ENVIRONMENT - 1988

Jan - March
Wentzel praises Ciskei’s water scheme

Daily Dispatch Reporter

EAST LONDON — Joint planning between South Africa and Ciskei was needed to maximise the benefits of the Lower Fish River Irrigation Project.

The South African Minister of Agriculture, Mr Greyling Wentzel, speaking at an on-site inspection of the project and Tefu Irrigation Projects on the banks of the Fish River said the R100 million Orange River project, which would feed water into the area, was extremely important for the two countries as it would improve relations.

"There is a potential for joint ventures in the fields of marketing, agricultural production, exports and imports and the creating of a common market system," he said.

Mr Wentzel congratulated the Ciskei Department of Agriculture and Fisheries in general for the success of a "very well-planned irrigation scheme".

Ciskei was moving forward in such a well-planned manner that it could move from its present position of importing all its food requirements to become a food exporter.

Commenting on the ideal to supply all Ciskeians with a daily meal, he said: "Today this ideal is going to be achieved which is something to be said about an African country."

The Ciskei Director General for Agriculture, Mr Bonde Jack, said a report on a regional marketing strategy, addressing all the problems of marketing, would be finalised by June this year.

Mr Jack said a joint liaison committee, comprising academics from Stellenbosch and Fort Hare universities, representatives of South Africa and Ciskei, the Development Bank of South Africa as well as farmers, had been addressing the problems for the past 18 months and would draw up the report.

One of the project consultants, Mr Bernard Rhodes, said they wanted to ensure the natural resources, particularly soil and water, were utilised in a conservative manner which would result in sustained productivity and enduring benefit to the community.

Mr Rhodes said job creation was of particular importance to the planners and whenever crops were decided on, those that would provide the most jobs were chosen.

Currently vegetable crops for freezing and citrus offered high returns and maximised employment creation.

Some 475 hectares are presently under irrigation, supporting 31 commercial farmers, 207 foodplots, three tribal farms, and one estate.

Up to 1,000 casual workers as well as 100 regular workers are employed in the scheme.

Agricultural production in the past year was high and the project also providing subsistence for 200 families.

Additional citrus will be a major crop when the water becomes available in 1988.
Deadly defoliant used in SA

DURBAN. — Agent Orange, a defoliant used by the US Army in Vietnam to kill plants, contains 50% of a weed-killer at present being widely used in Natal.

Symptoms which appeared in American soldiers exposed to Agent Orange, such as skin cancer and deformed offspring, are now occurring in Natal.

The weed-killer is 2,4 D, which made up 50% of Agent Orange. Used extensively by farmers on Natal's sugar belt, 2,4 D has replaced the old method of hoeing out weeds.

Initially blamed for an unexplained increase in foetal abnormalities encountered in the Camperdown-Richmond area, 2,4 D now stands accused of disturbing the whole ecology of the region — and more specifically of killing off a large proportion of Natal's vegetable crop.

"I guarantee, if hormonal herbicides were banned, the price of Natal's fresh produce would drop by a third," says Natal Fresh Produce Growers' Association chairman, Mr Roger Evans.

The biggest problem confronting researchers is to find out how 2,4 D transports from the sugar-cane fields to the vegetable fields.

Although the other ingredient in Agent Orange, 245 T — which kills trees — is no longer produced, 2,4 D continues to be used widely as a broad-leaf weed killer.

Since the US Army evacuated its forces from South Vietnam more than a decade ago, Agent Orange has been blamed for numerous diseases experienced by Vietnam veterans and the Vietnamese.

In 1979 the United States government banned the use of Agent Orange.

Environmentalists reported a tragically high rate of miscarriages after spraying.

It is understood that Western Cape farmers have imposed a voluntary ban on 2,4 D as it was found to affect fruit crops, including grapes, and in the Eastern Transvaal use of the herbicide is kept to a minimum.
Tarka curbs water usage

Daily Dispatch Reporter

QUEENSTOWN — Strenuous water restrictions have been imposed in Tarkastad as boreholes supplying the town with water are drying up.

The deputy mayor, Mr Mike Richardson, said the situation was serious as it was not known how much longer these boreholes would yield water.

Residents were restricted to using water for domestic purposes only. This excluded watering gardens with hose pipes or buckets and cans, and washing motor vehicles.

Mr Richardson explained that the town received its water supply from five boreholes. Water was pumped to two holding reservoirs above ground.

Two additional boreholes supplied water to the neighbouring Zola township. These had dried up and the township was now drawing from the town's supply.

Mr Richardson said the water supply was dependent on seasonal rains. The worst drought the area had experienced was in 1990/1991. Water was being rationed, and residents were urged to save water.

"We have a problem as we do not know what is happening underground and we could run out of water at any time. Consequently we have urged residents to practise the utmost water economy."

The Department of Water Affairs in Pretoria had been approached for advice and it was possible that one of the boreholes would be re-bored or that a survey to find an additional source of water would be undertaken.
Sugar industry begins probe into weed-killer

Staff Reporter

Research into the effects of a deadly weed-killer— one of two ingredients in "Agent Orange", used in Vietnam to destroy tracts of jungle — has been launched by the sugar industry and the executive of the National Fresh Produce Committee.

The investigation follows reports that the hormone herbicide 2,4 D is being widely used in South Africa, particularly in Natal's sugar plantations.

Symptoms which appeared in American soldiers exposed to "Agent Orange", such as skin cancer and deformed offspring, are now occurring in Natal.

The South African Sugar Association (SASA) said yesterday that in the light of "conflicting claims and contradictory evidence" regarding the effects of hormone herbicides, research had been initiated to provide "a conclusive answer".

Since the sugar industry used less than 25% of all herbicides in South Africa, an attempt will be made to involve all other agricultural sectors.

"The objective is to arrive at firm conclusions on the involvement of hormone herbicides before the start of the 1988 summer spraying season," a SASA spokesman said yesterday.
The people of Tyefu in the Feddie district have their hopes for the future focussed on the R100 million Orange River bulk water supply scheme which will bring quality water into the Lower Fish River Irrigation Project (LFRIP).

The pilot LFRIP, which has operated for 10 years, has grown steadily in that time and is set for further success when the water becomes available at the end of 1980.

An historical review of the LFRIP is outlined in the 1986 joint development proposal compiled by the Ciskei Department of Planning.

The report says the possibility of developing the irrigation potential in the area was the subject of investigation and discussion for many years. The first soil surveys were undertaken by the South African government in the mid thirties but the high salinity of the Fish River water precluded any major development of the area.

In 1975, the Ciskei government took the initial major step of commissioning an investigation into the feasibility of developing the irrigation potential on the Ciskei bank, and by 1977 the first lands were brought under irrigation.

Water of a suitable quality was trapped in catchment dams on the tributaries of the Fish River as well as being pumped from the river during periods of low salinity and high flow.

Some 500 hectares are now irrigated in Ciskei from these sources but further development requires a larger, more assured water supply scheme.

In 1978 a joint steering committee of the South Africa and Ciskei governments was established to investigate the possibility for developing the overall potential of the area.

In October 1981, a report prepared by the consultants to the Ciskei government was tabled, which identified a bulk supply scheme utilising off-channel storage and water supplied from the Verwoerd Dam. This scheme recommended the development of an international project to supply water to irrigation areas in both countries and formed the basis of the scheme presently being developed.

Although the project was at first turned down by South Africa, after further appraisals the State President, Mr P. W. Botha, announced in May 1985, that the project would proceed under the direction of the South African Department of Water Affairs.

That department immediately commenced with the detailed planning and design of the scheme and, by late 1985, the initial construction work had commenced.

The distinct advantage of the project is that Ciskei has for the past 10 years pioneered the development of irrigated crop production in the area and now has conclusive proof of successful crop production.
SMOG

The plague of our times

ATHENS — Like a modern plague, smog has settled on many of the world’s great cities. As roads become increasingly clogged with traffic, governments are under pressure to find new ways to clean the air.

Cities such as Tokyo and London have succeeded in checking air pollution, but the problem is worsening in places like Athens and Rome, according to a Reuters survey.

Faced with a mounting public outcry, the Greek Government this week announced tough new anti-smog measures including the banning of all cars from a large area of the centre of Athens, special exhaust systems for buses and halving the number of taxis in the city centre.

The drastic measures follow a statement by a doctors’ conference saying that six deaths daily in Athens could be attributed to smog. Environmental groups and doctors attributed many of the 1,000 deaths in a heatwave last July to pollution-related respiratory ailments.

Los Angeles, one of the first major cities to confront smog in the 1950s, could take another 20 years to meet government clean air guidelines, according to city air quality official Mr. Thomas Eichhorn. "That is a very aggressive programme, even to shoot for 20 years," he said.

In November a new programme was approved for Los Angeles companies to provide incentives for employees to form car pools but environmental groups say the authorities are not moving fast enough to pass new laws or enforce existing ones.

The situation is even worse in Latin America where Mexico City and Sao Paulo have grown to monstrous proportions. Mexico City, with a population of 18 million, has 2.3 million automobiles circulating daily with no pollution-reducing equipment.

Ecology groups say pollution could result in thousands of deaths each year in Mexico City, but these estimates are denied by the government.

Among measures taken by the government is the introduction of low-lead gasoline and the changing of school opening times to avoid the worst hours when the smog is worst.

Officials in Sao Paolo, the southern hemisphere’s biggest city with 16 million people, also cite the Brazilian city’s 2.5 million vehicles as the major source of smog.

In Peking, foreign environmentalists compare air pollution with the London smog of 30 years ago, the main culprit being high-sulphur coal burnt in stoves to heat the homes of millions of urban families.

China has not published figures for deaths linked to air pollution, but respiratory diseases are common and the distinctive hacking coughs of Peking residents can be heard on every street corner in the morning rush-hour.

Surprisingly, the level of air pollution from Bangkok’s legendary traffic jams remains within acceptable limits set by international standards.

Mr. Siritan Pairoj-Roribo, director of the Thai National Environment Board (NEB), said it was feared that smog from cars would become a problem in the future. An NEB report said there were high concentrations of carbon monoxide and heavy metal lead in some parts of Bangkok.

Two of the world’s few smog bright spots are London and Tokyo, once among the most air polluted cities but which have successfully done away with most airborne pollutants.

In Tokyo, a vigorous local administration over the years rid the city of most buses, enforced
that traffic police took to wearing face masks to protest against government inertia in tackling the problem.

Mr Renato Zeno, a lung specialist at Rome’s Regina Elena Hospital, said: “Studies show that the rate of respiratory diseases in Rome city centre is about three times than that in the suburbs.”

a new smog alarm system whereby citizens are warned whenever sulphur dioxide levels climb above 200 micrograms per cubic meter of air.

Switzerland has adopted the toughest auto emission standards in Europe, cut speed limits and boosted public transport subsidies in its fight to reduce air pollution.

Lead-free petrol in cars and taxis and extended inefficient metro system for commuters.

London’s famous smoggy fogs began to fade after the Clean Air Act in 1956 which reduced sulphur dioxide levels by setting up smokeless zones where only specified fuels could be burned.

“Coal fires were the main culprits,” a Department of Environment spokesman said. “As far as we're concerned smog is a thing of the past.”

Ms Mary Blake, of the Friends of the Earth environmental group, said: “The Clean Air Act was quite a success story. People in Europe are quite envious of us.”

But Ms Blake says restrictions on car emissions introduced last week need to be stronger. — Sapa-Reuters.
Grahamstown water supply at low level

Daily Dispatch Reporter

GRAHAMSTOWN — Unless the heavens opened before the next meeting, city councillors would probably have to impose water restrictions.

This was said by the spokesman for works, Mrs Pamela Paton.

The maximum water stored in all four dams was down to 45 per cent on January 17, she reported.

The cut-off point is 40 per cent when restrictions will be imposed and riparian owners on Settlers' Dam will automatically have their rights withdrawn.

"There is no way by law that we can do anything about it until we get to cut-off point," Mrs Paton said.

Recalling the last severe drought which ended two years ago, she said the restrictions would be imposed in three phases.

- At the start householders would not be allowed to use hoses for watering their gardens. Nor would they be allowed to wash their cars with municipal water.
- The next stage would be restrictions on watering gardens altogether.
- Finally, water would be rationed by means of a penalty tariff.

The Lower Fish River water scheme, which is proceeding as the provision of money permits, could be complete by the end of 1992, but none of the officials is prepared to put a firm date on this.

So Grahamstown can anticipate a dry winter unless the heavens open between now and mid-February.

During the last drought a series of test boreholes were sunk. It has not been discussed whether these sources could be tapped.

The idea was to link the ground water with the municipal supply.

The best gushes were found at the top and bottom of African Street.
PRETORIA — By the end of December last year R600,000 had been collected for the Natal flood disaster fund through sales of special disaster stamps.

On February 3, special Dias stamps will be issued, a statement from Posts and Telecommunications in Pretoria said.

The 16c stamp in this series will also be available as a surcharge stamp from March 1.

Four Pretoria firms presented a cheque for R4,000 for the flood fund to the chief Postmaster Mr Nie Jacobs.

Mr Jacobs said he hoped other firms would follow this example. — Sapa
Deliberate river flooding kills two men

MARITZBURG — The opening of the Henley Dam sluice valves last Wednesday to boost the water level of the Umzunduzi River before the start of the 1988 Durban Marathon, has claimed the lives of two bread winners in Mgodini, an adjacent location of Edendale, which is just below the dam.

Mr Mandla Mbatha (38) and Mr Skhumbuzo Mabula (44) were washed away by the flooded river after alighting from a bus when they tried to cross the river to reach their homes on Wednesday afternoon. The sluice valves were opened at about 11.30am.

The deaths have caused bitterness among community members upset about what they described as the "callousness of authorities whose priority concern was to facilitate the entertainment of white canoeing enthusiasts".

Workers and pupils were unable to cross the low-level Samora bridge last Thursday because of the man-made floods. — Sapa
Vaal Dam still 100,5 pc full

The Vaal Dam was still 100,5 percent full at the end of January, although the total January rainfall in the catchment area serving the Rand Water Board's four major dams was 56,2 mm down on last year's figure, according to Rand Water Board statistics.

Natal's Woodstock Dam was 96,1 percent full, the Free State's Sterkfontein Dam 39 percent and the Bloemhof Dam in the western Transvaal 46,3 percent full.

The total amount of water in these dams was 66,4 percent, compared with 26 percent at the same time last year.

Their catchment areas had 106 mm of rain in January, compared with 162,2 mm last year.
Toddlers die in shack fire

East Rand Bureau

Three toddlers burnt to death when a shack in a squatter camp at the Katlehong coalyard burnt down at the weekend.

Police said the fire broke out at 9.45 pm on Saturday.

Two little girls, aged two and 18 months, and a boy, aged 12 months, died in the blaze. They were alone in the shack at the time. Police are investigating arson.

A five-year-old son of an 'Alberton' domestic drowned when he fell into a pool yesterday.

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Storm uproots 700 lemon trees

NELSPRUIT — A violent storm uprooted 700 lemon trees and extensively damaged another 535 — all laden with fruit — at Tekwane Estates, South Africa's largest lemon producers, at the weekend.

The storm, accompanied by hail, wind and rain also left people homeless when it ripped roofs from buildings and broke scores of window panes.

A large tobacco crop, ready for reaping, was destroyed by the freak storm which lasted about 15 minutes.

The storm started shortly after 3.30 pm on Sunday when a powerful wind, accompanied by hail, swept through the farm destroying everything in its path, according to Tekwane Estates manager, Mr Brian Sproule.

"At the height of the storm corrugated iron sheets were being blown around like dry leaves," Mr Sproule said.

At Tekwane's Magogeni staff village considerable damage was caused to a new hostel and dining-room complex when two wood and iron sheds were lifted from their concrete slabs.

"Nobody was injured during the storm."

At nearby Tekwane, scores of people were left homeless when the storm swept through the Kwa Nymazane and Pienaar townships.

Many stranded inhabitants spent Sunday night with friends.

Machadodorp also reported extensive damage after a storm swept through the village shortly before 6 pm on Sunday.

"The storm, accompanied by large hailstones, uprooted trees, broke windows and lifted roofs."

The Lowveld storm was preceded by blistering weather on Saturday and Sunday with some areas reporting temperatures up to 40 deg C.
CSIR and health authorities fall out over power industry acid rain

The CSIR has publicly revealed a serious clash between itself and the Department of Health over acid rain in the Transvaal.

The Transvaal's acid rain is from airborne sulphur from Eskom's giant power stations and from Secunda's oil-from-coal plants, which spew nearly 1 million tons of sulphur into the air to save anti-pollution costs.

In 1984, The Star's CARE campaign revealed that Johannesburg's rain was as acidic as the worst areas in Europe.

The CSIR's clash with the Department of Health and Eskom (reported in its journal Scientia) came at a recent meeting of the National Association for Clean Air.

A "strong difference of opinion about industrial expansion on the Eastern Transvaal Highveld" emerged with the CSIR saying the environment could not take much more acid fallout and warning that "acid rain in Europe and North America resulted from a build-up of air pollution over at least 10 to 15 years".

Eskom and the Department of Health felt there was little cause for concern. But, said Scientia, "most CSIR researchers were adamant".

The Government's health men have claimed that levels of sulphur dioxide and particles such as sulphate, nitrate and chloride at ground level were "reasonably low".

CSIR experts said fall-out was "definitely" increasing at ground level and that 300 m above the Transvaal concentrations were high.

South Africa is one of the world's smallest spenders on clean air equipment.
LESOTHO WATER PROJECT

On stream

Tenders for the northern access road to the construction site of the Katse Dam in Lesotho — part of the R1.5bn first phase of the R5bn Lesotho Highlands Water Project (LHWP) — closed last week.

The northern access road — from Leribe through the rugged Maluti Mountains to the upper reaches of the Malimamatso River — will complement the R19.5m southern access road from Thaba Tseka to the dam site, an extension of an existing road.

