps even more as a result of the lack of effective local government during this period. There were attempts in numerous forms to implement better control in respect of sewage effluent and waste disposal measures. The demise of what was previously considered to be an organised system of urban development literally collapsed as more and more squatter camps were established in all parts of the board’s service area. Board chairman Hobbs explained the crisis:

Problems with reticulation of water by local authorities can be traced to various sources the principal ones revolving around legitimacy of black local authorities, violence during times of political transition, the non-payment weapon, and the lack of finances to undertake the necessary work.

Behind the scenes executives in all fields were negotiating to find a solution to crucial issues outside the sphere of politics. For the board it was a matter of grave concern to ensure that people were provided with proper clean water. The need for constitutional change was apparent as Hobbs observed:

There appears to be no end in sight to solving this problem independently of a new political dispensation and we shall have to work toward that end with due diligence.\textsuperscript{111}

For Bath the problem involved much more. There was a fear that waterborne diseases could increase if the development of informal housing settlements were to continue unabated until 2010.\textsuperscript{112} There were in particular fears at the time for the maintenance of basic hygienic conditions in the Barrage area.\textsuperscript{113}

One community that was offered support by the board was the squatter settlement of Paardekraal situated to the east of the municipal area of Rustenburg. The township, which comprised 12,450 stands, had to be provided with an average water supply ranging between 8.3 and 12.45 M\(\ell\)/d.\textsuperscript{114} The board, on the advice of its finance and executive committee, was in agreement that Paardekraal had to be perceived as an extension of the existing Rustenburg municipal area. It would naturally be subject to rapid growth as a result of the population increase. Consequently it was the task of the existing local authority to take the responsibility of providing for the local needs for water. It was also accepted that the local authority would have to make provision for part of the funding necessary to develop the system.\textsuperscript{115} What was important about the arrangement was that it no longer tried to shift the responsibility for supplying water to the squatter community to a new black local authority. Another important consequence was that among engineers it was realised that it would be necessary to develop a new supply institution. Already in the planning for Paardekraal’s water supply the development of the Magalies Water

\textsuperscript{111} Ibid., p. 4.
\textsuperscript{112} Ibid., pp. 6-7.
\textsuperscript{113} RWA, Rand Water Board: annual report 1993, p. 10.
\textsuperscript{115} Ibid., p. 111. 1 113th ordinary meeting, headquarters, Johannesburg, 1992.06.25. Report V.J. Bath: Engineering division. Board decision.
option was put on the table.\textsuperscript{116} The creation of regional water utilities increasingly tended to offer solutions to the new development challenges.

**The route to a new political dispensation in 1994**

Because of many uncertainties, the period marking the transition to a multi-racial democratic society gave rise to mixed emotions. There were fears that if anything went wrong the country could fall into a state of civil war. There was also the joyful anticipation among a large proportion of the population who were eagerly awaiting the opportunity to vote without any racial constraint for the first time in their lives. Then there were those who tended to be cynical about the outcome of negotiations between the politicians. This frame of mind was articulated in the form of a water metaphor in February 1992 when the journalist, Shirley Woodgate, wrote that a spokesperson for the department of water affairs observed that the level of the Vaal dam at the time was a blueprint of the mood of South African society. She wrote:

\begin{quote}
The current 51 per cent level could well reflect the pessimism of many South Africans about politics, violence and crime ... Over the past 10 years the dam’s water level has swung from desperately low to excitingly high.\textsuperscript{117}
\end{quote}

The mood of contemplation in the structures of Rand Water was at the time one in which the attention was focused on providing water and, at the same time, transforming the institution to fit in with the prerequisites for survival in an era of substantive change.

Rand Water’s Vincent Bath took one of the major initiatives at the time in preparing the way for planning the provision of water in a new dispensation.\textsuperscript{118} Early in the 1990s he was one of the prime movers in creating a series of consumer forums with the objective

\begin{itemize}
\item \textsuperscript{116} Ibid., p. 110. 1113th ordinary meeting, headquarters, Johannesburg, 1992.06.25. Report V.J. Bath: Engineering division.
\item \textsuperscript{117} S. WOODGATE, “Waters that mirror the mood of a nation” in *The Star*, 1992.02.12.
\item \textsuperscript{118} The author is grateful to former CE V.J. Bath for making disclosures on these developments during a personal interview. See RWOH1, pp. 10-3. Interview V.J. Bath, 2002.11.06.
\end{itemize}
of getting people who had a direct interest in the supply of water to talk about the future. It was an opportunity for Rand Water to become visible to its consumers and prove that it was accountable. At the same time it was an effort to promote the utility in such a manner that it could pave the way for bringing into the boardroom those people who were representative of all the consumers. Many hours were spent in negotiations with the different political parties, mainly those who were not yet in parliament. During the series of meetings that took place in the boardroom of Rand Water at Rietvlei with representatives of the organisation, it was decided to form the standing committee on water supply and sanitation (Scowsas).  