Work on the latter has started after the necessary finances were provided by the Development Bank of Southern Africa. To date, around R50m has been spent on feasibility and engineering studies for the LHWP. Costs on the northern access road should come in at around R100m.

Both access roads must be completed by 1990, when construction work on the first phase of the project will commence. This includes the Katse Dam together with a major tunnelling system through the Maluti Mountains to the 276 MW hydropower plant and pond at Sentelina, a pumping pond at Thaba and another tunnel underneath the upper Caledon River to an outlet into the Ash River (a tributary of the upper Vaal system).

The cost of the 240 km of tunnels is included in the first-phase costs of the Katse Dam of R1.5bn.

Four South African companies, three from Europe and one from South Korea, have submitted tenders for the northern access road.

“The treaty for the LHWP — signed by SA and the Kingdom of Lesotho in October 1986 — stipulates that tendering shall be by competitive bidding without discrimination as to the nationality of any tenderer, unless the parties (SA and Lesotho) approve otherwise,” says Water Affairs Director-General Theo van Robbroeck in a joint statement with his Lesotho counterpart.

Such approval will “obviously” be considered if tied finance is offered or tied finance guarantees are required by financing institutions — and if such finance or guarantees are in the interest of the project, they add.

Tenders will be evaluated on objective criteria such as cost, experience and financial conditions — and “no other criteria will hold.”

The upgrading of 263 km of existing roads and construction of 288 km of new access roads should add some R206m to total project costs, says Van Robbroeck.

With the exception of Mozambique’s Cahora Bassa Dam on the Zambezi River, the 166 m Katse Dam wall will be higher than any in Africa. On completion in 1995, Katse will provide the Vaal system with an additional 17m m³ of water a second (cusec).

This massive boost to existing water supplies should adequately provide for future growth in South African industry, which currently consumes 20m cusecs/year. The added “beauty of the project” is that water from Katse will require no pumping into the Vaal system. In addition, the gravitational flow will generate hydropower for Lesotho.

The second phase of the LHWP — to be completed by 2002 — will cost around R445m (at 1985 prices). The massive Massai Dam, with a “live” capacity of 5.375m m³, scheduled for completion by 2007, will add a further R1.8bn to costs. The fourth phase is expected to be completed by 2018 at current projected costs of R400m. Meanwhile, a further dam at Ntsasa, now added to the drawing boards, could push up final costs on the project even further than originally anticipated.

However, “the total project will more than double the current yield of the Tugela/Vaal system,” Van Robbroeck claims.
Natal repair teams at full stretch as downpours continue

Repair teams are working flat out to repair roads, railway lines and pipelines damaged by torrential rains which have lashed Natal since Sunday.

The Weather Bureau in Pretoria reported today that rain was still falling in many parts of Natal, but added that the weather should start clearing later in the day.

A South African Transport Services (Sats) spokesman said that the north coast railway line was closed after flood waters swept away the approach to the bridge at Gledhowe.

Sats has arranged a bus service from Durban to Empangeni to transport passengers along the north coast.

One of the lines from Johannesburg to Durban has been closed because of a mudslide near Inchanga. However, a second Johannesburg-Durban line is open and trains have been diverted to this line and are running normally.

The causeway on the old N2 giving access to Scottburgh has been closed for the third time since last September.

HEAVY DOWNPOURS

The volume of water flowing down the Mpambinyoni River over the causeway has in places gouged at least five metres of the temporary road surface away.

As a result of rainfalls at the south coast town of Umkomaas of 170 mm from Sunday to this morning, and heavy downpours inland, rivers have burst their banks.

During September the bridge at Scottburgh was washed away and work on its reconstruction has been hampered by heavy rain. Access to Scottburgh must now be gained through Park Rynie.

Seven people are still missing after the minibus in which they were travelling was washed off the N2 into a river near Cato Ridge.

Several places north of Durban have had their water supplies cut because of washaways of service lines from the Hazimere Dam. — Own Correspondent Staff Reporters Sapa.
DURBAN. — Natal was back on flood alert yesterday as torrential rains lashed many parts of the province, threatening to repeat the havoc caused by floods in September.

Reports have been pouring in of road wash-aways and subsidence mudslides, railway-line wash-aways with resultant closures, damage to bridges, disrupted water supplies as dams overflowed and supply lines submerged or washed away.

Seven minibus passengers are missing after the vehicle they were travelling in was washed off the N3 into a river near Cato Ridge. People living in low-lying areas have been warned to prepare to evacuate their homes.

The main road between here and Maritzburg was closed yesterday morning and traffic diverted after mudslides made the route impassable.

Many rivers that flooded their banks in the September floods are again in flood.

The swollen Umgeni River again surged over its banks near the Blue Lagoon here and the Tongaat River is in flood.

Among the bridges which have been flooded (making roads in the respective areas impassable) are the causeway on the Maphumulo River near Scottburgh, the low-level bridge between Umlonto and Dududu, the St Joseph’s Bridge near Richmond, the bridge between Mount Morland and Umhlozi, and the bridge on the main road through the Shongweni Valley.

The Umhloti River is in flood and water restrictions have been imposed at Ballito and Verulam.

Forecasters at the Louis Botha weather office here said the civil defence had been notified to be on standby. They said the level of the Umgeni would definitely rise.

In the Ballito-Verulam-Canelands-Stanger area water supplies to many homes have been cut as the Hazelmere Dam overflowed, washing all supply pipelines away. — Sapa
Swaarkry! is part of the fight for life in the land of maize

THERE'S an Afrikaans word that's as much part of Western Transvaal farmers' lives as watching the nightly SABC weather forecast — "swaarkry"!

For many of the 3,000 farmers in an area from Ventersdorp and Potchefstroom westwards to the Botswana border, if no rain has fallen by the time this report is read, a seventh consecutive maize crop failure will be imminent.

The irony is that as one travels the flatlands of the Western Transvaal platteland, the maize stands tall and proud in lines so straight they could have been drawn with a ruler. Not a weed is seen and the region is a demonstration of quality farming.

The soil is thick and rich, soil to be kneaded in the hands, good soil. There is only one problem — it's dry, the last bit of moisture sucked out by a relentless heatwave.

And in sporadic pockets the crops have already withered and died.

"Two weeks ago we were expecting record crops," said Manie du Preez, a man who has farmed in the area all his life. "But the situation changed in a week.

"Now is the crucial time — the maize is getting cobs — and if it does not rain within the next day or so the cobs will be a total write-off.

"I'd estimate there is already a 60 percent loss.

"The problem is the lack of moisture in the soil," said André Killian, chief agricultural officer of Northwest Government in Lichtenburg, a town almost totally dependent on agriculture.

"As a result of the years of drought, farmers have to start each season with a 'moisture budget' of zero. Consequently, when the plant needs moisture, there are simply no reserves in the soil.

Statistics dating back to 1981 show an expected rain-fall figure for Lichtenburg of 330mm. Yet, this year they have had only 20mm.

Expensive

In an attempt to reduce their risks, many farmers are switching from maize to less-risky crops and cattle ranching. Sunflower and groundnut plantings are up 71 percent and 65 percent respectively, while maize shows a 10 percent drop on last season's figure.

"We have encouraged farmers to reduce output per hectare to reduce risk," said Dr Andries Scholz, general manager of Northwest Co-operative. "We also have emphasised the need to diversify."

But it's easier said than done.

Everything costs money," said Coligny farmer Tienie Koekemoer. "It's incredibly expensive switching to cattle, and then it takes at least three years before you get a return. We just can't hang on that long!"

Input costs have continued to rise over the years while a maize glut has seen world prices tumble.

"I would guess the average farmer in these districts spends about R25 000 just getting his maize into the ground," said Mr Gert Pretorius, the Transvaal Agricultural Union's Western Transvaal representative.

"That money, borrowed from the co-op, is lost if the crop fails. So next year he has to borrow again in the hope that a good harvest will make it possible to pay off some of his debts. So they get deeper and deeper into debt.

Experts estimate if the rains do not come this week the loss to farmers in the area could be R50 000 per ton, valued at R125-million.

But the potential loss is much greater. Farmers play a vital role in maintaining platteland structures and, if they are forced off the land, the cost to the taxpayer will be enormous.

"The average farmer has at least 100 black families living on his farm," said Gert Pretorius. "That means about 60 000 people are dependent on the farmers in this area.

So if the Government has to take over this role you can imagine what the cost would be to the taxpayer."
Where drought dra

By Dries van Heerden

There is grave concern about the security situation in the area with more and more farms being abandoned. The drought may have disastrous consequences for the large number of black families who are completely dependent on employment of the farms.

No political party can afford not to take heed of the problems. NP candidate in the by-election Willie Lammer is in favour of drastic measures by the State.

"The drought is just as big a disaster for the country as the recent floods in Natal," he says.

"I believe the whole region should be declared a disaster-stricken area and farmers should be eligible for emergency aid."

Abnormal

"A lot has been done already, but an abnormal situation now needs abnormal measures."

CP candidate Pieter Mulder believes the problem should be tackled at the roots.

That the dire financial positions farmers find themselves in is not only because of the drought, but also because of soaring interest rates and the Government's inability to tackle inflation.

Mulder says he has not come across voters who say they will vote against the NP just because of the drought. They do, however, question the Government's commitment to help the farmers in their plight.

The farmers themselves differ on what measures should be taken to relieve the situation, but on one aspect almost everybody agrees: more subsidies and more Government aid schemes are not the solution.

Potential

"We are already feeling like beggars and deeply aware of the image of farmers standing in queues for more and more aid," says Roos.

"Our soil has the best agricultural potential in the whole country. All we need is a little push to help us over the lean years... and rain."

Late at night, when the fires are burning low, the talk is about the coming election, but the conversation never strays far from the drought.

The clouds have massed — the 13th time this year — and flashes of lightning can be seen in the distance.

"If it does not rain before Thursday," remarks local businessman Willie Munnik, "politics will be the only subject left to talk about."

© Report by Dries van Heerden, 11 Diagonal Street, Johannesburg.
Eight missing as Natal goes back on flood alert

The Argus Correspondent

DURBAN:—Eight people are thought to have died when a mini-bus plunged into a swollen river near Cato Ridge today, as Natal went back on flood alert today after unexpected heavy rains.

Bridges are awash, the main road between Durban and Maritzburg was closed for several hours and the Umgeni River is still rising.

Rescue teams and a crane are attempting to retrieve the mini-bus, which skidded in mist and rain down an embankment near Inchangha.

Police said the driver escaped but they were still searching for the eight unidentified passengers.

RESIDENTS

Rain is continuing to pelt the Shongweni Valley between Durban and Maritzburg and many residents in the area are partially cut off by the flooding Sterkspruit.

The river level is almost as high as it was during the September floods which caused extensive damage in the area.

It is also reported that heavy rain the Umzinto area has caused a break in the main telephone cable to the town.

Falls of up to 200mm of rain were recorded in some places last night. The swollen Umgeni again surged over its banks near the Blue Lagoon in Durban and the Tongaat River is in flood at Tongaat.

Durban forecasters said they had been unable to issue a warning because “we only knew about it when it happened.”

Mud, rocks and water have blocked the main Maritzburg-Durban road, while the alternative route through Drummond was in danger of collapse, the provincial spokesman said.

SANDBAGGED

In Durban, the low-lying Coedmore causeway was sandbagged as the river began rising swiftly last night and traffic was diverted.

The St Josephine’s Bridge on the main route between Maritzburg and Ixopo is under water.

A railway bus and car collided on the Ixopo side of the bridge and the heavily loaded bus is stuck in the mud.

See Page 3.
Bushman’s River Valley farmers push for irrigation scheme

Daily Dispatch Reporter
GRAHAMSTOWN — The shortage of water in the Bushman’s River Valley is a limiting factor for all agricultural, industrial and commercial development, including tourism.

Above the ebb and flow, the river is dry except for a few stagnant pools in which the quality of the water has so deteriorated as to be unusable.

The chairman of the Bushman’s River Development Association (BRDA), Mr Amedee Buchner, has spearheaded efforts to improve the situation through farmers’ associations and a grouping of riparian owners.

“The biggest challenge for 1968 is to get the authorities to place the Bushman’s River scheme on the priority list for Orange River water,” he said.

“We have now done all that is required of us. The ball is in the court of the Department of Agriculture and Water Affairs.”

For the past five years the BRDA has undertaken extensive research into the nature of the farming enterprises and their potential.

The University of Port Elizabeth’s Institute of Planning undertook the task of studying the potential impact of Orange River water on the region, and their report is due to be made public in a fortnight.

“Obviously we asked them to study the impact on potentially irrigable farmlands, but they have also looked at the towns and at tourism,” Mr Buchner said.

The relevant towns include the coastal resorts of Bushman’s, Kenton-on-Sea, Paterson and Alexandria, where further industrial development could take place if water was freely available.

“There are already plans to expand the chicory industry in another direction,” Mr Buchner said.

The BRDA envisaged the Bushman’s scheme being developed in tandem with the Sunday’s River scheme, whereby Orange River water will flow down the Sunday’s River valley.

“But the Sunday’s River is almost exclusively a citrus-growing district. Most of the citrus is exported and does not lend itself to developing secondary industry,” Mr Buchner said.

Agriculture in the Bushman’s valley is far more diverse.

It is possible to grow a wide range of crops including grapes and groundnuts. The area also produces milk and dairy products, red meat and some wool.

The UPE feasibility study has cost the Development Association nearly R9 000, much of which will have to be raised by the riparian owners.

Sponsors have come up with about R4 000 of this and the Regional Development Association for Region D (RDA) donated an amount of R1 500.

Other sponsors in-
Lightning kills six as rainstorms sweep Natal

DURBAN: Lightning killed six members of a family, including a one-month-old baby, near Amanzimtoti as storms lashed Natal, causing flood-swollen rivers to cut off road links, water and power supplies.

This brings to 13 the number of people believed to have died in worst storms since September last year when floods devastated the province.

Seven passengers in a minibus taxi are believed to have drowned yesterday when their vehicle plunged into a raging torrent near Calo Ridge.

Heavy rains were still falling in many parts of the province today. Weathermen have blamed the high humidity of the past weeks.

Police spokesman Major Charl du Toit said six members of the Mapumulo family were in a corrugated iron shack in the Umbumbulu Reserve when it was struck by lightning. The family included three adults, children of seven and four, and a one-month-old baby.

"We were unable to get four-wheel drive vehicles through to the area this morning because of the bad condition of the roads," he said.

Durban came up for a breather under blue skies today - although more rain is expected tonight. Electricity was cut last night at Verulam, Inanda, Hazlemere and Waterfall when low-lying substations were flooded.

Parts of Verulam, Ottawa, Canelands, Redcliffe, Ballito and Tongaat Beach were without water after the pipeline from Hazlemere Dam was broken by rising waters on Sunday night.

Further north, the raging Inyazane River has gouged out the approaches to the main N2 highway bridge between Gingindlovu and Empangeni, cutting off the main access to the industrial areas of Empangeni and Richard's Bay.

On the South Coast, 10 metres of the low-lying causeway over the Mpambanyoni river at Scottburgh - rebuilt after the September floods - have again been swept away by the flood waters. - The Argus Correspondent and Supa.
Seven missing as floods ravage Natal

DURBAN — Natal has been plunged into chaos again after heavy downpours on Sunday night and yesterday caused flooding, damaged roads and bridges, and disrupted rail and road traffic.

Seven people are missing, feared dead, after a minibus taxi plunged into a river at Inchanga.

Severe water restrictions have been placed on several North Coast towns, particularly part of the pipeline carrying water from the Hartbeespoort Dam to the water refinery was washed away.

Weather forecasters had predicted more heavy rain overnight.

Durban's civil defence unit was warned to be on standby. An engineer's department of the Umgeni River continued to rise.

The missing minibus plunged into a raging torrent after colliding with the back of another vehicle. A police spokesman said.

One passenger, Mr Samuel Shungu, was found dead.

Trains were disrupted by mudslides on the main line between Pietermaritzburg and Durban, and the passenger coach of a suburban train was derailed at Inchanga early yesterday when washaways undermined the railway line, according to a spokesman for Sats.

No one was injured in the accident.

The spokesman said other trains were running late as a result of three mudslides on the main line at Shongweni and Kwadenzelo near Durban.

The approaches to the St Josephine Bridge over the Umkomaas River on the main route between Pietermaritzburg and KwaZulu were washed away, and the road remained closed all day, a Natal Provincial Authority traffic spokesman said.

A huge landslide on the south-bound lane of the N3 at Inchanga blocked the road for nearly three hours between 7.20 am and 10.15 am yesterday, and traffic had to be diverted.

A second mudslide occurred this same place at about 1 pm and the road was closed again for just under an hour.

A spokesman for the city of Durban's department said so far no danger had been caused to Durban's water supply.

The acting director of the Northern Natal Regional Water Suppliers, Mr Gordon Pote, said all the public, commerce and industry co-operated by adhering to restrictions, with the water supply could stretch to three days.

A Natal Shacks Board spokesman, Mr Absa, said bathing at Zinkwazi, Blythedale and Scottburgh beaches had been banned.

She said the whole beach at Zinkwazi had been washed away.

No bathing bands have been imposed at Durban's beaches.

The heaviest rainfall since storms began to lash the area on Sunday night was reported from the Upper Tongaat area where more than 300 mm had been recorded.

Other heavy falls, according to the weather office, included Upper Glendora, 276 mm; Fort Shepstone, 26; Stanger, 175; Richmond, 85; Scottburgh, 71.5; and Balgowan, 87.

Clear weather expected soon

EAST LONDON — The cloudy weather conditions which have brought good rainfall to large parts of the Border region over the past few days are expected to clear partially today and temperatures are likely to rise.

The wind will be strong north-easterly along the coast and conditions will be fair over the next two to three days, a spokesman for the weather office said.

The northern interior regions, where thunderstorms were experienced yesterday, can expect high temperatures with isolated thunderstorms.

Fairly high rainfall figures have been recorded in some areas.

From 8 am on Friday until 8 am yesterday, 115 mm was recorded at Maclear, 105 at Kei Mouth, 77.5 at Jamestown, 63 at East London, 58.7 in Umtata, 53 at Dordrecht, 49.5 at Sterkspruit, 31.5 at Elliot, 30 at Indwe, 22.5 at Dohne, 21.7 at Komga, 20.5 at Lady Ferne, 20 at Coffee Bay, 15.5 at Butterworth, 14.8 at Queenswood and 8 at Cathcart.

"The hot conditions experienced before the rain were normal at this time of year and a strong high pressure ridge in the south of the country over the weekend with a cut off low in the upper air to the west of the country caused widespread rain over the entire south-eastern Cape," the spokesman said.

A farmer in the Molteno district, Mr Sandy Strelton, said it was normal to have tremendous variables such as being experienced now, during a long dry cycle, he said.

Mr Strelton, who has weather records for the farm which date back to 1894, said it was unusual that during the past three years the region had had unusually heavy spring rains followed by extended dry periods.
New Bill on natural assets disappoints

By James Clarke

The Government’s latest draft of the Environment Conservation Bill has drawn mixed feelings — from disappointment to fear.

Urban pressure groups have told The Star’s CARE campaign that the Bill mostly concerns itself with nature areas as opposed to urban environments which are where stricter environmental safeguards are most necessary.

The Bill proposes increasing fines for illegal dumping to R10 000 and the same for anybody violating laws regarding a new category of land — "limited development areas".

These are being interpreted as areas of special importance aesthetically or culturally.

A section dealing with "environmental impact reports" (EIRs) says the Minister "may" make regulations requiring developers to disclose in EIRs what negative impacts they expect from a planned project. But the military, which operates in many sensitive natural areas, is excluded.

And, a change from the original Bill, "legislative decisions" (which can cause profound environmental changes) are also now excluded. There is no provision for EIRs to made available to the public.
Northern Natal is hit by power blackout in deluge

DURBAN — A power blackout added to northern Natal's rain-soaked misery yesterday and a further six people have died, bringing the death toll in the latest storms to 15.

The six, all members of the Maphumulo family - two men, a woman and three children, the youngest of whom was one month old — were killed when lightning struck their hut in the Tafelkop district of Umbumbulu on Sunday.

Nine other people, all of them believed to be members of the family, were taken to Durban's King Edward VIII Hospital and discharged after receiving treatment.

The dead were Mr Vusiathl Maphumulo (30), Mr Magama Maphumulo (24), Mrs Mahlango Maphumulo (53), and the children Kimile (7), Bono (4) and one-month-old Johnny.

ROAD WASHWAYS

Empangeni, Richards Bay and other towns in northern Natal were cut off by road washaways and bridge closures, and residents at Empangeni said it was still raining heavily.

Power sub-stations at Hazlemere, Verulam, Inanda and Waterfall were flooded, cutting power to large areas and stopping efforts to renew the damaged pipeline to Hazlemere Dam, which has caused water supplies to the North Coast to be cut.

The bodies of a man and a woman, believed to be from the minibus which skidded into a flooded stream alongside the highway at Inchanga on Monday, were found yesterday by police.

With rainfall at the South Coast town of Umkomaas measured at 178 mm from Sunday to yesterday morning, and heavy downpours inland, rivers have burst their banks.

The Empangeni-Mtnzini stretch of Zululand's Great North Road was closed early yesterday and motorists were diverted through Eshowe.

Mr Stoffel Botha, Natal leader of the National Party, said yesterday the Government would provide flood relief.

Heavy rains have worsened the plight of many refugees fleeing the violence in the Maritzburg townships where church ministers have estimated that between 60,000 and 100,000 people were in need of relief.

"The most urgent needs are shelter, food and schooling for the children of families who have fled their homes," the Rev Patrick Gumede of St Christopher's Church, Sobantu, said.

"With all the rain of the past 24 hours, the plight of these people is very desperate indeed."

A national serviceman who drowned in the flooded Klip River near Ladismith on Monday was identified as 20-year-old Rifleman T A Dreyer.

Rifleman Dreyer had been married for only a week when he slipped while searching for a nine-year-old black girl who had disappeared in the river the previous day. His body was found by divers in the Windsor Dam yesterday.

Bathing has been banned at many Natal beaches with the North Coast the worst hit.

The director of the Natal Sharks Board, Dr Beulah Davis, said Richards Bay was the only North Coast beach still open today. — Sapa.
Curbs agreed on dumping of toxic chemicals

Government experts from nearly 30 countries, meeting in Geneva last week, agreed to the outlines of a treaty to curb the growing international traffic in hazardous waste and reduce the risk of environmental damage from uncontrolled dumping of toxic chemicals.

The proposed convention, sponsored by the UN Environment Programme (Unep), would forbid the export of hazardous waste unless the receiving country says it is willing to take it, understands what it is and has the facilities to deal with it.

Unep officials say the need for a treaty has become increasingly urgent as industrial countries, faced with escalating costs of safe waste disposal at home, are shipping ever greater amounts abroad, often to developing countries with no legislative control and no proper disposal facilities. The West generates about 30 percent of the estimated 237-275 million tons of hazardous waste produced worldwide each year.

"The incentive to save money on waste disposal has led to widespread dangerous practices," says Dr Jan Huismans, Unep's expert on toxic chemicals. "On land, a trucker sees a handy dump on his way somewhere else and he decides to drop off 50 drums of toxic materials without saying a word to anybody. Another popular trick to get rid of waste is to ship it to a false address. No one claims it and the drums corrode under a tropical sun in the port. No one accepts responsibility and no one knows what to do with the waste."

The Geneva meeting succeeded in resolving the thorny issue of defining hazardous waste, which spurred a similar accord drawn up late last year. The UN treaty will include a core list of hazardous substances. But substances not on this list will still be covered by the convention if they are controlled by national legislation in the exporting importing country.

The convention will not deal with the transport of nuclear waste, which is regulated by the International Atomic Energy Agency in Vienna.

There are still details yet to be agreed, but Mr Alain Clerc, Swiss chairman of the expert group, said he hoped the treaty would be ready for signing in early 1989 and come into effect 18 months later. — Independent News Service.
Natal death toll rises — rain due to clear

DAILY DISPATCH

Correspondent

DURBAN — The confirmed death toll in the Natal floods stood at eight yesterday afternoon — with another seven probably drowned.

As rain continued to fall over Natal many towns faced water restrictions, roads and railway lines were closed and many people had to evacuate their homes.

But the good news, according to the Weather Bureau, is that the weather is expected to clear from today.

A young national serviceman based with the Fifth SA Infantry Battalion at Ladysmith drowned in the Klip River while assisting in the search for the body of a young boy who had gone missing during the heavy rain on Monday.

A South African Defence Force spokesman identified the dead soldier as Rifleman Thomas Andries Dreyer, 20. Police divers recovered his body from the Windsor Dam near Ladysmith yesterday.

Rfn Dreyer leaves his wife, Mrs C. L. Dreyer, of Randfontein.

Six people — three adults and three children — all members of the Maphumulo family who were in a hut with a corrugated iron roof, were struck dead by lightning near Umbumbulu on Sunday afternoon. Nine other people were injured and taken to hospital.

Five people were still missing late yesterday after a mini-bus, carrying seven passengers, had toppled into the Shongweni River on Sunday. Two bodies have been recovered.

Electricity was cut last night at Verulam, Inanda, Hazelmere and Waterfall when low-lying substations were flooded.

Parts of Verulam, Ottawa, Canelands, Recliffie, Ballito and Tongaat Beach were already without water after the pipeline from Hazelmere Dam to the purification works was broken.

The heavy rains have also worsened the plight of many refugees fleeing the violence in Pietermaritzburg townships where between 60 000 and 100 000 people are estimated by some ministers to be in need of relief.

Bathing has been banned at all North Coast beaches and along the South Coast at Ifafa, Scottburgh, Mtalume, Umtentweni, Glenmore and at Umzumbe and Msamba beach in Transkei.

A record billion litres of water were consumed by hot, thirsty and sweaty Capetonians on Monday. Lower temperature of 20°C are expected today.

In feminist topless

Accused Labour Party feminist topless, kissogram girl, has exposed by a mass circulation...

at the controversial chair...

Labour Party in London, until recently earned up to her 153 cm bust at parties.

ed a photograph of Miss...ng party ranks by causing and fighting por-

ths 127 kg, denied that she
got a girl until she was....councilors said Miss.

n against girlie pin-

ing places, was a hypocrite.

15 feared dead in Natal flooding
Water crisis shuts factories, schools

DURBAN. — As the weather cleared throughout most of flood-stricken Natal, reports flowed in of further devastation, water shortages and closed schools and factories.

All schools and industries at Verulam were closed yesterday because water reservoirs were empty.

A spokesman for the North Coast Regional Water Suppliers said local authorities used tankers to supply residents.

Power failure

The water shortages were caused by a power failure at Hazelmarie dam, which prevented the Umgeni Water Board pumping to the area.

However, a board spokesman said he expected power to be restored by nightfall and it would then be "a matter of hours" before residents in the area received water.

A Natal Provincial Administration traffic spokesman said sinkholes had developed on the N3 highway between Durban and Pietermaritzburg at Inchanga and on the Mkontani offramp.

Third sinkhole

A third sinkhole had appeared on the George-Dale-Hammersdale Road.

The spokesman said traffic would be diverted if necessary.

Five of the 27 roads, which had been closed since the heavy rain began, were reopened yesterday.

A roads department spokesman said other roads would be repaired as soon as possible.

Water was still flowing "too strongly" yesterday to repair the causeways at Batstone, near Port Shepstone, and at Mpambinyoni River at Scottburgh.

The North Coast railway, damaged at Gledhow, and the line at Shongweni should be fully operational by the weekend, weather permitting, according to a South African Transport Services spokesman.

Three bodies of passengers in a minibus, washed away in a swollen stream near Inchanga on Monday, have been recovered. A search for three more bodies is continuing.

Hard-hit

Canelands Boating Club at Hazelmarie dam, which is scheduled to hold two international water-ski meetings in April, has been hard-hit again.

Mrs Lizbeth Piotz, a club official said the club had just spent £30 000 on repairing damage caused by the September floods.

"It's too depressing," she added. — Sapa.
Further water shortages as floods subside, skies clear

DURBAN — As the weather cleared throughout most of flood-stricken Natal yesterday, reports were received of further devastation, water shortages and the closure of schools and factories.

All schools and industries in Verulam were closed yesterday because water reservoirs supplying the area were empty.

A spokesman for the North Coast Regional Water Suppliers said local authorities had to use water tankers to supply residents.

He said yesterday the Dsaenger townships were without water and at 3pm levels of the reservoirs supplying La Mercy and the region from Ballito to Umbani Beach were "very low."

The water shortages were caused by a power failure at the Hazelmer Dam, preventing the Umgeni Water Board from pumping water to the area. A spokesman for the board said the power should have been restored by last night.

Meanwhile, a traffic spokesman said sinkholes were developing on the N3 highway between Durban and Pietermaritzburg at Inchanga and on the Mkondeni offramp.

The roads department is working, in conjunction with traffic authorities, on the situation, he said.

Five of the 27 roads, which have been closed since the heavy rains began are now open.

The North Coast train line, damaged at Gledhow, and the train line at Shongweni should be fully operational by the weekend, weather permitting, a spokesman for the South African Transport Services said.

Three bodies of passengers in a mini-bus, washed away in a swollen stream near Inchanga on Monday, have so far been recovered. The search for the other three bodies is continuing.

The Canleys Boating Club at Hazelmer Dam, which is scheduled to hold two international water-skiing meetings in April, has once again been hit hard.

Mrs Lizbett Plotz, from the club, said R20,000 has been spent repairing jetties and the clubhouse which were damaged during the September floods.

The Weather Bureau in Durban said the weather should clear further today. — DDC
Water official to inspect sites

Daily Dispatch Reporter

QUEENSTOWN — The Deputy Minister of Water Affairs, Mr J. A. van Wyk, arrives here on Wednesday to inspect two possible dam sites — at Waalpoort near here and Uitsig at Sterkstroom.

The visit stems from the recent formation of an action committee by riparian owners along the Klaas Smit River.

The action committee's chairman, Mr R. Schreuder, said that more irrigation water was an absolute necessity for farmers here to farm productively.

The mayor, Mr Gerrie Coetzer, said the water situation was giving cause for some concern. Waterdown Dam, one of two dams supplying the town, had overflowed about two months ago.

Since then the level of the dam, which supplies water to over one million people, had dropped by 50 per cent, Mr Coetzer said.

If a dam was earmarked for either of the sites the municipality would also benefit from the scheme.

With an additional water source, farmers maintain they would be able to grow fodder for their stock which they now purchase at considerable cost. It could also mean a revival of fruit and vegetable farming in the area.

After inspecting the dam sites Mr van Wyk will address a meeting of councillors and farmers regarding proposals for future water supplies in the area.
Water not promises

These peddlers take advantage of Mmakau's water shortage by selling water to thirsty residents.

By GOL MORTANI

At the point on the road from GaRankuwa to Motl sniffa where the tar turns to gravel, a dilapidated collection of mud and corrugated iron houses makes up the village of Mmakau.

Scrapes of cars lie on their backs like dead insects and a single railway track runs through the area between the GaRankuwa industrial zone and De Wildt.

Dust from our car spills over and coats the mud houses, the people's skins and the animals.

Mmakau, the home of about 70 000 Bakgatla families under the chieftainship of Peter Bapazaba Mosepe, is a place of abject poverty.

The locals have a lot to complain about. Besides having no means of earning a living, their most immediate need is for water.

No one here, it seems, knows that we are halfway through the United Nations decade for improving drinking water supply and sanitation internationally. Even if they did, they would be right in thinking it will not improve their lot.

The problem, according to the residents, lies with the local tribal authority. There is enough water beneath their feet, but the local tribal authority is apparently reluctant to tap it.

Thus locals either buy water from water peddlers at 10c per litre, they dig water up in their yards or they wait for the summer rains to fill their oil drums.

The first two options are, unquestionably, the most expensive. Both are usually unaffordable for nearly everyone.

The World Health Organisation estimates that 50 percent of the world's illnesses are caused by contaminated water supplies.

Children become the first victims, dying not from typhoid and cholera outbreaks, but from diarrhoea and dysentery.

The water supply at Mmakau is unfiltered and, as the number of children in the area who die of such diseases bears testimony to this, Mmakau is the place, is true and honest leadership.

More often than not, villagers gather at the chief's kraal to raise the water issue, but not much has changed despite promises from Bapazaba Mosepe and his advisors.

A number of options have been put before the chief. The first was to dig more communal taps in this vast settlement. The second was to sink a borehole.

Mmakau cannot be relegated to be a rural area by virtue of its location.

It is situated between the most popular Botshumberane townships of GaRankuwa and Motholong. It also lies a mere 37km north west of Pretoria. Most of its residents work in Rosslyn, Brits and Pretoria, while some travel daily to and from Johannesburg - dispelling any doubts that they may be primitive.

What the residents of this village need, as it was gathered in numerous interviews with old residents of the place, is true and honest leadership.

With that, many reckon, Mmakau will be devoid of all the troubles and problems currently facing it.
Thatcher retreat paves way for accord

EC agreement reached on financial reform

BRUSSELS — European Community leaders reached a milestone agreement early on Saturday to finance the EC into the 1990s and give it more muscle.

The deal, reached in the early hours of the morning, followed a retreat by British Prime Minister Margaret Thatcher when her insistence on drastic curbs on farm spending seemed certain to scuttle the 12-nation summit.

She settled for softer penalties on Europe's 10 million farmers if they produce too much, in return for a tighter limit on overall EC spending.

"We have put the EC on a solid financial basis," a beaming but exhausted West German Chancellor Helmut Kohl told reporters.

Radical reforms

His persistence as summit chairman during more than 28 hours of talks over two days smoothed the way for the most radical financial reforms in the community's 30-year history.

Failure in Brussels would have pushed the EC towards bankruptcy and sapped its power to stand up to the United States and Japan in trade disputes.

Mrs Thatcher, unbowed despite her retreat, said: "We have achieved some of our main objectives — control over agriculture and community spending. We needed this control now, not at some uncertain time in the future."

The agreement, designed to last until the community removes all internal barriers in 1992, will:

- Boost EC funds from 44 billion European Currency Units (RF165 billion) in 1988 to 53 billion ECU's (RF265 billion) in 1992.
- Restrict the share which goes to farm subsidies by penalising overproduction with price cuts. Farm spending, which increased by more than 20 percent last year, will be allowed to grow by less than two percent a year for the next three years.
- Lift spending on the EC's deprived regions from eight billion ECU's (RF30 billion) in 1990 to 13 billion ECU's (RF50 billion) in 1992.

The reforms were approved just one year after they were first proposed by EC Commission President Jacques Delors — an unprecedented feat for a bloc that normally moves at snail's pace.

Spanish Prime Minister Felipe Gonzalez said the accord would free EC leaders to tackle basic issues such as unemployment, regional poverty and press on with industrial, technological and trade development.

"We will have a few years without having to dwell on the problems of the last three summits," he said. "They have been more like meetings of finance and agriculture Ministers than heads of government."

Two summits in the past eight months have foundered over the Delors plan.

The farm spending restrictions will bring protected cuts of more than five percent in cereals prices next year, hurting the politically powerful farmers of France and West Germany. The leaders of both countries wanted to protect their producers from income losses because of election this spring.

Mrs Thatcher said the agreement was conditional on Foreign Ministers approving curbs for minor EC crops which she had wanted the summit to approve along with the major items — cereals and oilseeds.

But diplomats said approval was certain when the Ministers met on February 22. — Sapa-Reuter.
Botha told to freeze politicians' salaries

JOHANNESBURG — The Housewives' League have asked the State President, Mr P. W. Botha, to show his sincerity — after appealing to South Africans "to tighten their belts" — by ensuring that all members of Parliament and the President's Council go without increases in salaries, pensions and allowances.