Bath was called to Pretoria for talks with the department of water affairs. Senior officials there expressed reservations as to where these discussions might lead. After explaining the objectives to them, they agreed to send a representative to the new forum. A future director general of the department, Mike Muller, who was at the time with the Development Bank of Southern Africa (DBSA), was also on the of the key role players in the process. He then became one of the key participants in the process of planning for a future dispensation. Bath recalled a number of years later:

We said to ourselves that we were interested in getting a sensible policy that any new government would adopt. Many of those guidelines, developed by Scowsas, found their way into the ANC’s Reconstruction and Development Plan and hence the water legislation of the future.

Together with a number of officials and leading engineers, it was possible to prepare the way for continuing with a reliable water supply service to consumers. One objective was to ensure that water could be provided particularly to the poor. The board was constantly informed on the negotiations that were taking place. In many respects the new board chairman, A.M.D. Gnodde, who succeeded Dale Hobbs, in 1993, played the role of a trusted advisor.

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120. Ibid., p. 13. Further information also supplied on 2003.03.07.
and mentor in the difficult negotiations that were taking place. Gnodde was a qualified legal practitioner who had studied at the universities of the Witwatersrand, Cape Town and Oxford. At the time of his retirement as chairman of Rand Water, some three years later, he was a member of the boards of a number of companies such as Dunlop Ltd, Commercial Union Co. of South Africa Ltd, Industrial and Commercial Holdings Group Ltd. He was former deputy chairman of Gold Fields of South Africa Ltd where he joined the company in 1955.\(^\text{121}\) One of the accomplishments of Scowsas, as far as Rand Water was concerned, was the preparation of an institutional pricing policy for rates.\(^\text{122}\) On 1 October 1993 it was possible for Bath to make a submission at the World Trade Centre, in Kempton Park, where the water future of the country was being discussed. In his presentation the CEO outlined the nature of the service provided by Rand Water.\(^\text{123}\) For all intents and purposes Rand Water had been well prepared for the changes to come.

In the process of ordinary operations Rand Water and its workers gained first hand experience of the crime wave in the period of transition. On 8 September 1991 four people travelling in a Rand Water Board vehicle were brutally gunned down by criminals, thought to be members of *Mkhonto we Sizwe* and the former Renamo movement of Mozambique, in what was described as an act of terror. The first arrests in the case were made in June 1992 and police suspected the group was responsible for various other attacks on civilians.\(^\text{124}\) From 1 November 1992 to 31 October 1993 four vehicles were involved in incidents of theft or hijacking. This

\(^\text{122}\) RWOH1, pp. 13-4. Interview V.J. Bath, 2002.11.06.
\(^\text{123}\) RWA, Committee of the whole board, meeting 1993.09.30, p. 173.
resulted in a loss of R159 052. Between 1 November 1993 to 31 October 1994 a further 13 vehicles were stolen or hijacked. The losses incurred were R602 374. There were a further nine incidents of attempted theft and one of attempted hijacking. In the course of 1994 seven vehicles were either stolen or hijacked. These losses amounted to R332 355.\(^{125}\) In an effort to cope with the problem, the board agreed to purchase an air to ground communications network system to at least counter theft or hijacking. Substantial amounts of money were spent on introducing the security system. However, there were savings for Rand Water on the annual insurance premiums.\(^{126}\)

As the elections drew closer security measures were stepped up. There had been rumour mongering that the water supplies of Rand Water would be poisoned. The management subsequently had to go public and give consumers the assurance that the water was drinkable and no poisoning had taken place.\(^{127}\) Attention was also meanwhile given to preparing the employees of the board for the elections. Many of them had never previously participated in polls of this kind. Representatives of the Independent Electoral Commission (IEC) visited the board and presented formal instructions on voting procedures. In March 1994 the board was informed that 1350 employees had received training.\(^{128}\)

In the transition to the new dispensation the political negotiators at Kempton Park were more than aware of the need for stability and continuity. Consequently, in March 1994, shortly before the elections the board chairman, Gnodde, informed the board that the minister of water affairs had notified him that all members of the board had been re-appointed for a further five years. He himself, as chairman of the board, was to be appointed for one year only.\(^{129}\)

\(^{125}\) RWA, Committee of the whole board, meeting 1995.01.26, p. 118.

\(^{126}\) Ibid., p. 119.

\(^{127}\) RWA, Committee of the whole board, meeting 1994.04.28, p. 10.


\(^{129}\) Ibid., p. 537. 1 132e gewone vergadering, hoofkwartier, Johannesburg, 1994.03.31. General.
After the elections the new minister of water affairs informed the board that he had taken note of the vacancies on the board. The government was intent on making the board more representative of the country’s population, but until the necessary investigations and planning had been completed, the government did not intend to bring about any change.

Once the new government had formally taken over in May 1994 Gnodde and Bath, on behalf of Rand Water, held talks with the new minister of water affairs, Prof. Kadar Asmal. The minister was informed of Rand Water’s policies in respect of the Reconstruction and Development Plan (RDP), affirmative action programmes, differentiated tariffs and supplies to rural areas. The minister was also informed of vacancies on the board and that nominations had been invited.