The League said in a letter that the South African public must see a decrease in "the privileges of free travel, luxurious living and extravagant banquets".

"While we appreciate your call for South Africans to tighten their belts, we would remind you that the ball is in your court," the letter read.

"For years we have been told to cut back because we are in a depression, but every year those in power have had more than generous increases.

"If you are sincere in your appeal, we must have specific assurances that there will be no increase of salaries, allowances and pensions in the three Houses of Parliament and the Presidents' Council.

"Privileges of free travel, luxurious living and extravagant banquets must be cut down — and we, as the public of South Africa, must see it," the League stated. — Sapa

Deadline for cycad permits imminent

Daily Dispatch Reporter

EAST LONDON — Permits for collecting cycads will not be granted after March 31, except for bona fide research purposes.

The chief director of nature and environmental conservation in the Cape, Mr P. J. le Roux, said that following reports of extensive illegal removal of cycads in the Eastern Cape, all cycads were classified as endangered flora in May 1985.

The classification was made in terms of a proc-
Drought devastated farmers

By Paul Olivier

The whole of the western Transvaal was a disaster area and the South African Agricultural Union would be asked to look into the welfare of maize farmers devastated by drought, Mr Wilko Beukes, a member of the Transvaal Agricultural Union's executive committee, said last night.

He said at a press conference in Pretoria that farmers in some parts had difficulty feeding and clothing their families.

"The morale of many of the farmers is low. All measures must be taken to stabilise them and give them peace of mind."

He said that in the Lichtenburg area three schools had been closed during the drought of the past few years, resulting in the loss of more than 11 800 scholars.

See Page 4.

Eskom pragmatism reaches to equator

By Michael Chester

Eskom, the state electricity network giant, yesterday proposed a round-table conference with neighbouring countries as far north as the equator to discuss the creation of a power grid to cover the sub-continent.

The Eskom chief executive, Mr Ian McRae, said the object was to harness the energy and technology resources of the whole region. The master plan was to use the multi-national grid as the foundation to economic unity outside the political sphere.

He said there had already been positive responses to proposals of new co-operation and mutual assistance from six neighbours, several of which had entered into formal agreements over two-way export and import deals on energy supplies.

The next aim was to arrange round-table discussions with the nine member nations of the Southern African Development Co-ordination Conference.

Undaunted by political conflicts, Mr McRae, as an engineer, views the chances of success in pragmatic rather than ideological terms.

"The sub-continent has a simple choice — economic stagnation caused by political division with growing unemployment and worsening poverty, or economic dynamism stemming from co-operation in the non-political sphere.

"If there is stalemate among the politicians, it should not mean that everything else must stay at a standstill."

Mr McRae said it would be stressed that Eskom had no ambition to act as Big Brother and dictate the terms of the exercise.

See Page 15.
Drought conditions in Bathurst area severe

GRAHAMSTOWN — Severe drought conditions are being experienced by farmers in the Bathurst district.

Rainfall in the last two years has fallen off in some cases to less than half of what is received in good years.

Dams are dryer than they have ever been, according to the chairman of the Bathurst Conservation Committee, Mr Cecil Jones-Phillipson.

Light rains have brought no run-off although parts of the region have a superficial green covering bellying the severity of the drought, he said.

The coastal strip has been worst hit, according to the chairman of the Eastern Border Farmers’ Association, Mr Johan Liesenberg.

There farmers are beginning to reduce their stock.

“This drought has hit the entire coastline from the Fish River to Humansdorp,” according to the East Cape Agricultural Union representative for the Albany region, Mr Chris van Aardt.

“The lack of water is alarming. We have not reached disaster drought conditions yet but our advice to farmers’ associations is to apply for drought relief now,” Mr Jones-Phillipson said.

It usually took about two months before the wheels were in motion and if no significant rains fell in that time conditions could be critical, he said.

Most of the stock was still in reasonably good condition. The committee had no reports of stock losses.

Pineapple farmers who also ran large stock were reasonably well off. They were able to turn their stock into old pineapple lands to graze.

“The condition of the veld is very poor. There is little or no grazing. Lucerne is at a premium.”

“Certain people are able to get it but for new applicants it is virtually impossible,” Mr Jones-Phillipson said.

“At Kaffir Drift they have recorded the lowest rainfall in seven years. At Shaw Park we have recorded the lowest rainfall in five years,” Mr Liesenberg said.

Farmers were moving their stock. One had hired land at Kidds Beach while another who had a farm near Adelaide had moved all his stock away.

“A limited amount of feed is available — at a price,” he added.

Last year only 223 mm was recorded in 1985, only 345 mm had been received last year.

At Martindale where as much as 528 mm was recorded in 1985, only 223 mm was recorded last year. Similar figures were recorded on the coast while at Shaw Park where peaks of as much as 1 000 mm had been received in 1981 and 1985, the figure had dropped to 568 mm last year.

“This year the rains have been negligible. What we have had has been so light as to produce no run-off whatever,” Mr Liesenberg said.

Depression, thought to have been caused by the prolonged drought, is believed to have led to the death on Monday morning of a Paterson farmer, Mr W. S. (Willem) Buchner, 80, on his farm, Hashiwond.

Mr Buchner’s body was found at the back of his house shortly after 4 am by his wife, Mrs Hazel Buchner, 80. He had a shotgun wound in his head.

Mr Buchner’s brother, Mr Carel Buchner, of the farm, Goedemoed, said his brother, who could not come to terms with the drought, had got up as usual at about 4 am on Monday and after serving tea to his wife in bed had gone outside with his shotgun.

Shortly afterwards, a shot rang out. Mrs Buchner did not take much notice, as she had thought that her husband had fired at stray dogs.

However, a second shot, much closer to the house, had prompted her to investigate. Outside she found her husband bleeding profusely. A shocked Mrs Buchner had tried to help her husband into the house, but could not manage. He succeeded, however, to stumble into the house where he allegedly fetched another shotgun cartridge.

The police liaison officer for the Eastern Cape, Captain Bill Den- nis, said police do not suspect a crime.
Four die, Limpopo flooded in downpour

The Argus Correspondent

JOHANNESBURG — Four children have died, farm-houses have been evacuated and a general flood alert has been issued after torrential rain in the Northern and Western Transvaal and Botswana caused the Limpopo River to come down in flood.

The children died on the Botswana side of the Limpopo. One school pupil was killed when a toilet collapsed because of heavy rain at Moshupa village.

An eight-year-old boy died when a hut collapsed at Mahalapye and two young girls were killed in Moshupa when their hut collapsed.

The Limpopo rose by nearly three metres during the night before stabilising at 4am today.

Railway lines from Lobatse northwards have been cut and the main road from Gaborone northwards is also impassable.

More than 100m of road is flooded near Mochudi.

The district commissioner at Mahalapye said the Botswana Defence Force and the Red Cross were helping to accommodate flood victims whose houses had collapsed.

A number of border posts between South Africa and Botswana have been closed because the roads are flooded and motorists have been advised to check which border posts are open.

Most of the floodwater originated in Botswana and the north-western Transvaal, where up to 200mm of rain has fallen. The Eastern Transvaal and parts of the Free State also had good rain.

Three farmhouses in the Pontdrift and Weipe areas on the South African side of the border were flooded when the Limpopo burst its banks yesterday. More houses are threatened should the water rise a further 10cm.

There are fears that further flooding will occur as the river's tributaries continue to gush water into the system.

Extensive damage was caused to cotton fields in the Pontdrift area, and pump houses on the river banks were flooded.

The level in the Limpopo stabilised about 4am today, said Mr Hansie Willemse, chairman of the Weipe Farmers Association. Residents of the area are ready to evacuate their houses if the level starts rising again.

Mr Willemse and other farmers in the area surveyed the damage by air today. He said farmers in the Pontdrift area, which until recently was being crippled by drought, feared most of their cotton crop would rot.

At Stockpoort, near Ellisras, the lands were also flooded.

Camps were cancelled.
Full-scale air and land search launched for farmworkers

11 dead, six missing in widespread flooding

Staff Reporters

Flooding across the country has claimed 11 lives and six other people — all farm labourers from the Eastern Cape — are missing after a flash flood in the area last night.

The raging Limpopo River which burst its banks yesterday claimed the 11 lives, 7 in South Africa, five in Botswana and five in Zimbabwe. Among the dead were four children.

A full-scale air and land search had been launched for the six farm labourers missing after a flash torrential downpour in the Glenconner area near Kirkwood in the Eastern Cape last night. Police said 14 people had already been rescued.

The raging Eastern Cape flood waters, which followed the downpour of 100 mm in less than 30 minutes, swept two motor vehicles off roads, derailed a train and punched out the rail bridge over the Kariega River.

General alert

Further north, farmers in the north-western Transvaal and Botswana are bracing themselves for further flooding. A general alert has been issued by the Weather Bureau in Pretoria, which forecasts further rain in Botswana today. Torrential downpours have caused the Limpopo to rise to its highest level in 20 years.

The Limpopo rose 3 m during the night and farmers reported today that the flood is worsening.

In some places the water speeded up kilometre by kilometre beyond river banks and cotton fields were turned into lakes.

The raging torrent yesterday claimed the life of 75-year-old Mr Lucas, Willem Dekker, who was drowned while inspecting a leaking dam on his farm in the Limpopo Valley west of Middelburg.

The children died on the Botswana side of the Limpopo, where hundreds of people were left homeless. A schoolchild was killed when a toilet collapsed due to heavy rains at Moshupa Village.

Huts collapse

An eight-year-old boy died when a hut collapsed at Mahalapye, and two young girls were killed in Moshupa when a second hut collapsed.

Details of the fifth Botswana death have not yet been released.

Several border posts have been closed between South Africa and Botswana. Reports of drowned animals and abandoned vehicles drifting downstream have also been received.

Last night, the river's level had dropped considerably at Pontdrif, but many farmers were preparing for more floods as word reached them that a new deluge was on its way from Stockpoort, 150 km to the west.

Also last night, a police spokesman at Groblersburg — about 100 km downstream from Pontdrif — said the river was starting to rise. Similar fears were still reported in the area.

Some farms were still isolated by the floods when The Star visited the Pontdrif area yesterday.

Traffic across the border was disrupted with many heavy trucks being re-routed.

See Page 11.
10 killed as Limpopo River bursts its banks

The Argus Correspondent

JOHANNESBURG — The raging Limpopo River, which has burst its banks, has claimed 10 lives — five in Botswana and five in Zimbabwe. Among the dead are four children.

Farmers in the north-western Transvaal and Botswana are bracing themselves for further flooding and a general flood alert has been issued as torrential rain caused the Limpopo to rise to its highest level in 20 years.

More heavy rain is expected today in Botswana, according to the weather bureau in Pretoria.

The children died on the Botswana side of the Limpopo. A schoolchild was killed when a toilet collapsed under heavy rain at Moshupa village.

An eight-year-old boy died when a hut collapsed at Mahalapye and two young girls were killed in Moshupa, also when a hut collapsed.

Details of the fifth death have not been released.

TRUCK SWEEP AWAY

The five Zimbabweans were killed in the Filabusi area of Matabeleland on Tuesday when the truck in which they were travelling was swept away, police said in Harare.

On the South African border with Botswana, scores of people have been left homeless and several border posts have been closed.

Last night the river's level had dropped considerably at Pontdrif but many farmers were preparing for more floods as word reached them that a new deluge was on its way from Stockpoort, 150km to the west.

Defence Force units were active yesterday, pulling cars and farm vehicles out of mud and helping wherever they could.
Flash-flood washes cars off roads, sweeps through Cloudburst

By PAT CANDIDO, STEPHEN WROTTESLEY and SHARKEY ISAACS, Staff Reporters

A CLOUDBURST dumped between 100 and 127mm of rain on the Eastern Cape town of Glenconnor in less than 30 minutes, causing a flash-flood which washed cars off roads, destroyed a railway bridge and derailed a train.

Police said there was no loss of human life but some small stock drowned.

Within hours the Glenconnor district, which had been experiencing the worst drought in memory, was a lake.

A goods train and two diesel locomotives were derailed when the railway bridge over the Kariega River was washed away. Train driver Mr B.J. Fourie of Klipplaat was slightly injured and was taken to hospital in Uitenhage.

Police rescued 14 people trapped by floodwater and six farm labourers, earlier reported missing, were found safe.

“In 20 minutes”

A police liaison officer, Captain Bill Dennis, said the river came down in flood when between 100 and 127mm of rain was recorded in different parts of the district in “20 minutes to half an hour” just before midnight.

The Kariega is a tributary of the Sundays River.

Mr Henry Killen and his wife Eliza from GoodHAKE Farm near Port Elizabeth were watching television when the storm broke.

Because they had never seen such heavy rain they went to the main road to warn the police and motorists, but their bakkie was washed off the road and submerged in stormwater. As they climbed on to the back of the bakkie they saw a small car swept behind a large clump of trees.

Thrown ropes

The occupants, Mr and Mrs J.A. Bezuidenhout of Uitenhage and their 12-month-old son, were rescued by police who threw them ropes.

Water swept through two houses near the railway bridge.

A large emergency contingent of police and firemen from Port Elizabeth and Uitenhage arrived at first light.

Backed by helicopters, they patrolled the banks of the swollen

Murder accused blows himself up

WELKOM... A Free State man awaiting trial on a charge of murdering his wife has died in an explosion in a field here.

Sticks of dynamite were attached to his body.

Police liaison officer Captain Johann Poucha said Mr Stephanus van Loggerenberg, 50, of Virginia, was blown to pieces by the blast, at 1.30pm yesterday.

DRINKS

Mr van Loggerenberg was on R1 000 bail following the murder of his wife Elizabeth Johannas, 36, on February 1. He was to have appeared in court again on March 3.

Mr van Loggerenberg visited his daughter, who lives in Welkom, shortly before the blast. He left her saying he was going to have a “little sleep”.

He went instead to the field. Mr van Loggerenberg, a goldminer, and his wife visited friends on February 1. They had drinks and began to argue.

About 4pm Mrs van Loggerenberg ran out of the house followed by her husband. Four shots were fired, hitting her in the chest and stomach.

Police took possession of a revolver and Mr van Loggerenberg appeared in Welkom Magistrates’ Court two days later on a charge of murder. — Saps.
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Four children die in Limpopo flood

JOHANNESBURG — At least five people including four children have died, farmhouses have been evacuated and a general flood alert has been issued following torrential rains in the north-western Transvaal and Botswana, which have brought the Limpopo River into flood.

The children died on the Botswana side of the Limpopo.

One school pupil died when a toilet collapsed due to heavy rains at Moshupa village.

An eight-year-old boy died when a hut collapsed at Mahalapye and two girls were killed in Moshupa when their hut collapsed.

Details of the fifth death have not yet been released.

As the Limpopo rose by almost three metres last night, scores of people were left homeless. Farmers reported the river was still rising.

Most of the flood water had its origin in Botswana and the north-western Transvaal, where up to 200 mm of rain fell.

Commando and army units were on stand-by to give assistance to flood victims.

Reports of drowned animals and abandoned vehicles were received.

A number of border posts between South Africa and Botswana were closed because roads were under water.

Reports of flooded lands along the river have been received from Stokpoort near Ellerslie.

Torrential rains fell over the Border area yesterday, with as much as 38 mm, recorded in Molteno in just 15 minutes.

More than 25 mm was recorded in East London's city centre last night after a downpour at about 7.30 pm.

According to the weather bureau's rainfall report for the 24 hours ending at 8 am yesterday, 85 mm fell in Alivew North, 35 in Maclear, 25 in Jamestown and 15 mm in Burgersdorp.

Earlier, temperatures here soared past the 30°C mark, but bathers attempting to cool down in the sea got more than they bargained for, with the sea temperature plummeting to 14°C.

A forecaster at the weather office, Mr Louis Vermaas, said the low temperature was caused by northerly and north-easterly winds.

"These winds have the effect of bringing cold water to the shore."

Cloudy and cold conditions, with rain having been predicted for the coastal regions today and over the weekend.

— DDR-DBC-Sapo
New Amatola dam: building postponed

CAPE TOWN — Construction of the Wriggleswade Dam under the Amatola Regional Water Supply Scheme has been postponed.

Construction will now only begin during the 1988—89 financial year, according to a government document which was tabled in parliament yesterday.

A memorandum by the Department of Water Affairs to explain reasons for increases or decreases to its current budget, stated that it had decreased spending on the establishment of government water schemes by R13,43 million.

This was due mainly to the postponement of construction on the Wriggleswade Dam.

The postponement was on account of a "cost advantage analysis".

New tenders had been called for, but construction of the dam would only commence in the coming financial year. — PC
Raging floods: 11 die, hundreds homeless

JOHANNESBURG. — Flooding has claimed at least 11 lives after torrential rains lashed the north-western Transvaal, the Eastern Cape, Botswana and Zimbabwe.

One person died in South Africa, five in Botswana and five in Zimbabwe. Among the dead were four children.

Twenty people were rescued in the Eastern Cape after a full-scale air and land search. They went missing when a flash flood hit the Glenconnor area near Kirkwood just before midnight on Thursday, dumping up to 127mm of water in less than 30 minutes. Fourteen were found at first light yesterday and the other six, all farm labourers, by mid-morning.

The raging Eastern Cape floodwaters swept motor vehicles off roads and derailed a goods train as the rail bridge over the Kariega River, a tributary of the Sundays River, was punched out. Train driver Mr B J Fourie of Klipplaat was slightly injured.

The raging Limpopo River rose three metres on Thursday night, breaking its banks and sending water sweeping across farmlands, causing extensive damage. Farmers reported yesterday that the flood is worsening.

A general alert has been issued as the Limpopo rose to its highest level in 20 years, spreading a kilometre beyond river banks and turning cotton fields into lakes.

The raging torrent on Thursday claimed the life of 75-year-old Mr Lucas Willem Dekker, who was drowned on his farm in the Limpopo Valley west of Messina.

The four children died on the Botswana side of the Limpopo, where hundreds of people were left homeless. Details of the fifth Botswana death have not yet been released.

A family forced to evacuate their home on Thursday night were trapped on an island. Yesterday a helicopter went to their rescue.

The five Zimbabweans were killed south of Bulawayo on Tuesday when the truck in which they were traveling was swept away, police said in Harare. — Sapa
Extent of the Floods... This Bogusberg Dam near Guntersburg was so deep under water that the people could not see it. The floodwaters rose to the level of the second floor of some houses, while others were more than half sunken. The people were very much afraid and took to their boats for safety. The damage was estimated at $5 million.

Urgent flood relief operations opened without delay. The Governor declared a state of emergency, and the federal government dispatched 500 National Guardsmen to assist in the relief effort. Tents were set up along the banks of the river to house the flooded residents.

The relief efforts were led by a team of engineers and experts who worked day and night to prevent the river from overflowing. The water was slowly drained from the area, and the residents were allowed to return to their homes.

In the wake of the disaster, the community came together to rebuild. The government provided loans and grants to help the affected families recover. The people were resilient, and within a year, the community was back on its feet.

The flood of 1937 was a tragic event, but it also brought the community closer together. It was a testament to the strength and determination of the people who lived in this area.
Community cut off after flash floods

The two schools have apparently been isolated for four days and yet no information could be obtained about the exact number of those involved or their state of health.

The report was that the trapped schools, Johann Kruger, the then government permanent secretary, was unable to get through to the area so he does not know the exact situation. Without knowing the level of food and medical supplies, the situation is difficult to assess.

But while various relief agencies and the authorities of the area know of the problem, there is no information available on the number of people trapped and their condition.

The community, in the large Mzimkulu and Mapubhulaleni areas of Ndwedwe, is contacted by Chief Female, who also could not be contacted.

Nene Peak Magazine's M. Buthelezi said it was impossible to reach the area. He, however, said, that he had no further knowledge of the situation because it was not possible to get through. He was not aware of how many children were trapped in the schools.

A spokesperson for the SA Defence Force's National Command said the people had been isolated for about four days but they were no longer trapped.

The only information that they have of this is that there are no power lines, and some of them are needed. However, the community is not able to establish the number of people that were trapped, he said.

But over in Durban, the report was that although the organisation had been concentrating relief work in the Ndwedwe area from after the September flood, they had no information about the schools.

This could be attributed to the fact that the situation is not visible from the rest of the world.

"This is not the first time that I have been told," the report said. "But the situation in Ndwedwe is not visible as it is very good.

"The flash floods isolated them and made access impossible. I am surprised that we have no information about the situation, but it looks like the residents are not being reached.

"The defence force had beenavenport and a doctor from the KwaZulu-Natal Department of Health was working in the area, but he did not know who was responsible.

"We understand that the situation is very complex, but they had no further information about the state of the situation."
In Bloemfloods

6 die, many homeless

BLOEMFONTEIN - A 20m (66ft) long bus was swept away in a flash flood on Monday.

Three people died and more than 100 were rescued when the bus was swept away on the N4 highway near Bloemfontein on Monday.

The bus was carrying several South Africans on a recreational trip when it was swept away.

The accident occurred near the town of Klerksdorp in the Free State province.

Three people died and more than 100 were rescued when the bus was swept away on the N4 highway near Bloemfontein on Monday.

The bus was carrying several South Africans on a recreational trip when it was swept away.

The accident occurred near the town of Klerksdorp in the Free State province.

Rescue operations are still ongoing and more bodies may be found.

The incident occurred as heavy rain continued to fall in the area.

At least 10 people are believed to have been swept away in the floods.

The bus was carrying several South Africans on a recreational trip when it was swept away.

The accident occurred near the town of Klerksdorp in the Free State province.

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Floods in three provinces claim 9 lives

JOHANNESBURG — At least nine people are reported to have died in floods after heavy rains fell in the Free State, Northern Cape and Natal at the weekend.

Five drowned near Colesberg in the northern Cape, one in the Bloemfontein area and three in Ladysmith, Natal.

Soaking rains continued falling throughout the Eastern Cape and Border region and a spokesman for the weather office in East London said the rainfall for February was the highest-recorded since 1919.

The worst-hit part of the country was Bloemfontein, which was virtually cut off from the rest of the Free State.

Latest reports were that the wall of the Tygerpoort Dam south of Bloemfontein was cracking. However, it could not be established whether the bridge across the N1 below the dam had been washed away.

More than 150 mm fell in Bloemfontein yesterday, bringing the total rainfall in the city since Saturday morning to 245 mm.

Five air force helicopters carried out rescue operations in areas where people were trapped by flood water. One helicopter was forced down during an evacuation operation but no one was injured.

Flooding was also reported from Wepener, Diewertdorp and Pietrusburg.

At Ladysmith the Klip River burst its banks and the air force sent helicopters to the area to help with emergency aid operations.

Several houses in the Peaceville area and in the Indian residential area of Leonardsville were evacuated.

The town clerk of Ladysmith, Mr Pieter Hurter, said the level of the floodwater at the town was dropping after having reached a depth of four metres in some streets earlier yesterday.

And Umngazi Bungalows could not be reached.

The Umzimkulu River was rising and people were warned not to use the ferry.

More heavy falls were predicted over the north-eastern Cape and the Free State but the rainy weather is expected to start clearing over the Border region today.

The following places in the Border area have recorded particularly good rainfall during the past five days:

- Great Fish River: 96 mm; Risibana 116 mm; Dihloane 129 mm; Konga 96 mm; Kia Mthath 108 mm; Calbstark 104 mm; Stutterport 79 mm; Queenstown 116 mm; Lede Frere 128 mm.
Free State, Natal devastated

11 die as towns cut off in worsening floods

Staff Reporters

Flooding across a vast tract of central South Africa worsened today with raging torrents cutting towns and cities off, washing away roads, bursting dam walls, flooding homes and claiming a known 11 lives.

Three people drowned in the Bloemfontein area, fruit on the Colesberg when their house was washed away, and three at Ladysmith.

Hundreds of people have been evacuated from towns and farms of up to 200 mm at the weekend and torrential rains have sent the Vaal and the Vaal River flooding through the Free State, northern Cape, eastern Natal and parts of the Western Transvaal.

Almost every river in the southern Free State has burst its banks, and the water of the Vaal River has started flooding through eastern Natal.

Nine Air Force helicopters have rescued 200 people from the roofs of houses, trees and areas inaccessible by land, an Air Force spokesman said.

In Ladysmith, a 10-kilometre stretch of the N2 was narrowed when an Alouette helicopter used in rescue operations yesterday crashed on its side while rescuing 80 people from the town of Bloemfontein. No-one was injured.

In Natal, two of the flood victims were young men who died in the Modder River after they died in the Modder River after they died in the Modder River after they died in the Modder River after they died in the Modder River after they died in the Modder River after they died in the Modder River.

The weather bureau predicted more heavy rain could be expected over the flood下一个区域.

From Bloemfontein it is reported that people below the Kroger Drift Dam were forced to evacuate their homes after flood waters from the Modder River caused the dam to overflow.

The weekend’s deluge in Bloemfontein — by yesterday almost 250 mm of rain had fallen — flooded all routes to the south and west of the city. One of the casualties was this minibus.

Govt gears up again for flood relief

Political Staff

CAPE TOWN — The Government is gearing itself to launch a huge flood relief operation for the second time in five months.

The Minister in charge of the special Government flood relief programme, Dr Willie van Nierk, said in an interview that rescue measures were already being implemented.

Residential areas in the low-lying sections of Ladysmith in Natal had been flooded, with loss of life, three times in 12 months and a team was investigating the establishment of a new residential area.

Pilibale response to the Government’s Disaster Fund has continued to be sluggish. Donations can be made at any bank.
Blowout at Isolated as Foods Cause Havoc

For the countrywide expanse of the

plumbers cannot be reached soon

because food warranties have been given

with the coming storm. Equipment

In the city has only a four-day supply of

water, but rains have increased. The

water levels are rising. The

situation has escalated due to the

situation that has occurred in the

enemy-controlled area at the shire.

The shire, which has been flooded,

cannot be reached soon.

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The shire, which has been flooded,

cannot be reached soon.
FOCUS ON FLOODS

SA's biggest dams now overflowing

Warnings on Riet and Vaal rivers

PRETORIA — Heavy rains continued to fall over the Southern Free State, Northern Cape and Karoo yesterday, aggravating the disastrous flooding which has spread over a vast area. Huge volumes of water yesterday surged into the country's two largest dams — the H F Verwoerd and the P M K le Roux.

The Verwoerd overflowed yesterday morning and is running at over 100% full and the P M K le Roux Dam, downstream from the H F Verwoerd, was expected to overflow last night.

The Kalkfontein Dam started overflowing yesterday morning and water is still pouring in.

The Department of Water Affairs expects the Vaal River to burst its banks and low-lying areas in Koffiefontein, Edenvale, Modder River Richie and Douglas, and all other areas downstream of Kalkfontein Dam, to be under water today.

Inhabitants and riparian owners along the Vaal and Vaal rivers near Douglas have been warned urgently to evacuate their homes. According to the department, most Free State dams are full.

The inflow into the Verwoerd Dam yesterday was 10 000 cubic metres a second. The Vaal River at Douglas is in flood, and flow in the lower Orange River could exceed 3 000 cubic metres a second in the next few days.

A Weather Bureau spokesman said more heavy rain could be expected today and tomorrow throughout the Northern Free State and in the north-eastern Cape.

He said overcast skies and more rain were expected over the wider area of the southernmost part of the country.

IN BRIEF

RESIDENTS on the banks of the Riet River and Vaal River yesterday received a "serious warning" from the Water Affairs Department to evacuate their houses for safety reasons.

The warning was also extended to the low-lying areas of Koffiefontein, Jacobsdal, Modder River and Richie.

PAASSENGER train services between the eastern Cape and Johannesburg were seriously disrupted because of the flooding in the Free State, it was reported yesterday. Some services were cancelled, while others were rerouted.

TENTS and supplies were being rushed, by trucks and helicopters, to communities in the flooded areas of Transvaal, KwaZulu and Nyasa, where at least 50 families' homes had been flooded, a Johannesburg Daily News spokesman said in Mmabatho yesterday.

TWO major dams were nearly 100% full and expected to overflow today, the Water Affairs Department said. The Hendrik Verwoerd Dam was 98% full at 6am, while the P M K le Roux Dam was 93% full.

Ladysmith death toll rises to four

DIANA GAMES

his verandah, was lapping his ceiling in just a few hours after the dam wall broke. Ferrera and his family were three of nearly 1000 people evacuated over the weekend to escape the floodwaters.

Free State farmers, who have battled with drought for decades, are better off now and have to cope with floods. "We prayed all week for a bit of rain and now look what's happened," Ferrera said.

Not far from the Ferrera's property the holiday home of former Free State rugby coach Sackle van Zyl was washed away to its foundations.

Ladyship death toll rises to four

OWN CORRESPONDENT

DURBAN — The number of dead in the Ladysmith floods has risen to four and more than 500 people are homeless.

Ronnie Sibho and Amesh Ramphal, both aged 18, drowned in the fast-flowing water while trying to rescue a man who was clinging to a shop's pergola bars.

Petra Shabalala, 27, of Pecolton, about 15km from Ladysmith, drowned when he was swept away. The body of a fourth person, an unidentified black man, was found at Stockville, near the town.

Floods ruin farmers

BLOEMFONTEIN — Three Free State farmers Sol van der Linden's sheep drowned in a tree on Sunday night to save themselves from rising flood waters. By yesterday one was still alive on a perch while several hundred lay drowned below.

Although he lost livestock, Van der Linden's farm house, along with others on the banks of the Kaffer River, was saved when the flood burst on Sunday afternoon.

About 2km down river — near where a 500m section of the N1 had become a gorging hole — Tom Ferreira lost his stock, irrigation system and house. His house was submerged up to the ceiling in a torrent of water from the dam.

The river, formerly half a kilometre from

This map shows the Free State roads which have been cut by flooding

Floods a threat to maize crop

ALAN FINE

The floods in the Free State threaten to further damage the maize crop, already severely depleted by the hot weather of the first six weeks of the year.

National Maize Producers' Organisation (Nampo) economist Kit Le Clue said yesterday past experience had shown that when a dry spell was followed by a wet spell, the crop was more susceptible to fungal diseases.

The industry would be watching the situation in the north-western Free State carefully during the next few days to see whether such a danger emerged.

Dry weather earlier this year forced producers to cut crop estimates by a third.

Mozambique:

MOZAMBICAN authorities have warned of impending floods in the Gaza province in the south of the country in the wake of torrential rains further upstream.

Officials said rains along the border between Mozambique and SA have greatly swollen the Limpopo River and flood waters are moving rapidly downstream.

As a precautionary measure, floods have been sent to the Limpopo to prepare for rescue operations.

In addition, low-lying areas around the town of Chokwe in the Limpopo Valley have been evacuated.

The first major surge of flood waters was expected to reach Chokwe yesterday. — Sapa.
Alien trees a potential fuel source, say experts

Environment Reporter

ALIEN plant invaders such as the Port Jackson willow could be used for fuel by the Cape's poorer people, a conference was told at Kirstenbosch.

Representatives of universities, state departments, local authorities, a hospital and the private sector yesterday attended a conference on woodlots organised by the Botanical Society.

They listened to nine papers on the subject and discussions followed.

Presenting a picture of the problem which faced poor communities, Mr Wouter van Wamelro of the Botanical Society said the population of the greater Cape Town region would increase from 2.5-million to 3.6-million by 2 000.

He said Khayelitsha was growing at a rate of 5 000 people a month, mostly because of immigration, and while 285 000 jobs were needed last year, this figure would have to increase to 474 000 within the next 12 years.

TURMOIL

Mr van Wamelo said a potential crisis was a lack of energy sources, which could lead to social, economic and political turmoil.

The wood of alien plant invaders could be an interim solution, the conference heard. But there were many questions about its use, he said.

Mr I MacDonald of the Percy Fitzpatrick Institute of African Ornithology, said alien plant invaders were plants introduced by man to areas outside their natural distribution range, which then spread to areas where they were not intentionally planted.

He said these plants could give rise to conservation, economic and social/aesthetic problems.

They threatened local species, caused damage to ecosystems, cost a lot to combat, changed the appearance of natural veild and, because they often grow best alongside roads, blocked the view.

A serious problem was that wood was not a popular fuel among the people in a township such as Khayelitsha, who preferred using paraffin, said Mr B Slob, ex-researcher at the Energy Research Institute in Cape Town.
The widespread flooding in the Thames valley caused by rising river levels has disrupted rail transport services in the area.

Flood Disaster

Deluge causes chaos in road, rail transport

Daily Dispatch Reporter

DLO 3/12/63
13 lives lost
Hundreds evacuated
Bloemfontein and other towns cut off
Rivers burst their banks
Homes, roads and bridges washed away
New flood warnings sounded

FLOODS
WREAK
HAVOC

TWO hundred blacks and 18 whites evacuated from flooded areas in the Free State are being sheltered at Air Force base Bloemspuit near Bloemfontein, SAFAF spokesman Cndt Koos Smit said in Pretoria yesterday.

Floods wreaking havoc across a vast tract of central South Africa worsened yesterday with raging torrents cutting Bloemfontein and many towns off, washing away roads, bursting dam walls, flooding homes and claiming a known 13 lives.

And as hundreds of people were airlifted to safety by Air Force helicopters, new flood warnings were issued.

On Sunday three people drowned in the Bloemfontein area, five at Colesberg when their house was washed away, and four at Ladismith.

More than 200 people have been airlifted to safety and hundreds

ONE of the routes into Bloemfontein which was cut off by the weekend's deluge.

To Page 5

“Damelin makes it easy!”

Almost every river in the southern Free State has burst its banks.

In Natal, two of the flood victims were young men who died in seething flood water in Ladismith while trying to rescue a man clinging on to a shop's burglar bars.

Eyewitnesses said two other men who had tied themselves to a pole to avoid being swept away were rescued by emergency services personnel.

Road, rail and telephone links have been cut in many areas, and Bloemfontein is accessible only by air.
PW promises assistance to victims of flooding

CAPE TOWN — The government will do everything in its power to assist victims of the flooding in the Free State, Northern Cape, Western Transvaal and parts of Northern Natal, the State President, Mr F.W. Botha, said here yesterday.

"The ministers concerned, state departments and other authorities were already acting in this regard, he said." Mr Botha added in a statement that it was with deep regret that he learnt of the loss of life, damage and disruption which followed the widespread rainfall and floods in these areas.

"I wish to express on behalf of the government and the people of South Africa our sincere sympathy to those who have been affected in some way by the loss of life and damage caused by the floods," he said.

"We cannot fail, however, to express our humble thanks towards Almighty God for the drought that lasted over large parts of the country for many years has been broken." Mr Botha also thanked, on behalf of the government, "everyone who has assisted the victims of the floods and heavy rains in their hour of need".

Mr Botha said as had been the case in Natal, where a cabinet committee had been appointed, a special cabinet committee had again been appointed. The Natal committee had been under the chairmanship of the Minister of National Health and Population Development, Dr Willie van Niekerk, and was still responsible for dealing with the flood and its consequences in Natal.

Dr Van Niekerk will also chair the newly appointed committee and determine the extent of the flood damage, and "submit recommendations on dealing with the consequences of the floods," Mr Botha said. — Sapa
Help on the Way

As the last road out of Bloom-

from the far north of South Africa

One of the main routes north is cut off by floods. The photograph was taken yesterday.

Road Closed...
Floods

already evacuated from outlying areas since Sunday.

Of this figure, 461 were airlifted from rooftops, trees or kopjies and other inaccessible points, 300 were transported by road and 34 by boat to various relief centres in Bloemfontein. Food is being distributed to the evacuation centres.

One of Bloemfontein’s main lines of water supply could be in jeopardy if the pumps at Maselsoort, on the Modder River about 20km from Bloemfontein, cannot be repaired soon. The city has only a four-day supply of water left if the pumps are not repaired.