On 28 and 29 July 1994 a conference was held at the World Trade Centre in Johannesburg where the minister outlined the approach of the government to the provision of services to representatives of the most important water authorities in the country. For V.J. Bath, the chief executive officer of Rand Water, it was clear that the message from the government was to be that water and sanitary services were, above all, to be provided for needy people. In essence the government wanted the water supply to be extended to supply ordinary people with a per capita water supply of 25 ℓ per day within 200 m of their homes. There was concern about the fact that some 12 million South Africans did not have access to clean drinking water while an estimated 21 million people had ineffective sanitary services. Asmal let it be known at the time that the government intended establishing a national water council, representative of the whole population of the country, to give the

130. RWA, Committee of the whole board, meeting 1994.08.25, p. 60.
131. RWA, Committee of the whole board, meeting 1996.05.30, p. 34.
132. RWA, Committee of the whole board, meeting 1994.06.30, p. 33.
133. RWA, Komitee van die algehele raad, vergadering 1994.07.28, p. 54.
134. Ibid., p. 54.
government advice. He also announced that the names of a number of dams in South Africa were to be changed. The government wanted to get away from the discriminatory practices of the past that did not respect the cultural diversity of the country and its peoples.  

By July 1994 the management of Rand Water had already worked out plans in respect of supply to the unserved, embracing sanitation and the possible expansion of the services of Rand Water in terms of the RDP policy of the government. The newly appointed general manager for corporate services, A.H. Davis, had extensive experience and know-how in the field. He undertook to give a monthly feedback on progress to the finance and executive committee of the board. The board agreed to the expenditure of an amount ranging between R250 000 and R1 million to be spent towards promoting the RDP plans. It was also accepted that Rand Water would work towards integrating the principles of the RDP into all facets of its strategic planning in the future.

Later in the year government policy in respect of the language issue came into place. In November Bath informed the board in committee that for administrative efficiency in the board it was proposed that ‘the language of record would be in English but Rand Water would respect the use of all official languages in South Africa’.

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137. RWA, Komitee van die algehele raad, vergadering 1994.07.28, p. 52.
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Rand Water and a new South Africa 1994-1999

In one of the discussions between representatives of Rand Water and the minister of water affairs and forestry, Kadar Asmal, shortly after the new government came into power, it was stated that although Rand Water did an outstanding job of providing water to the most urbanised part of South Africa, the water utility had paid scant attention to the plight of the people in the rural regions.\(^1\) The government’s accent on the poorest of the poor and the need also to secure for those South Africans a sense of dignity in the form of clean water became one of the first priorities of Rand Water. At the same time it also had to contend with developments in the local government sector of the region that it served. In August 1994 the Central Witwatersrand Metropolitan Chamber of Commerce released a report. It contained a projection that in time to come the existing water supply would have to carry an additional 2,5 million people in the region. The investigation, which had been conducted by the consulting engineering firm of Jeffares & Green, was aimed at determining the existing bulk supply of the region. It was found that 25 per cent of the region did not have a proper water supply to end-users. A further 22 per cent of the region did not have proper sewerage services.\(^2\) Rand Water had a daunting task ahead. First and foremost, however, was the task of determining precisely what the new government had in mind to correct this deficiency, largely

\(^1\) RWOH, p. 9. V.J. Bath, 2002.11.06, Johannesburg.

at municipal level. In the course of the final months of 1994 it was possible to form an impression.

In an effort to realise his objective of bringing water within at least 200 m of all consumers, Asmal in September 1994 announced that 12 projects had been launched to get water as close as possible to 1,2 million unserved people. One of the communities in the PWV region to benefit from the scheme was that of Winterveld, north of Pretoria. It relied for its water supply on Rand Water’s Mabopane network with no local reticulation service being provided in the semi-rural area. This project was one of many that the government had identified as a presidential lead project in a R16 billion campaign aimed at providing sanitary services and a good water supply for the country’s disadvantaged communities. In the following months European governments also made available funds for upliftment. The Danish government, was among the first foreign donors to make available R2,7 million for a rural water supply to the Northwest Province.

The government’s determination to provide water was subject to criticism. Research conducted by the fresh water research unit of the department of Zoology at the University of Cape Town, predicted at the time that the country was facing a water crisis with the annual population increase standing at as much as 3,6 per cent. There could be severe shortages in the future. The information was made public, shortly after the minister of water affairs and forestry had explained that the government wanted to ensure that the per capita consumption of water could be lifted to between 20 and 30 ℓ per day. At Rand Water the planners had to take note of this information in the process of implementing the government’s policy objectives.