The floods in the Free State threaten further damage to South Africa’s maize crop, already severely depleted by the extremely hot and dry weather of the first six weeks of the year.

The SADF, which has used 10 helicopters for evacuations, said last night the situation had quietened down but the Riet River was expected to rise more than 10 metres and flood warnings have been issued in the Koffiefontein and Jacobstad areas, west of Bloemfontein.

In Maputo, the government has issued flood warnings in the wake of torrential rains in the catchment area of the Limpopo River.

The deputy minister for environment affairs in the House of Delegates, Mr Somarto Pachal, said yesterday he would make urgent representations to the government to have the flood-ravaged Natal town of Ladysmith declared a disaster area.—Political Correspondent, Own Correspondents and Sapa
Tragic end to heroic rescue bid in floods

By Inga Molteni

Tragedy marred a heroic effort by four Ladysmith teenagers to rescue two people whom they found clinging to the burglar bars of shops in the town at the weekend.

At least four people drowned and three were rescued from their homes as flash floods hit low-lying areas of the town for the fourth time in 13 months.

A 17-year-old pupil, Raveen Moholien, said The Star yesterday how he was nearly pulled down by the raging flood waters on Sunday morning. He and a friend, Neville Morris (18), were rescued after they managed to tie themselves to a lamp-post with a rope to stop the floods from carrying them away.

Two of their friends, who had joined them in their attempt to aid people trapped by rapidly rising water, drowned although they, too, were tied to the rope.

Indian community members commended yesterday the bravery of the two pupils boys, Raveen Sidhu (18) and Anosh Pathiyan (18), who died helping others.

Mr Moholien explained how his friend, Mr Morris, prevented them from being swept away by tugging the rope which held them together to a nearby lamp-post.

He said that after they rescued a man who was clinging to the burglar bars of a fish shop they were called to assist an old man, whom rescue workers later managed to save, at another shop.

Made a chain

"Neville and I knotted ourselves on the same rope, the other two were at the other end. We made a chain and waded through the water together in case one of us slipped," he said.

"As we took the old man, the force of water told Rennie and Anosh from behind and they swept past us."

"I tried to pull them back but they were pulling me with the force. Neville held me back and tugged the rope round the light pole."

"The water dragged the others away."

"Anosh was washed away. I saw him floating about 100m from us. Rennie was strangled under the water by the rope," said Mr Moholien.

His friend, Mr Morris, said: "I was frightened. Raveen lost hope, but I held tightly on to him."

Still stunned by the experience, the two teenagers were discharged yesterday from the provincial hospital where they had been admitted unconscious after the Ladysmith Protection Service had rescued them.

Yesterday, they attended the funeral where their two friends were buried according to Hindu custom.

"They scattered petals on the faces of their friends before the coffins were closed." According to Hindu custom, only men attend the burial of the two Ladysmith teenagers, who were buried beside each other yesterday after they drowned at the weekend attempting to rescue others when the town was flooded.

Fresh water for 4 days in Bloemfontein

By Adele Baleta

BLOEMFONTEIN — There is enough fresh water in Bloemfontein to last only another four days, despite the deluge which has flooded the Free State capital.

This was announced at a special meeting of government officials, including the Minister of Health and Welfare, Dr Willie van Nierkerk, in Bloemfontein yesterday.

Dr van Nierkerk, Free State officials and the press yesterday inspected the flooded areas from a helicopter.

Mr Japie Visser, chairman of the disaster fund, said the delegation would assess the situation and recommend to the Cabinet whether to declare the flood-affected region a disaster area.

The Free State Commando involved in joint operations with State departments reported to the Minister on critical areas in the Free State.

NEW CRITICAL AREAS

Commandant Piet Venter said the situation around Bloemfontein had stabilized but new critical areas had developed after more rains yesterday.

On Sunday night, 200mm fell and 136 people were placed in the Boeusterspark in Bloemfontein. Last night the suburb's roads were flooded.

Bloomfontein city officials said the Maserlopoort pump station was flooded and electricity to operate the pumps had been switched off as it was too dangerous.

"We are not insured. We only managed to save our clothing," she said.

Unaware of the disaster which has hit her family in Ladysmith for the third time in a year, this little girl still found time to play in the mud.
In 1954 Flood Teacher recalls

By Donald Gay

1954 Flood

The teacher at the Riverdale School in St. Joseph, Missouri, recalls the flood that took place in the area. The school was located near the Kansas River and was damaged by the floodwaters. The teacher, Mr. John Gay, describes how the river rose and flooded the school, causing damage to the buildings and premises. The school was closed for several weeks, and the students had to be relocated to a nearby school. The floodwaters were so high that the school was completely submerged, and the teachers and students had to evacuate the building. Despite the damage, the school was eventually restored and reopened after the floodwaters receded. The teacher, Mr. John Gay, remembers the flood as one of the most challenging times in his career as a teacher.
Towns Brace For New Floods

Death toll rises to 18 as torrents of water pound downstream.

Home owners, Prayer the water in the town.
De-stocking was in this area and at present the most extensive
western part of the extensive area on the
northeastern cape of the
lake. This area is extensive.
Significant changes due to
the area of the breeding
grounds have occurred in the
lake, and these changes have
led to a decrease in
breeding.
The assistant general
of the secret tribal
took the old man in
his arms and told
him to enjoy the
survival. He then
led him away and
left him there.

"We are happy to
know that he was
saved."

The old man
smiled and
nodded his head.

The assistant
general said,
"We will do all
we can to help you.
"

The old man
nodded again.

The assistant
general
continued,
"We will take care
of you."

The old man
smiled.

The assistant
general
added,
"We will do all
we can to help you.
"

The old man
smiled again.

The assistant
general
said,
"We will take care
of you."

The old man
smiled for the last
time.

The assistant
general
added,
"We will do all
we can to help you.
"

The old man
smiled for the
last time.

The assistant
general
said,
"We will take care
of you."

The old man
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last time.
Floods: The worst-hit areas

1: BLOEMFONTEIN: Cut-off, at least four drown
2: COLESBERG: At least five drown
3: LADYSMITH: At least four drowned
4: SMITHFIELD:
5: REDDERSBURG: Residents evacuated
6: EDENBURG: Evacuated
7: BOSHOF:
8: HERTZOGVILLE:
9: PETRUSBURG: Car washed away
10: AMALIA: 152 homeless
11: VRYBURG: Dam wall washed away
12: SCHWEIZER— Bridge collapsed

FLOODS: LAST WEEK, Limpopo burst banks—10 dead in Zimbabwe/Botswana, 1 dead in Northern Transvaal.

FLOOD WARNING: GAZA PROVINCE, Mozambique.
The position of the towns

Aliswad North: Almost completely isolated - one road out open, bread flown in.
Barkly West: Flood danger.
Bloemfontein: Almost isolated - one dangerous road to the north open. Joint Operational Centre set up by security forces. At least four dead. Water for only three days.
Boshoit: 200 homeless.
Botshabelo (50 km from Bloemfontein): Homes damaged, some areas isolated, one drowning with other unconfirmed reports of drownings. Cut off from Bloemfontein.
Campbell: Isolated.
Christiana: Road flooded.
Colesberg: Isolated, bread flown in, telephone links down. Five dead.
Delftshop: Homes evacuated.
Douglas: Warned to expect floods. Edenburg: Isolated, bread flown in.
Groblershoop: Flood danger.
Jagersfontein: Telephone links down.
Kimberley: Isolated.
Koffiefontein: Warned to expect engulfing floods. Black township evacuated and partially flooded, with some homes collapsed. Main bridge closed, evacuations continuing.
Ladysmith: Low-lying residential areas flooded, covered in silt. Four dead.
Peacetoyn: Flooded, one man swept away.
Pettersburg: Isolated, farmers airlifted from their land.
Prieska: Flood danger.
Reddersburg: Bread flown in.
Rouxville: Telephone links down.
Smithfield: Telephone links down.
Steadville: One dead.
Thaba 'Nchu: Homes destroyed.
Winterton: School and 70 homes have collapsed.

Floods: Mozambicans breath a sigh of relief

The Mozambican authorities are no expecting serious floods in the Limpopo valley in southern Mozambique, it has been reported here.
The Jaly Nocstua quoted a spokesman for the National Water Board, Mr Isabel Vaz, as saying that the level of the Limpopo River had already start-
ning to fall.

She said the fact that tributaries of the Limpopo River downstream from Beit Bridge were not con-
tributing to the flood was the reason why the level of the river had dropped.
The Mozambican authorities started evacuating people and livestock from the Limpopo valley earlier this week.

Towns face total disaster

By Sven Forssman and
Toni Youngusband

The floodwaters racing towards small towns in the Free State and northern Cape could turn them into disaster areas, police spokesperson Captain Carl van der Westhuizen, who is directing rescue operations, told The Star last night.

Captain van der Westhuizen said the entire northern Cape police force had been mobilised to help rural farmers and residents of small towns evacuate their homes, following flood warnings by the Department of Water Affairs.

At least five rural towns - Richie, Barkly West, Groblershoop, Jacobsdal and Koffiefontein - were in danger of being engulfed by the water as crooing dams started to burst.

The Spitskop dam was 200 percent full yesterday when its walls broke and a deluge racing towards Richie, Barkly West and Groblershoop.

"The area has already been devastated by the rains. I shudder to think what is going to happen when the floodwaters arrive," Captain van der Westhuizen said.

"More than 500 houses have collapsed because of the rains. That number could double or even triple.

Farm dwellings along the Ritchie and Medder rivers are under water and we have already moved 1 500 people to higher ground.

"Seventy homes in a school collapsed in the Winterton district alone."
Fresh rain brings new troubles

Fresh torrential rains have hit the south-western Free State, causing extensive flooding in Richie and Jacobsdal.

Richie, at the confluence of the Riet and Modder rivers, has suffered the brunt of floodwaters. Residents began evacuating early yesterday.

The South African Air force rescued 26 people from farms near Phillipsburg, south of Bloemfontein.

Jacobsdal appeared totally desolate.

From the air, it can be seen that the Modder River — up to 3 km wide in places — has cut a path of destruction between Bloemfontein and Richie (160 km). Only the roofs of farmhouses and the tops of vehicles can be seen.

Homeless stranded by floods

By Adele Baleta

BLOEMFONTEIN — A numb silence prevailed at Bloemspruit Air Force bungalows, where at least 200 people who were rescued from their flooded homes have been accommodated. Many of those who lived in Rudioel, Valenbrooks and Midway no longer have homes to go to.

Mrs Lucy Shongwe (51) told The Star yesterday she was rescued by an SAAF helicopter from the roof of her employer's house in Rudioel.

"As the water started rising, my employer took a ladder and he and his three children and my husband and our four children climbed onto the roof. It was terrifying," she said.
Kalahari’s ‘desert ships’ moved

Crime Reporter

The Kalahari’s famous camels have been moved to a new home as small villages on the banks of the Kuruman River battled down the hatches.

Police at Witdraai, where the camels are being trained for a 200km commemorative trek to Upington in two months’ time, said the river was threatening to flood.

The camels, which had been corralled in the dry river bed, had been moved, station commander Warrant Officer Koos van Zyl said.

The parched area in the Kalahari had 65mm of rain on Friday and falls are thought to have been far greater in the river’s catchment areas in Botswana and further to the east.

The road to the Kalahari Gemsbok Park runs along the river bed in places and could be closed.

The camels will be ridden to Upington in April for the unveiling of a camel statue in front of the police station to commemorate the police, camel patrols which ended in 1951.

TOWN FLOODED: Houses in the small town of Ritchie on the banks of the Riet River were up to their windows in floodwaters yesterday.

TRUCK TRAPPED: A milk truck lies submerged in floodwaters which have wreaked havoc in the Orange Free State and Northern Cape.
41 airlifted after floods

PIETERMARITZBURG — Forty-one people stranded by floodwaters in the Drakensberg were airlifted to safety by helicopter in two separate mountain rescues yesterday.

The rescues were carried out by the South African Air Force (SAAF) in Durban assisted by Department of Forestry officials and the Mountain Club of South Africa.

One party was a group of 31 university students from the Orange Free Stat. who were rescued in the Cathedral oak area, and the other was a group of 10 doctors who were stranded at Injasuti following torrential rains which brought all the Berg streams down in full spate at the weekend.—DDC
MORE devastation is feared in the ravaged Free State while northern Cape townsfolk are bracing themselves as torrents of water pound downstream, bursting dams and river banks.

The giant PK le Roux Dam was expected to overflow at midnight last night and 10,000 cubic meters of water—more than three times flood level—will hit Douglas by noon today, a water affairs spokesman said yesterday.

The Weather Bureau yesterday issued a special warning that further heavy falls were possible over the southern Free State, spreading into the North Eastern Cape, Lesotho and South Western Natal.

The SA Police and army are on standby in the low-lying areas of Douglas, Koffiefontein, Bethulie and Ritchie, which are expected to be hit by waters from three flooding rivers.

The northern Cape town of Upington, on the banks of the Orange River, is braced for flood waters expected to hit the town on Friday.

The town clerk of Douglas, Mr. L. de Jager, said yesterday: "We worked right through the night moving hundreds of people out of the low-lying areas into the town."

"Terrible"

"It's a terrible thing that is happening. The water hasn't reached us yet, but it should do so within the next two days."

Major Egbertus Vivier of the Upington police said: "People are scared. We don't know what is going to happen."

The river is expected to rise at least seven and a half metres, but we don't know what effect this will have.

The biggest storage dam in the country, the Hendrik Verwoerd, was just over 111 percent full yesterday morning.

Contributing to the deluge is the Kalkfontein Dam on the Riet River. At 159 percent full and with an overflow of 3,226, fears are growing that the dam will not be able to withstand the flood.

The dam above Bethulie started overflowing yesterday morning after the dam on Mr. Piet Joubert's farm Riefonfontein broke.

At least 15 people have been killed in floods since Saturday.

All road links to Campbell in the northern Cape have been severed by flood water. The town had 100mm of rain last night and has recorded 350mm this week.

The security forces set up a joint operational centre in Bloemfontein to cope with rescue work.

More rain is forecast for the flood ravaged Bloemfontein and southern Free State areas, and rescue workers fear further devastation.

Rescue

After a dry night, dams and rivers began to subside and the rescue of stranded people and the evacuation of stranded people, uddle with 317 plucked from trees, rooftops and higher ground by air force helicopters on Monday afternoon.

The nine Alouette and two Puma helicopters in service were in the air shortly after dawn yesterday, carrying food and supplies to stranded people.

Spokesman for the joint operations centre in Bloemfontein, Mr. Marius Nagel, said evacuation of people from low-lying areas below the Kalkfontein Dam had been completed on Monday in the face of fears that the dam wall would not hold.

Mr. Nagel said yesterday that further rain would be "a major problem."

Most of the roads in the area were still under water, but motor bridges were holding up.

"We don't know if they will still hold up if more rain falls," said Mr. Nagel.
Douglas hit by a wall of water

A WALL of water hit the little Northern Cape town of Douglas today.

At least one person, a woman, is missing and feared drowned. Police said most people had already been evacuated from the area.

A flood warning was issued to residents of Douglas yesterday after the Spitskop dam burst. A mass of water poured down the Modder river and hit the town this morning.

At 7am today, 276 million litres a second was flowing past the town at the confluence of the Modder and Rust rivers.

A spokesman for the Joint Operations Centre in the Northern Cape said the level of the Harts River at Delportshoop and the Vaal River at Douglas was still rising.

BRIDGE

Earlier police drafted extra men into Douglas. A spokesman said: "We are shifting people to higher ground and all policemen in the Northern Cape have been mobilised.

Extra men have been drafted into the town to staff police and they are being assisted by the police helicopter that has been flown down from Potchefstroom.

It was expected that parts of Delportshoop would be flooded this morning. The approaches to the bridge across the Modder between Kimberley and Hopetown were under water.

At least 20 homes at Ritchie were flooded, and the power supply was disrupted.

Jacobsdal is partly submerged. People living in low-lying areas along the Orange River near Prieska have left their homes.

Jagersfontein has been cut off. Another 80mm of rain fell there last night. Farm dams have broken and one farm has lost 600 sheep.

Emergency supplies are being organised for flood victims in the south-western Free State and the Northern Cape. Supplies, including 200 blankets and 40 stretchers, are being taken to Edenhurst.

Mother tells of fight to save children

The Argus Correspondent

BLOEMFONTEIN. — A Free State housewife today described her battle to save the lives of her three children trapped in their home as floodwaters rose.

Mrs Esmé Buys of Roodevalkfontein, said she and her husband George and the children were preparing lunch on their smallholding when water began flowing into the house under the doors.

"By the time I alerted George a wall of water from the Renosterspruit burst into the house," Mrs Buys said.

Mr Buys packed two suitcases, loaded them on his bakkie and drove from the house with his family.

"But we had gone only 10 metres when the bakkie's bonnet was covered in water. We were stuck," she said.

Her husband, chest-high in the swilling waters, went to look for help while Willie, 13, made his way to a nearby school and alerted the army.

Troops secured the bakkie and then plucked Esmé and the children out through the windows.

OVERFLOWING

A Defence Force spokesman in Kimberley said the bridge at Douglas and the bridge at the mouth of the river had been washed away.

The direct route from Kimberley and other towns in the Northern Cape to Beaufort West via Barry's River has been closed and motorists should travel via Barry's West. The Harry Verwoerd dams on the P. K. le Roux dams on the Harts River were over the banks yesterday, and the Krugerditdam was 10 per cent full.

Washaways occurred over the weekend. The railway line across the Harts River was seriously damaged. Harts River was seriously damaged.
1,500 are evacuated from Douglas as wall of water hits

Staff Reporters
A massive wall of water hit the little northern Cape town of Douglas today after tearing its way through Ritchie yesterday afternoon and forcing the evacuation of 1,500 people.

At least one person, a woman, is missing and feared drowned. No details are yet available on flood damage in the town, but police said most people had already been evacuated.