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3. ANON., “Twaalf projekte om 1,2m. water te gee: 300 000 in Winterveld ook gehelp,” in Beeld, 1994.09.12.
5. ANON., “Danes give R2,7-m for water scheme” in The Citizen, 1995.01.20.
In ideological terms the state’s policy revolved around the principle of ‘water for all’. The problem that water providers such as Rand Water were faced with was determining who was going to pay for it. The minister was vague at first and explained that it could be in the form of a levy under the heading of a ‘social tariff’.\textsuperscript{7} At the same time President Nelson Mandela outlined the government’s policy of ‘democratisation of water’ at an international conference in Durban. He explained:

\begin{quote}
There will be a decided change in emphasis. In the past, some of our dams were constructed virtually for the exclusive use of the privileged section of our population. Henceforth the accent will shift to enhancing the standard of living of especially the majority.\textsuperscript{8}
\end{quote}

In a government policy paper issued at the end of 1994 it was pointed out that poor people were in effect paying 50 times more for each drop of water than many of the consumers in the affluent parts of South Africa’s urban centres. It was becoming government policy to transfer the cost of providing water to the consumers who were intent on maintaining lavish gardens.\textsuperscript{9} Moreover, the farming sector that in the past had consumed as much as 60 per cent of the country’s water was also set for considerable reductions.\textsuperscript{10}

\textbf{Determining water needs}

At the January 1995 board meeting one of the members, D.J. Dalling, a former Democratic Party member of the national legislature who crossed the floor to the ANC in 1993,\textsuperscript{11} enquired about the extent to which a survey had been conducted on the statistics of communities in need of basic water supplies. He was informed that aerial surveys had been conducted. At the same time it was stated that Rand Water did its own surveys and kept the data.

\begin{footnotes}
\item[11] Personal disclosure Mr. P. Camay, Johannesburg, 2003.04.05.
\end{footnotes}
updated constantly. There was an awareness that it was required of the corporate sector in the prevailing environment to be sensitive to the needs of poor communities. The board was also reminded that a RDP unit had been established as part of the Corporate Services Division’s activities.\textsuperscript{12} Plans were then set in motion to start preparing a list of potential projects that Rand Water could undertake.\textsuperscript{13} It was possible to provide an extensive list and before too long the organisation and its people started, with rolled up sleeves, to work for water. By January 1997 the green light was given for the establishment of a new division for community services. This division came into existence after the work falling under the general manager corporate services had increased to the extent that it was no longer possible to perform all the work within the division. The newer division was to look at community based projects – a department that had come into existence earlier with the development of operations such as Odi Water and Bapo Villages. Sanitation and the operational units that were being set up formed part of the new dispensation. Corporate services were to continue in loss control, protective services, occupational health and safety, environmental services as well as the administration section and legal services.\textsuperscript{14}

The RDP Winterveld project

Rand Water experienced a number of superficial problems in terms of planning and management when a presidential instruction was passed down for the water utility to assist in a Reconstruction and Development Program (RDP) project. The task was to supply water to Winterveld in the former Bophuthatswana. In a report to the board A.H. Davis explained that Winterveld was a peri-urban area

\begin{flushleft}
\textsuperscript{13} Ibid., p. 349. 1 141st ordinary meeting, headquarters, Rietvlei, 1995.01.26. General.
\textsuperscript{14} RWA, Committee of the whole board, meeting 1997.01.30, p. 143.
\end{flushleft}
to the north of Mabopane with a population of about 300 000 people.\textsuperscript{15}

The government wanted Rand Water to get involved in the project as an implementing agent. The water utility had to work in conjunction with the local community and the department of water affairs, as well as a cabinet committee. The task was to oversee water matters.\textsuperscript{16} It was, at that point, strange for the board to take note of the requirements for the project. It was supposed to be an integrated and sustainable programme, a people-driven process, securing peace and security for all. It had to form part of nation building, linking up with reconstruction and development and based on the principles of the democratisation of South Africa.\textsuperscript{17} For many years matters of this nature were seldom considered relevant in the board chambers of Rand Water. Now the leadership of the largest water utility in South Africa found itself in the position of a junior partner when it came to getting permission from the local community for the installation of a water supply scheme.\textsuperscript{18} The board in a subdued manner noted what was happening.\textsuperscript{19}

In a short period of time the project was burgeoning into a substantial undertaking with a value of R23,4 million by August 1995. The objective was to provide a community, now estimated to be a population of more than 350 000 people, with a suitable water supply.\textsuperscript{20} The department of water affairs and forestry who had initiated the project started withdrawing in the course of 1995, and Rand Water’s staff and the local population were involved in

\begin{thebibliography}{99}
\bibitem{15} RWA, Minutes 1994-5, p. 269. 1 139th ordinary meeting, headquarters, Johannesburg, 1994.10.27. Report A.H. Davis: Corporate services.
\bibitem{16} \textit{Ibid.}, pp. 269-70. 1 139th ordinary meeting, headquarters, Johannesburg, 1994.10.27. Report A.H. Davis: Corporate services.
\bibitem{17} \textit{Ibid.}, p. 270. 1 139th ordinary meeting, headquarters, Johannesburg, 1994.10.27. Report A.H. Davis: Corporate services.
\bibitem{18} \textit{Ibid.}, p. 270. 1 139th ordinary meeting, headquarters, Johannesburg, 1994.10.27. Report A.H. Davis: Corporate services.
\bibitem{19} \textit{Ibid.}, p. 270. 1 139th ordinary meeting, headquarters, Johannesburg, 1994.10.27. Report A.H. Davis: Corporate services.
\bibitem{20} RWA, Rand Water Board: annual report 1995, p. 2.
\end{thebibliography}
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extended training programmes, capacity building, and development strategies. The project was divided up into small sub-projects with a value of between R25 000 and R300 000 per contract. These were then given to small contracting firms that were given the opportunity to make some headway.21

The process of Africanisation was proving to be a new adventure for an organisation that had become one of the best of its kind in the world. The experience gained in this field was valuable. It could be applied in many other areas of development work being conducted by Rand Water elsewhere.