Police said the town was in great danger because the Spitskop Dam on the Harts River had burst and tons of water poured down the Vaal and joined the water raging down the Modder.

An urgent flood warning was yesterday issued to residents of Douglas, helpless in the face of raging rivers.

This morning the large mass of water from the Modder River moved toward Douglas and hit the town, which is at the confluence of the flooding Modder and Riet rivers.

A spokesman for the Joint Operations Centre in the northern Cape said the level of the Harts River at Delportshoop and the Vaal River at Douglas was still rising.

It was expected that parts of Delportshoop might be flooded today.

The approaches to the bridge across the Modder River on the road between Kimberley and Hopetown were already under water.

At least 20 houses at Ritchie were under water and the power supply to the town was disrupted.

Jacobsdal is partly submerged. People living in the low-lying areas along the Orange River in the vicinity of Prieska have also left their homes.

Jagersfontein has been cut off from the rest of the country. A further 93 mm of rain fell at the town last night. Many farm dams in the district have broken and one farmer has lost 600 sheep.

The Cape Provincial Administration has supplied the residents of Warrenton with 30 tents, as 160 houses in the town's black residential area have been washed away. Tents are also being taken to Petrusburg, where about 50 black families have been left homeless by the floods.

The Kimberley-Douglas road, which was under water for several kilometres, had been closed, thereby cutting all road links between Kimberley and Upington. The road between Kimberley and the Transvaal is also closed.

Two large dams on the Orange River, the Hendrik Verwoerd and the P K le Roux, are overflowing.

Early yesterday the Krugersdrift Dam west of Bloemfontein was 191 percent full, creating a danger for all the areas along the Modder River.

A large number of people were stranded at Edenburg which was cut off from the rest of the province. Food was being supplied by helicopter.

Four roads from Bloemfontein have been reopened — those leading north to Winburg and Brandfort, and east to Thaba Nchu and Dewetsdorp, but the provincial inspection service again warned motorists to drive carefully on re-opened roads. Only vehicles of less than 1.6 tons were allowed.

Other roads still closed were those across the Harts River between Delportshoop and Ulco and across the Riet River near Jacobsdal in the south-western Free State.

See pages 3 and 9.
More heavy showers today

PRETORIA. — The government weather bureau expects more heavy showers today over a wide area. This includes south and central Free State, northeastern Cape, Lesotho and the south-western parts of Natal.

And, according to the Water Affairs Department, the Hendrik Verwoerd Dam was approaching 120% full late yesterday.

The overflow is gushing downstream into the P.M. K le Roux Dam which was expected to overflow last night. Water levels continue to rise in other dams.

Cost may be ‘tens of millions’

PRETORIA. — The Free State provincial administration says the cost of repairing the havoc caused by the unexpected floods over the southern parts of the province could amount to tens of millions of rand.

A provincial spokesman said that till the water subsided it was impossible to get an accurate picture, but the costs would be “high”.

Roads in many parts have been undermined and washed away, dams have been breached and bridges in some areas have collapsed or been weakened. Damage caused by rail washaways and to Post Office equipment will swell the overall cost.

‘Once in 200 years’ deluge

JOHANNESBURG. — The massive weather system stretching from north to south over the southern Free State is a “once in 200 years” occurrence, weather experts say.

The massive deluge in the country’s interior is being caused by a unique 15-day influx of moist tropical air from the north meeting up with a strong frontal low sweeping in from the west, says Pretoria Weather Bureau chief forecaster Mr Mike Edwards.

The powerful Atlantic high ridging in from the south-east has caused a virtual standstill of the combined upper and lower atmospheric low-pressure systems, which together act as a “magnet” for the moist air pouring in from the north and south.

Lady'smith ‘back on its feet’

DURBAN. — Mopping up in the flood-hit Natal Inland town of Ladysmith was progressing satisfactorily and the town was “almost back on its feet”, town clerk Mr Peter Hurter said yesterday.

However, damage to municipal services such as roads, storm-water drainage and other amenities has been estimated at more than R1 500 000.

The losses of individual families will be known only today once they have returned to their homes after spending the past two nights in civic halls.

Rail services, which had been disrupted between Ladysmith and Durban, were expected to be back to normal today, a SATS spokesman in Durban said.

Loud-hailers and megaphones being used by army and civil defence units yesterday along a 200km stretch of the Orange River to warn people to evacuate low-lying ground threatened by floods.

Mr De Jager said 32 houses had been evacuated late last night but we probably have to evacuate more tomorrow — perhaps a third of the town comprising 150 homes or more”.

A coloured school opposite Douglas was washed away on Monday night and several houses flooded from the 250mm of rain which have fallen there since Sunday.

A helicopter airlifted food to the residents, who were being housed in a church hall and community centre yesterday.

The rains — the first in 12 years of drought — had finally stopped falling at the town about 5pm yesterday, and no more was expected — “but we are going to have our hands full just dealing with all the floodwater from upstream”.

Furniture and possessions were being taken from threatened homes and moved to the Douglas Co-operative and livestock were being moved to higher ground.

Families in lower-lying areas had moved in with friends or booked into the local hotel out of the reach of the anticipated tide.

Mr De Jager said life had continued “relatively normally” with telephone communications and electricity supplies still functioning yesterday. School had also continued as usual.

Added to the flood current was the possible collapse of the 61.4-million m³ earth-walled Spitskop Dam on the Harts River which could happen today. The dam was at 200% of capacity yesterday and was not expected to hold out.

Mr Dirk Viljoen, town clerk of Prieska, said the floodwaters were expected to reach them about 11 hours after it hit Douglas.

Fourteen houses close to the river were evacuated late yesterday and a further 13 would be cleared this morning. Scores of people had had to be relocated.

The liaison officer of the police in the Northern Cape, Captain Karel van der Westhuizen, announced late yesterday that the evacuation of Ritchie had begun. The town is just below the confluence of the Modder and Riet rivers.

Capt van der Westhuizen said that from the air it appeared that a vast quantity of water from the Modder River was approaching Jacobda, and only the roofs of houses were visible on many farms.

The Administrator of the Free State, Mr Louis Botha, who flew over the flood area in a helicopter, said the situation in the province was critical, but it appeared that the floodwater was receding in the east.

Although the N1 between Bloemfontein and Winburg had been reopened last night, a provincial
Town Waits For Wall of Water

END OF THE ROAD. The picture and caption on the mirror reflect the eerie view — a town trapped by the floodwall upwards from a round-the-corner drive.
Trains to north cancelled

Staff Reporter

THE floods have caused all railway lines in the Free State and Northern Cape to be closed as a result of which the Blue and Trans-Karoo trains, due to leave from Cape Town today, have been cancelled.

A SATS spokesman, Mr Jannie van Zyl, said the rail line between Kimberley and Warren- ton had been washed away.

Monday's Orange Express to Durban via Johannesburg stopped at De Aar and was on its way back.

No figure yet on flood damage

Own Correspondent

JOHANNESBURG.—Insurance assessors have not yet been able to put a figure to the damage caused by the latest floods.

"Our people are down there, but in some cases they have not even been able to enter some flood-damaged areas," SA Insurance Association CE Mr Rodney Schnee-berger said yesterday.

He rejected reports that companies had refused to insure Ladysmith residents after the Natal floods last year.
Burst rivers drown 2, leave 1000s homeless

By Paul Olivier

KIMBERLEY — Two children drowned, hundreds of thousands of hectares of farmland were devastated, thousands of people were left homeless and more than 10,000 houses were flooded as rivers in the northern Cape burst their banks.

The Modder River near Kimberley, usually only a few metres wide, was 20 km wide yesterday.

Two children drowned on the farm, Kameebu, near Steil, and a 41-year-old woman was reported missing. A boy was rescued by a helicopter after he spent almost two days in a tree.  

Families huddled

- Last night, at the Modderriver station, more than 1000 homeless people were being accommodated in train coaches and fed and clothed by Kimberley Civic Defence.

A mother of two children left homeless said: “My heart is broken for the loss I have suffered. All I have left are my children and the clothes we are wearing. This is most terrible.”

Some road, rail links are restored

Road and rail links between Johannesburg and Kimberley and Johannesburg and Bloemfontein have been partially restored.

Two railway lines between Johannesburg and Kimberley and Johannesburg and Bloemfontein have been re-opened to allow special trains to ferry stranded passengers between the cities, a spokesman for South African Transport Services said today.

A Johannesburg-bound passenger train left Kimberley at 11.15 am. The return journey starts at 7pm, arriving in Kimberley early tomorrow.

A Bloemfontein-bound train left Johannesburg at 10 am today, due to arrive in the Free State at 11.35 pm.

The Automobile Association confirmed this morning that the N1 between Johannesburg and Bloemfontein had been opened to traffic as well as the highway between Johannesburg and Pretoria.

Bills all paid in Kimberley were impossible, the AA said.

Urgent bid to prevent Bloemfontein water curbs

By Adela Baleta

Engineers and workmen helped by the SADF are battling to restore Bloemfontein’s water supply before severe restrictions have to be imposed on the city.

Work began yesterday with the re-erecting of Eskom pylons strung across the Modder river near the town. The pylons were pulled down by floodwaters yesterday evening.

It is expected to be back to normal if clear weather continues.

The SADF, the Department of Water Affairs and Bloemfontein teams from Bloemfontein, Bethlehem and Hammarsburg were at the scene yesterday. A Puma helicopter yesterday lifted into position three cables — each 300 kg — and four wooden pylons.

According to Bloemfontein’s City Engineer, Mr John Basinger, severe restrictions would have to be imposed if the water supply was not restored today. Supplies to Botshabelo near the city are also threatened.

Queenstown hotel closed

The Central Hotel in Cuthbert Road, Queenstown, was closed last night after an outer wall of the building collapsed just after 7 pm yesterday.

Two bedrooms on the first floor were exposed and the floor two of the rooms crashed to the ground floor. The roof in one of the rooms also collapsed. No one was injured.

An engineering consultant, Mr Peter Fischer, said it could have been caused by water pressure.
Upington braced for disaster

From VERNON BRENTH
Staff Reporter and Argus
Correspondent

UPINGTON. - Hundreds of residents, farmers, and farm workers have begun to evacuate the low-lying areas in and around this Northern Cape town.

The community is taking no chances as the marauding flood waters, which have so far claimed at least 16 lives and caused appalling damage, threaten to push the Orange River to an unprecedented rise of 12 metres.

The first flood waters reached Upington at 2am today.

By this evening the rate of flow will have reached twice the flood warning rate, 6,000 cubic metres per second (cumecs).

According to estimates by the Department of Water Affairs, the full force of the flood - an incredible 10,000 cumecs will be thundering down the Orange River on Saturday morning.

RESIDENTS EVACUATING

The town is bracing itself for the worst flood in its history.

Residents in the riverside suburb of Middelpos are evacuating, moving their furniture to warehouses on high ground.

Some are packing sandbags against the walls of their houses, using a rough rule of thumb that flood waters will be two metres higher than in 1974.

At Kanon Island, a Blemynie cultivated piece of land sandwiched between two arms of the Orange River 20km east of Upington, farmers and their workers have started to evacuate.

WIDESPREAD HAVOC

Meanwhile, reports of widespread havoc are being received from the Free State and many parts of the northern Cape.

At least 16 people are known to have died, but the death toll could be considerably higher.

It will be days before an accurate total will be known, and weeks and even months before the appalling damage to farms, roads, railway lines, bridges, dams and stock can be assessed.

Yesterday a farmer in the Ulco area, Mr T D Paton, 64, died of a heart attack when he was about to be airlifted to safety from his flooded farm near Kimberley.

DROWNED, MISSING

The 16th victim of the floods was reported to have drowned in Botshabelo, the massive settlement 20km east of Bloemfontein. Two more people have been reported missing in the area.

The body of an unidentified woman was spotted floating in the Modder river near Ritchie by a helicopter crew last night, a spokesman for the Joint Flood Operations Centre in Kimberley said.

An unsuccessful search for the body was made last night and was resumed again at first light.

Meanwhile, at Deportshoek, which was hit last night by floodwaters from the burst Spitskop Dam, 250 houses were reported to have been flooded.

DANGER ZONES

Douglas, at the confluence of the Riet/Modder/Vaal and Orange Rivers has already been struck by the initial rush of water, with the main flood expected sometime after midnight tonight.

Large sections of the town have been declared danger zones and telephones lines in the region have been cut. About 276 people in the town were evacuated by air.

Ten women, who had gathered on Sonderdraal farm near Perdeberg, had to be airlifted to safety by helicopters when the became cut off by flood water last night.

At Prinska, on the Orange river, flood water is reported to be rising rapidly and families are being evacuated from 14 white and 12 coloured residential area houses.

INUNDATED: About 15 low-lying houses at Jacobsdal on the Riet River, southern Free State, were flooded yesterday. Early warning of expected flooding allowed owners to evacuate.
Floods likely to cause shortages in Western Cape

Staff Reporter

SHORTAGES of certain commodities are expected to hit the Western Cape as most rail and road links through the flood-devastated areas between Cape Town and the Transvaal remain impassable.

Almost all the roads to Bloemfontein and Johannes-
burg are closed and motorists have been advised to delay
their journeys or to fly.

Some goods trains have been
operating but many routes are still closed.

Mr John Barry, Western Cape
general manager for Pick'n Pay, said shortages of some perishable goods had already been experienced.

SHORTAGES RESTRICTED

"We foresee some shortages developing in a week or two," he said.

Shortages should be restricted to certain brands but other brands would be available.

These companies which did not have factories in the Western Cape would be affected, such as some manufacturers of paperware, cereals, soap powders, detergents and similar products.

He said the Western Cape was self-sufficient as far as fruit and vegetables were concerned but prices of some crops grown in flooded areas might rise.

At the same time there might be surpluses of produce grown in the Cape and normally transported to the Trans-
vaal. This would lead to prices falling.

Mr Deon de Goede, Cape Town's director of markets, said the supply which could be most affected was that of potatoes.

The Automobile Association has warned that even those roads which are open are still very dangerous and advised against using them.

The situation was changing hourly and advice should be taken before leaving, a spokesman said.

Some train and bus services have been cancelled because of floods in the northern Cape.

A Sats spokesman said that three mainline train services from Cape Town to the Trans-
vaal, including tomorrow's Trans-Karoo, had been can-
celled.

Blue Trains scheduled to leave tomorrow and on Mon-
day have been withdrawn and the bus service between Cape Town and Upington today and on Sunday has been cancelled.

Tickets may be rebooked or refunded, the spokesman said.

Mr Francoise Louw, a PRO for South African Airways, said the demand for seats on flights had been heavier than usual, but they were coping and seats were still available.

Sats' passengers and live-
stock stranded by the floods earlier this week had reached their destinations by yesterday.

Some passengers were put on a special flight to Johannes-
burg while others were put on buses.

But the railways are not expected to be operating normal-
ly for some time, Sats PRO Mr Frikkie Stevenson said.

City to give R50 000 for flood victims

Municipal Reporter

THE Cape Town City Council is to contribute R50 000 to the national disaster fund for victims of the floods in the Northern Cape.

Mr Dick Friedlander, the chairman of the ex-
ecutive committee, told the council at its month-
ly meeting today that rescue staff, technical assis-
tants and "whatever practical assistance we can render" would be made available.

- Pick'n Pay stores in the Western Cape are collection points for tinned food and clothing for the flood victims.

The chain started the collection with 10 000 tins.

- M-Net and a Bloemfontein newspaper have launched a disaster fund.

Contributions may be deposited into account number 477668205 at any branch of Volkskas Bank. Cheques should be made out to "Ramp-
fonds".

Contributions by post should be sent to PO Box 267, Bloemfontein, 9300.

- The Lions Club of Somerset West is arrang-
ing a Hottentots Holland collection point until the end of next week for cash, clothing, blankets and food for contributions to flood victims. It will be at Checkers in the town.
Natal floods absorbed £2.5 million.

The Natal floods last year cost the Transport Services £2.5 million and it faces heavy losses through the current floods in the central and northern sections of the country.

Transport Minister Mr. E. Louw said in his budget speech yesterday that most Natal rail links had been affected and trains "in the Durban area virtually came to a standstill for two days".

Altogether 6,889 employees were involved in the mopping-up operations.

"The heavy downpours in parts of the Free State, Transvaal and Cape resulted in devastating floods accompanied by great damage and heavy losses."
Uprising. Awaits Deluge

Specie of the 1974 disaster returns... and this time its going to be worse.
Dawn . . . and the peak of the deluge

From PATRICK COLLINGS
and SAPA

PRIESKA. — Residents of the Northern Cape town of Douglas watched last night as the raging torrent of the Vaal River which hit them yesterday continued to rise at the rate of a metre every half-hour.

The deluge was expected to peak at more than 9 000 tons of water a second by early morning.

By nightfall yesterday one person was missing, 77 houses in the town were already underwater and another 100 homes were threatened as the floodwaters continued on their devastating path.

Earlier Ritchie, up-river from Douglas, was cut off and 57 houses were underwater. There, too, the flood had not reached its peak.

ON PAGE 3
- Orange River flood warning
- Map of flood trail
- RSC gives R10 000 to fund

The flood is expected to swell, with the Weather Bureau warning of more rain, and more evacuations are expected from the areas along the Orange River. About 1 500 people have already been evacuated.

Water supplies, sewerage services, telephone, electricity and major road and rail links have been severely disrupted in the Cape and Free State.

Helicopters were moving in and out of Douglas and Ritchie into the night, dropping off food, blankets, tents and other necessities to stranded people and airlifting others to higher ground.

Prieska, expected to be cut off when the floods reach it late today, had already evacuated 143 homes as water levels started rising by 4cm every 30 minutes.

Douglas was experiencing a strong flow of water from the Harts and Vaal rivers at 3pm yesterday and a second wall of water from the Modder and Riet rivers was expected to hit the town by 6 last night.

The Department of Water Affairs expected the flood to peak about 8 this morning with a flow of 9 150 tons of water per second.