Operations at Bushbuckridge

Already in 1989 a deputation of Rand Water had visited Eastern Transvaal (later Mpumalanga Province) to communicate with rural authorities on water supply and sanitation.22 Very little was done at the time to get more directly involved in the project. Towards the end of 1994 the Sabie River Water Board asked for advice and expertise in supplying water to Bushbuckridge. The department of water affairs and forestry (DWAF) also suggested that Rand Water get involved. In broad terms the project required of Rand Water to assist some 300 villages in the Bushbuckridge region in securing a good supply of water.23

During the briefings on the project it was stated that the work would start once it had been registered as an RDP-project with the government.24 By September 1995 Rand Water had been appointed as implementing agent on a cost recovery basis. Management intended executing the work through the community-based projects department that was at the time scoring substantial

22. RWA, Committee of the whole board, meeting 1998.08.27, p. 20.
successes in many of its initiatives. The whole objective of the exercise was to put in place a water services institution.

In January 1999 it was reported to the full board that Rand Water was acting, on behalf of the department of water affairs and forestry, through the Mpumalanga regional offices, to operate as a facilitator in helping the employees of Bushbuckridge Water operate on their own. By 2000 Rand Water had facilitated the conclusion of the tripartite Sanbonani accord between Bushbuckridge Water, the Mpumalanga provincial government and DWAF in order to give effect to this mentoring process. At the time there was also another agreement in place in which Rand Water agreed in broader terms to maintain its ties of friendship with Bushbuckridge Water, always at the ready to provide support if and when it was required.

The Odi project
In the second half of 1996 Rand Water took over part of the activities of the North West Water Supply Authority (NWWSA). This was in response to a request by DWAF. The understanding was that the project would not exceed a period of five years. The functions were *inter alia* to take on the responsibility of a retail distribution of water to Mabopane, Ga-Rankuwa, Winterveld, and the surrounding peri-urban areas, as well as the Bapo villages near the Eastern Platinum Mine. At the time of the takeover Rand Water inherited a large staff and an organisation that relied heavily on subsidies from the department of water affairs and forestry. There was a strong prevalence of non-payment in the region. The local authorities in the region were also not in a position to provide retail water readily to consumers.

26. RWA, Committee of the whole board, meeting 1999.01.28, p. 92.
28. RWA, Committee of the whole board, meeting 1999.01.28, p. 92.
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In what was described as the first annual report of the ‘turn around plan’, it was stated that the objective was to make the entity of the Odi Water undertaking a financially sustainable system. The urban centres of the Odi region were Mabopane and Ga-Rankuwa where there were about 22,000 houses dating back 20 to 30 years. The stands were fairly well serviced and there were meters on all the sites.

The peri-urban areas of Odi included the areas adjacent to Mabopane and Ga-Rankuwa, as well as Winterveld, the poorest area in the region. The third peri-urban area of Odi was the series of villages near the Eastern Platinum Mines of Bapong, Wonderkop, Segwelane, Majakaneng, Makolokwe, Oskraal (Bapong East) Mooiinooi and Modderfontein. These areas, at the time of the inception of the services had a limited supply of water available.

The total population in the Odi area was estimated in 1997 to be about 500,000 people. There were 27,000 metered connections to the water system and about 10,000 illegal connections. It was a region of considerable poverty and numerous inherited problems. The water provision service was poor and there were hardly ever responses to complaints that had been lodged. The state’s houses were poorly maintained and unemployment was the order of the day. There were insufficient pay points and inconvenient opening hours. The existing local authorities did not bother getting involved in the system and in many cases they also proved to be unable to render a proper service. It was against this backdrop that Rand

34. Ibid., p. 460: 1 164th ordinary meeting, headquarters, Rietvlei, 1997.02.27. Report V.J. Bath: Corporate services division.
Water became involved. With the active support of the South African Bureau of Standards it was possible to prove how effective management plans could prevent water wastage.\(^{35}\)

The project planners immediately set up a plan of operations for what was described as Odi Retail Water. It operated as a separate business unit (SBU) of Rand Water.\(^{36}\) At the outset the sale of water was well below retail tariffs and more in line with the basic cost of bulk water supply. It was the intention to push up the tariff gradually over a period of five years.\(^{37}\) Local community leaders were brought into the negotiation process with the view of creating an environment where people would be prepared to start paying arrears. The collection of revenue was to be conducted by the Bophuthatswana Electricity Corporation at their offices in the region. Advanced information and an effective marketing campaign was started in order to make the community aware of the service that was being introduced.\(^{38}\)

The operating cost of the project was high. In the first year of service (1996/7) it was estimated that R42 million, funded by government, was necessary. There was to be a supplement from the department of water affairs and forestry of R26 million. It was estimated that the daily consumption would be about 20 M\(\ell\)/d.\(^{39}\)

Over the long term the project proved to be effective in that it was possible to introduce a service in a poor rural area where the process of urbanisation had started on an informal basis. In 2000 it was reported that the project was well underway. The new objective was to enable Odi Water to operate independently of

\(^{35}\) See C. CHAPMAN, “Water management: crucial for any water supply authority” in SABS Bulletin, 17(1), March 1998, pp. 5-8;


\(^{38}\) Ibid., p. 461: 1164th ordinary meeting, headquarters, Rietvlei, 1997.02.27. Report V.J. Bath: Corporate services division.

Rand Water in supplying water to its own region. Rand Water continued to provide valuable assistance in placing the service on a sound footing. The government had meanwhile also made available subsidies enabling the communities to pay for the services provided. It was reported that Odi had all the potential of becoming in the near future a showpiece for what could be achieved ‘in the provision of sustainable services in newly self managed urban areas’. 40

The government and Rand Water

In February 1996 the minister of water affairs and forestry, Prof. Kadar Asmal, addressed the board, following its monthly meeting. He said that boards in general would in future have to expand their roles to reach out to the broader community. This had to become the core of their business. 41 It was necessary, he maintained, for local communities in the rural regions to be educated and trained in respect of water. Water boards were also to start co-operating more than had been the case previously to make water available to more parts of the country. 42 Asmal made a point of accentuating the fact that water conservation played an important part in the plans of the department of water affairs and forestry. Discussions were to take place with the different water boards in respect of pricing policies. 43 Asmal also stated that the Rand Water Board statutes had to be revised in such a manner that it was in step with the government’s proposed water legislation. 44

From the subsequent discussions it was clear that the government intended giving its full support to all plans aimed at pushing up the price of water to levels that were on a par with the value of the scarce commodity. The government was also aware that 60 per cent of the country’s water was being used for irrigation farming. Asmal

41. RWA, Minutes 1995-6, p. 378: 1 152nd ordinary meeting, headquarters, Rietvlei, 1996.02.02.
42. Ibid., p. 378: 1 152nd ordinary meeting, headquarters, Rietvlei, 1996.02.02.
43. Ibid., p. 378: 1 152nd ordinary meeting, headquarters, Rietvlei, 1996.02.02.
44. Ibid., p. 378: 1 152nd ordinary meeting, headquarters, Rietvlei, 1996.02.02.
indicated that that mapping of the country’s underground water resources had been completed and that a water law concerning the use of boreholes was to be introduced in good time.45

Local government
In the months following the 1994 elections the Gauteng government launched an extensive campaign to provide inhabitants of the province with sufficient housing.46 In political circles it was maintained that the Gauteng government had to ensure that the system of local government was in place, before embarking on large-scale house building schemes.47 Government had another agenda. It argued that on average some 300 000 houses had to be built annually if the demand were to be brought down to reasonable levels in the near future, according to the minister of housing, Joe Slovo.48 This placed pressure on the revival of local authorities after April 1994. The government appeared to be adamant: local government had to contend with the country’s housing needs and provide the services if and where it was deemed necessary. In the 1980s Rand Water positioned itself as a basic service supplier to local authorities. By 1994 the crucial issue was no longer a matter of merely providing water. It now also had to concern itself with sanitary services for the new local authorities.

Towards the end of 1994 a transitional metropolitan council was promulgated for the Witwatersrand region. It was intended ultimately to replace the existing municipalities of Johannesburg, Sandton, Roodepoort, Alexandra and Johannesburg.49 Similar developments were the order of the day in other parts of the area served by Rand Water. The new dispensation did not offer a solution to the problems.

45. Ibid., pp. 378-9: 1 152nd ordinary meeting, headquarters, Rietvlei, 1996.02.02.
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Rand Water was faced in this period with redefining its bulk water customers. Municipalities started regrouping themselves into transitional local authorities. In many cases the staff leadership in the organisations had changed. Rand Water was consequently forced to build up new relations with these authorities and their key representatives. In addition a new database of information had to be developed. At the start of 1995 it was expected that institutional stability would once local elections had been held. These were scheduled for November 1995.\(^{50}\)

At the start of 1995 the board was informed that Messrs. Bath and Dalling had been in meetings with the responsible member of the executive committee of Gauteng, Dan Mofokeng. The provincial minister for local government and housing had indicated that he wanted to appoint strategic task teams and needed Rand Water to be represented in the system.\(^{51}\) An important aspect of these talks revolved around securing the re-introduction of a responsible attitude toward the payment for services rendered by institutions such as Rand Water.\(^{52}\) In March 1995 the board was informed that a summary had been finalised for the attention of Mofokeng so that the provincial government could take note of the late payments of some of the local authorities.\(^{53}\)

Behind the scenes the members of the management of Rand Water were actively involved in contributing to the new proposed legislation that was introduced by the government in respect of water supply and sanitation. Bath regularly kept the board posted on the negotiations taking place on the matter with the new local transitional authorities.\(^{54}\)

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After the elections, Rand Water’s management started positioning the organisation to provide the local authorities with the necessary services and advice. It was a priority of Rand Water’s management to secure a good service to all its consumers.\(^{55}\)

One of the major responsibilities of the utility was literally to redefine itself in terms of its status as a regional bulk supplier of water.\(^{56}\) It was becoming increasingly clear that the organisation had a substantial role to play in transforming South Africa. In an effort to cope with the demand for water and sanitary services in previously disadvantaged communities, Rand Water’s management started approaching the private sector to give its support in the context of development strategies. One implication was, of course, that Rand Water was to find itself in a competitive environment.\(^{57}\)

**Non-payment for water**

A persistent problem remained consumer commitment to service payments. In April 1995 the board was informed of a number of local authorities that were in arrears with their payments for water. The board gave instructions that more detailed information be made available on the matter at a later meeting.\(^{58}\) In May it was reported that Rand Water’s financial administration had been in correspondence with some of the local authorities that were in arrear. One indicated that the matter was to be considered by the executive committee of the council and another recommended that the interest on arrears be scrapped. For this the financial manager of Rand Water could not find any reasonable explanation.\(^{59}\) The following month, one of the major debtors of Rand Water made a payment of R1,5 million and indicated that negotiations were being

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59. RWA, Minutes 1995-6, p. 89: 1145th ordinary meeting, headquarters, Rietvlei, 1995.05.25.
conducted with the Gauteng provincial government to get more funds to pay the arrears.\textsuperscript{60}

By August 1995 the first steps were taken in preparation for cutting off the water supply to the Kempton Park/Midrand transitional local council. At the monthly board meeting it was disclosed that negotiations had taken place with the chairman of the local council, who had requested Rand Water to report in writing to the minister of water affairs and forestry on the situation. Rand Water’s representative agreed to do so. At the same time information on the state of affairs was given through to the local chambers of commerce. Local hospitals had also been notified of the situation in advance.\textsuperscript{61}

Not even the large local authorities that traditionally had been able to contend with vast financial responsibilities could live up to expectations. In November 1995 steps were taken by Rand Water’s financial division to get a payment, within 14 days, from the Greater Transitional Metropolitan Council of Pretoria. It had fallen in arrear with payments.\textsuperscript{62}

In February 1996 it was reported that some of the board members had negotiated with members of councils that were in arrear with their payment. This had the desired effect.\textsuperscript{63} Increasingly the trend developed for the finance and executive committee to single out the local authorities that were the furthest in arrears with their payments for services.\textsuperscript{64}

In 1997 the Johannesburg Southern Metropolitan substructure was in the process of collapse, following the deterioration of services.

\textsuperscript{60} RWA, Minutes 1995-6, p. 129: 1 146th ordinary meeting, headquarters, Rietvlei, 1995.06.29.
\textsuperscript{61} RWA, Minutes 1995-6, p. 183: 1 148th ordinary meeting, headquarters, Rietvlei, 1995.08.31.
\textsuperscript{62} RWA, Minutes 1995-6, p. 334: 1 151st ordinary meeting, headquarters, Rietvlei, 1995.11.30.
\textsuperscript{63} RWA, Minutes 1995-6, p. 408: 1 153rd ordinary meeting, headquarters, Rietvlei, 1996.02.29.
\textsuperscript{64} RWA, Minutes 1996-7, pp. 33-4: 1 155th ordinary meeting, headquarters, Rietvlei, 1996.04.25.
Rand Water was owed several million rands. In addition the Greater Johannesburg Transitional Metropolitan Council informed the board that it had not received payments from the various substructures. At the time the amount that was owed to Rand Water was in the order of R38 million.\(^{65}\) There were promises of half the outstanding money being paid over, but it still implied huge losses for Rand Water. The Masakhane Project, a government initiated campaign aimed at creating a sense of civic responsibility and pride, was not having the desired effect when it came to paying for water.\(^{66}\) The Gauteng government had indicated earlier on that there was no chance of the substructures’ receiving any support.

Rand Water found itself in a difficult position. It could not afford to absorb the losses of non-payment. At the same time management knew that they had the responsibility of negotiating for payment of the outstanding money from the substructure. In view of providing a form of support, the board of Rand Water approved the expenditure of an amount of R500 000 for an investigation into the situation so that a database could be established for planning purposes.\(^{67}\) The objective was to provide support in solving the problem that presented itself on the provincial level.\(^{68}\)

In the course of 1998 it was evident that many local authorities were still in arrear with payments. They did not seem to keep the promises they had made during negotiations with Rand Water officials. Subsequently, in March 1999, the board approved a policy document for action against defaulting local authorities. It implied in essence that once a local authority started defaulting on payments for water supplies, there would be negotiations, consultation and warning of a reduction in the supply of water.

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68. Personal disclosure, V.J. Bath, Westcliff, 2003.03.07.
before legal steps were taken. In the course of actions several other parties concerned were to be informed of the state of affairs and information was also to be given through to the media. Within 100 days of an account falling in arrear, water supplies were to be reduced substantially, pending the outcome of legal prosecution.\(^69\)

**Planning for sanitary services**

With the passing of the *Water Laws Rationalisation Act*, No. 32 of 1994 responsibility was assigned to an organisation like Rand Water to make the necessary provision for sanitation services. The greater responsibility in terms of the legislation lay with regional authorities that generally wished to retain their responsibilities. They were spread over the complete distribution area of Rand Water’s limits of supply. It was realised that Rand Water had a definite role to play.\(^70\) In 1995 Rand Water appointed a firm of management consultants to investigate the nature of sanitation services in its region of supply. The report was comprehensive and pointed to a number of problems experienced at the time in the local government system served by Rand Water.

When the report was submitted to the board in October 1996 it was recommended that it was not appropriate for Rand Water to establish a separate focused sanitation functional unit. It was instead suggested that existing structures be used in order to provide the essential support in as far as it was required at the time. The furthest that the organisation was to go towards providing support in sanitation matters was by appointing certain officials where human resource needs existed. It was also recommended that Rand Water would be involved in compliance monitoring and technical advice support. It could help in the application of a diagnostic framework to establish deficiencies within communities or in local authorities. Rand Water could also move into the area of enabling projects that could include medium to long-term technical

\(^69\) RWA, Minutes 1998-9, pp. 405-12: 118th ordinary meeting, Rietvlei, 1999.03.25. V.J. Bath: Corporate services division.

and management support. It could help in the process of setting up appropriate management structures (partnerships) in order to render services. Overall, the task of Rand Water was perceived as one aimed at providing a service.\textsuperscript{71}

Perhaps of greater importance in the report at the time was the background to the existing problems in local government. The investigators found that there had been a substantial exodus of managers and skilled workers from the service of local authorities. It was increasingly becoming difficult to get the necessary information because of this state of affairs. There was a sense of uncertainty and conflict among different local authorities. Decision-making was delayed for an unlimited period of time. In many areas the existing physical infrastructure was under severe strain. It was evident that there was a general decline in service levels. The unrestrained process of urbanisation had the effect of reducing socio-economic wealth. Overall this state of affairs was placing the infrastructure of the sanitation systems under severe strain.\textsuperscript{72}

Problems were experienced at the time in most areas of Rand Water’s limits of supply. The only local authorities that seemed to cope were the Greater Johannesburg Transitional Metropolitan Council, the Greater Pretoria Metropolitan Council and the area of the East Rand Water Care Company.\textsuperscript{73}

The greatest crisis appeared at the time to exist in the area of the Lekoa Vaal Metropolitan Council’s area of jurisdiction in the Vaal Triangle.\textsuperscript{74} Consequently it was decided that a sanitation-enabling project (SEP) had to be introduced. It was estimated that the first phase would cost R1 million. Rand Water’s proposal was for Lekoa to pay one half, with the water utility paying the other. Rand Water


\textsuperscript{72} RWA, Minutes 1996-7, p. 66: 1156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Scientific service division.

\textsuperscript{73} Ibid., p. 66: 1156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division.

\textsuperscript{74} Ibid., p. 66: 1156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division.
was prepared to use money that had been set-aside for the purpose in the budget of 1996-7. The problems were much larger than Rand Water was able to finance at that point in time. According to the consultants, it was estimated that R180 million was necessary over a period of three years to upgrade the wastewater treatment facilities of the Lekoa Vaal Metropolitan Authority. Over a period of 20 years, it was predicted that the local authority would have to spend R1400 million for the sanitation system it required.\textsuperscript{75}

The consultants recommended that the East Rand Water Care Company be brought into the scheme of things as the company had considerable experience in coping with the treatment of sanitation water in the region.\textsuperscript{76}

In the ‘scoping programme for the scheme’, provision was made for \textit{inter alia} the upgrading and extension to the Sebokeng and Leeuwkuil water care works and the upgrading of various interim projects such as the decommissioning of the Meyerton works and the construction of the Rothdene pumping system. Overall the plan also made provision for structuring a management plan for the Lekoa Vaal sanitation system.\textsuperscript{77} The board of Rand Water gave its approval to make available just short of R1 million for the project.\textsuperscript{78}

In July 1997 the board indicated that it was in favour of plans by Rand Water literally to take over the Lekoa Vaal Metropolitan Council’s responsibilities in respect of dealing with its sanitation. In the plans, provision was made for a company of engineers to take over the supply of water and the purification of the Vanderbijlpark and Vereeniging sewage supply. The first phase of the Lekoa Vaal Metropolitan Enabling Project was to be given to the firm Booz Allen and Hamilton (South Africa) Limited. The management of

\textsuperscript{75} \textit{Ibid.}, p. 66: 1 156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division.

\textsuperscript{76} \textit{Ibid.}, p. 66: 1 156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division.

\textsuperscript{77} \textit{Ibid.}, p. 66: 1 156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division.

\textsuperscript{78} \textit{Ibid.}, p. 66: 1 156th ordinary meeting, headquarters, Rietvlei, 1996.05.30. Report V.J. Bath: Corporate services division. Board decision.