A Cape Times team in Douglas yesterday saw families calmly
Floods

Men wearing shorts and holding on to guide ropes between trees and walls waited to and from their homes carrying as many of their valuables and possessions as possible.

By yesterday afternoon 77 families had been evacuated out of their homes, while other families were waiting nervously to see if they would also have to evacuate their homes. They feared that their houses would collapse in the rising water steadily submerging the buildings.

The township on the west of Douglas was cut off from the town. A local businessman, Mr. Fredie Laboule, said he could hear people in the township shouting for food. The civil defence and red cross were, however, able to deliver food to the isolated township.

Two hundred people were evacuated from the township, according to the Cape Provincial Administration's situation report yesterday.

Schools were closed as children helped parents move valuable books and belongings out of the houses. One woman was seen searching for her dog.

Mrs. Corn Theron, who has been living next to the river for a year and a half, said she had not realized the water would rise so quickly.

"We have to leave most of our valuables in the house and I have no idea what their total value is. Our children aren't at school because the schools are closed and the sewage system is not functioning. I might not have a home here when this is finished," she said.

Mr. Warwick Lowmore, a resident of 21 years, said: "I never thought it could happen to us. You think it happens to places like Langa and Balfour." Officials in the town seemed certain that bridges linking Douglas to the surrounding areas would either be washed away or closed.

The town clerk, Mr. Louis de Jazer, said people were staying in friends and family in the higher part of town. "Others are staying in hotels and in church halls. Some old people have been moved to the provincial hospital."

Western Cape RSC gives R10 000 to disaster fund

Staff Report

The Western Cape Regional Services Council voted unanimously at its monthly meeting yesterday to donate R10 000 to the flood disaster fund.

Mr. Piet Lourens, the chairman, said: "Our hearts go out to those who lost loved ones and those who suffered serious damage."

Checkers deputy managing director Mr. Sergio Martinengo said yesterday that the chain would be making all its stores available as collection points for victims of the floods. He appealed to the public to give whatever assistance possible.

At all the stores there would be special bins for donations.

The Western Cape general manager of Pick 'n Pay, Mr. John Barry, said collection points for donations would be set up at the chain's Western Cape stores today.

The SABC announced yesterday that a special fund-raising programme would be held on Good Morning South Africa on Saturday.
Some roads, rail links are restricted

Bust rivers

Howard

Iearie 100s

Drown 2,
Mother tells of battle to save her children
CAPE TOWN — Mail will now be delivered by boat to flood-ravaged towns in the southern Free State.

A Post Office official said last night that the flood damage to railway lines and roads had made Post Offices in the area inaccessible, and normal deliveries had become impossible.

It was therefore decided to use small boats on flooded roads "wherever possible" to transport mail to several small towns which had been partially cut off from the outside world.

The spokesman said the "mail boats" will be met on "dry ground" near the various towns by local postmasters driving light delivery vans.

He said it was the responsibility of the postmasters to transport mail from different rendezvous spots to their post offices.

The postmasters will also have to ensure that the "sea-mail" reached homes and businesses as soon as possible. — DDC
Flood disaster

Biggest dam now an inland sea

Daily Dispatch
Correspondent

PORT ELIZABETH — The torrential rain of the past week has turned the Hendrik Verwoerd Dam — the biggest concentration of fresh water in the country — into a rapidly expanding inland sea, swamping everything in its path.

The dam has increased its length by almost 30 per cent, from 85 km to 122 km — enough water to stretch from Port Elizabeth to Grahamstown.

A wall of water three metres high was surging over the wall at a rate of 2,845 cumecs yesterday, a member of the Department of Water Affairs at the Verwoerd Dam, Mr Ben Venter, said.

The inflow, however, is a massive 8,000 cumecs. This means that the volume of the dam increases by more than 5,000 cumecs and is causing the huge dam to creep up and over its banks, flooding large areas adjacent to it.

Mr Venter said only a sea of water could be seen yesterday where the caravan park and holiday resort at the dam had been.

The dam itself was 122 per cent full yesterday. The large overflow was gushing towards the P.K. le Roux Dam which was 108 per cent full yesterday.

Mr Venter said the P.K. le Roux Dam started overflowing at a rate of 748 cumecs at 2 pm on Tuesday.

It is expected that this overflow, which will be dramatically increased by the water rushing towards the dam from the Verwoerd Dam, will create another huge wall of water which will join the masses of water already surging towards Douglas and, eventually, Uitenhage along the Orange River System.

"The only result can be havoc", Mr Venter said.

Meanwhile, Sapa reported yesterday that hundreds of people had already left their homes in the flood-ravaged areas of the south-western Free State and the northern and north-western Cape.

Many residents of Douglas, Ritchie, Deportshoop, Jacobsdal, Jagersfontein and Prieska have fled from the areas of devastation.

A large mass of water from the Modder River was expected to reach Douglas yesterday.

Mr Venter said the bridge over the dam was still open to traffic.

The water level was only five metres below the bridge yesterday. The current inflow of water, however, poses no immediate threat to the bridge, he added.

Below the dam wall, however, little damage had been caused.

---DCN---
Flood damage to take months, cost millions

JOHANNESBURG — Devastation to the Free State and Northern Cape transport network would take weeks, possibly months, and millions of rand to repair, the head of Murray and Roberts operations in the area, Mr Stan Fletcher, said yesterday.

He said the transport network in flood-stricken regions was in chaos.

Reports say that September's floods in Natal cost South African Transport Services (Sats) R26 million, and it was facing heavy losses due to the current floods in the central and northern sections of the country.

The Minister of Transport, Mr Elie Louw, gave the loss figures during his budget speech yesterday.

"The magnitude of the damage has not yet been determined and Sats is doing its level best to normalise its services as soon as possible."

Mr Fletcher said that even a totally superficial assessment in bad visibility in the Bloemfontein area showed that a huge mobilisation of construction personnel would be required to restore transport networks.

A number of Murray and Roberts construction operations in the affected regions — notably in Wepener and Frieskraai — were out of contact at present.

Mr Louw said during the September floods almost all rail links in the Natal region had been affected and "for the first time in living memory train movements in the Durban area virtually came to a standstill."

Sapa reports that the Administrators of the Cape and Natal were considering declaring the Northern Cape and Ladysmith in Natal disaster areas.

This was said yesterday by the Minister of Constitutional Development and Planning, Mr Chris Heunis.

Mr Heunis said that officials of his department had already approached the government of QwaQwa on the possibility of that government declaring a state of disaster in certain areas such as Eshowe.

As Minister responsible for civil defence, he called on members of all communities to support civil defence organisations.
The worst floods are yet to come

Interior floods have so far destroyed about 1,500 houses and forced the evacuation of more than 10,000 people.

As mopping up starts in some areas of the Free State and the western Transvaal, rescue workers say the danger area is now a 400 km stretch of the Orange River down which the floodwaters are flowing at the rate of 10 km an hour.

Close to 6,000 cusecs of water had flowed past the devastated town of Douglas by yesterday afternoon, but the worst is still to come.

By 3 am tomorrow the flow was expected to reach the peak flood rate of 9,000 cusecs, according to the Department of Water Affairs.

The first floodwaters reached Upington at 2 am today. By this evening the rate of flow will have reached twice the flood warning rate of 6,000-cusecs, and the full force of the flood — an incredible 10,000 cusecs — will hit the desert town on Saturday morning, according to Department estimates.

Further upstream, the entire town of Ritchie was flooded, forcing the evacuation of 1,500 people.

The townships of Modder River and Ritchie south-west of Kimberley, which have already been evacuated, are in "great danger of being washed away", a spokesman for the Kimberley Joint Operations Centre said today.

Fifty houses were under water at Douglas early this morning.

Large sections of the town have been declared danger zones and telephone lines in the region have been cut.

Six more towns were declared disaster areas yesterday, bringing to 25 the number of magisterial districts declared disaster areas.

At Upington hundreds of residents, farmers and farmworkers have begun to evacuate low-lying areas in and around the town.

The strongly flowing Orange has risen about 2 m in the past two days.

At 6 am today the Hendrik Verwoerd Dam was 120,7 percent full and the overflow was 2,500 cusecs while the PK le Roux Dam was 105,8 percent full and the overflow 300 cusecs.
Scramble to flee floods
Residents race to save goods and sandbag homes
South African taxpayers face a massive flood bill. The Minister of National Health and Population Development, Dr Willem van Niekerk, said the National Disaster Fund, which was launched to help victims of the Natal floods, was in arrears and much more money was needed to help victims of the floods in the Free State and northern Cape.

He disclosed that R65 million had been received from the public which was added to R3 million in the Fund.

INFRASTRUCTURE REPAIRS

However, the Government had paid out 4 000 cheques to the value of R32 million for victims in Natal as well as R13 million in KwaZulu.

That deficit would have to be made up by the State, that is, the taxpayer, as with the financing of repairs to the infrastructure.

The taxpayer would eventually have to fork out R400 million to repair flood damage in Natal.

It was likely that the taxpayer would have to pay heavily for the present floods, too.

APPEAL FOR DONATIONS

Dr van Niekerk, chairman of the Cabinet committee dealing with the floods, said damage to the road network in the Free State and northern Cape was estimated at R20 million.

Damage to bridges was estimated at R6 million. Evaluations of other damage could only be made when water levels had subsided, he said.

Dr van Niekerk appealed to the public for donations to the Disaster Fund. These could be sent to the Director of Fundraising, Emergency Fund, Private Bag X103, Pretoria 0001.

They could also be deposited into any branch of Volkskas Bank, account number 0000292929.

A spokesman for the Minister said "millions of rand's worth would be needed to distribute to flood victims who had suffered personal losses. Food, clothing and blankets were also urgently required.

Yesterday, Cape Town City Council announced it would donate R10 000 for flood relief in the northern Cape.

A spokesman for the SA Red Cross said many people displaced by the floods would require feeding.

The SABC will broadcast live a relief appeal called "Operation Good Neighbourliness" on the programme, "Good Morning, South Africa" tomorrow.

Food, blankets and donations will also be accepted at 170 Checkers stores throughout South Africa.

For flood-hit family, the aftermath is worst

By Adele Baleta

BLOEMFONTEIN — A Free State woman, overcome by thirst, waded through her flooded house looking for something to drink before she was rescued by an air force helicopter on Sunday.

Mr J T Bekker and his wife, Marita, have been trying to piece their lives together in the aftermath of floods which have cost lives and caused millions of rand's damage to property in the Free State.

Mrs Bekker and her daughter, Cecilia (18), had just returned from church and were preparing lunch when the floodwaters converged on their house.

With no place to bear the water had climbed a metre up the wall,” Mrs Bekker said.

Mr Bekker signalled to a passing air force helicopter.

The water in the front garden came up to my chest, a winch was dropped from the chopper and our domestic worker's children were rescued first. We then followed,” Mr Bekker said.

"Lolli", the family’s pet dog, was left behind. He was found the next day standing on his hind legs with his front paws up against a wall and his head above the level of the water.

"There are things that can never be replaced, Maybe I should rather have been washed away than to have come back to see this,” Mr Bekker said.

I have heard about the Cape and Natal floods, but I never believed that the same thing would happen to us.

The fields where wheat once grew were bare. Four cars had begun to rust, and a screwdriver which was retrieved was clogged by mud.

Mr and Mrs Bekker have chosen to carry on living on their plot in a caravan.

Homeland MPs inspect flood areas

By McKeed Kedlo

MBABATHO — Six members of the Bophuthatswana Cabinet committee on disaster relief have flown to flood areas to assess damage and arrange immediate relief for victims.

A spokesman for the Department of Public Works said yesterday the committee, under Chief Minister the late S G Kgobokoe, left for Tung, one of the most affected areas, where two people were reported dead.

The spokesman said a relief centre had been set up, from which members of the Siswati Defense Force were operating.

Sources who visited the area said at least 1 300 families in Tung had been left homeless, and tents to house them were needed.

Most of the roads leading into flooded areas were impassable.
AA reports on conditions of flood-damaged roads

JOHANNESBURG — The roads between Johannesburg and Bloemfontein, Colesberg, Three Sisters, Beaufort West and Cape Town have been re-opened to all types of vehicles, the Automobile Association (AA) announced yesterday.

In a statement, the AA gave a comprehensive review of the conditions of roads in the country, following the closure of several through flooding.

Motorists are warned to exercise "extreme caution" on the road between Bloemfontein and Edenburg and Colesberg—Three Sisters.

Roads in the Cape which were re-opened to traffic are: Johannesburg to Kimberley, Victoria West to Three Sisters and Kimberley to Upington.

Still closed are the roads from Kimberley to Victoria West south of Modder River—Wynburg—Hartswater—Warrenton and Kimberley—Barkley West—Postmasburg.

In Natal, roads which were re-opened included the Harrismith—Oliviers Hoek—Mont Aux-Sources road, and roads to the Royal Natal National Park, Cathedral Peak, Champagne Castle, El Mirador, Monk's Cowl and the Nest.

The Injasuti, Mool River—Giant's Castle, Nottingham Road—Esteni, Underberg—Dakensberg Gardens and Netherby—Himeville; roads are still closed.
Flood bill rises to R1bn

The country's flood bill for the past six months could run to R1bn with the latest deluge likely to cost about R800m and a bill of R360m outstanding for the floods in Natal last September.

The Minister of Finance, Mr Barlow Kierans, yesterday said the Additional Appropriation Bill would be needed to fund the Free State and Northern Cape floods, which could be between R800m and R700m — money that could have been used elsewhere.

Kierans also estimated that the Natal floods would cost R600m.

The Orange River last month continued to devastate parts of the Northern Cape and it is feared that the cost could rise to R2bn.

Deaths in the towns through which the uncontrolled floods have already passed are likely to reach 200, with the near certainty that many more will be found.

In Pietermaritzburg, the capital of KwaZulu-Natal, the death toll rose to 50 yesterday, with 500 people still missing.

Evacuations

At least four people have been killed and another 500 people are feared missing in the worst floods in the country for 50 years.

Commander Van der Vyver said 300 houses in Douglas had been evacuated and that another 2,000 were under water, with the whole business area under water and there was no power in the town.

Patients airlifted

Resident patients at Douglas Hospital were airlifted to KwaZulu-Natal by helicopter yesterday.

Downstream, the town of Pietersburg looked prepared for a surge, with sandbags piled around deserted houses and huge sand walls built in an attempt to divert the flood waters which were expected later in the afternoon, Mr Patrick Colllings said.

People washed their belongings in buckets and tractors to move them to higher ground.

Children, too young to comprehend that the deluge travelling at 100km/h would engulf the town within hours, played in the rising floodwaters which covered almost 20% of the town.

Cut off

By late yesterday at least 78 families had left their homes.

Mr John Venter, town clerk, said tents and blankets had been distributed to the destitute as they waited for the water to recede.

He expected the town to be cut off in the next few days as the rising floodwaters continued to rise.

He said about 500 people had been evacuated from the town, and that the ones who remained were in danger as the water continued to rise.

The programme announced a national drive to raise funds for flood relief, to be launched on the 7th of September.

While the town continued to be evacuated, the police were on standby to assist.

Reed helps flood-relief fund effort

He hopes sandbags will save his home

From PATRICK COLLINGS

PIETERSBURG — While this town yesterday continued its evacuations and made preparations for the expected surge of water, not all of its residents were prepared to leave.

Mr W. H. Reed, who lost all his possessions when floodwaters from上游 reached his home, said he would not leave until he heard that the water was receding.

The Reed family, who have lived in the town for 50 years, said they would stay put until the water receded.

Nearby, about 100 workers from the Picrola Copper Mine were busy building a sandbag wall around their homes.

The sandbags were being placed around the walls of the mine to prevent water from entering.

Peninsula dam levels 'normal'

Although some dams in the area were overflowing, the levels were still considered normal.

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The sandbags were being placed around the walls of the mine to prevent water from entering.

The dam levels were still considered normal, with some dams overflowing but still within the safe range.
Stormberg roads very wet but not damaged

Daily Dispatch Reporter QUEENSTOWN --Roads in the Stormberg Divisional Council area are very wet but no major washaways have occurred.

The chief roads inspector, Mr André van Vuuren, said he had considered closing the Boesmanshoek Road, between Sterkstroom and Molteno. However, the flood waters had subsided rapidly and a closure was avoided, he said.

Roads in Ciskei, which are maintained by the Divisional Councils of Smaldeel, Kaffraria and Stormberg, are also very wet but undamaged.

The level of the Bongolo Dam, one of Queenstown's storage dams, has risen by 20 centimetres since last Thursday. This is about a fortnight's water supply for the town.

The dam is 89 per cent full.

The other supply dam, Waterdown, situated near Whittlesea, dropped by 0.1 per cent during the same period. It is now 48.5 per cent full.

The assistant town engineer, Mr Andy Jarrett, said the gentle rain of the past week had penetrated the ground, and subsequently there was little run-off.

He explained that, unlike the hard soil at Bongolo Dam, soil in the Waterdown catchment area was soggy and unless it rained heavily, run-off was slow.

Although the capacity of Waterdown Dam was a little low, the town had an adequate water supply for the rest of the year, he added.

"We can also expect a fairly good run-off into Waterdown during the winter. The dam has a remarkable flow pattern, familiar with rivers in England which flow during winter whereas South African rivers flow during summer."

He subscribed Waterdown's winter flow to the run-off from snow and ice on the Hogsbak and other mountains in the catchment area.
Funds open to assist flood victims

Daily Dispatch
Reporter

EAST LONDON — Funds have opened in the Border region to assist the victims of the flood disaster in the Free State and Northern Cape.

The mayor of East London, Mr Robert de Lange, has appealed to citizens to "open their hearts and pockets and give generously to the Flood Relief Fund at any branch of Volkskas, in account number 000232928."

"Anyone donating clothing, food and so on can contact Mrs Fleming, Department of Health and Population Development, Room 277, 1st floor, magistrates court building, East London, or phone 43 4060," Mr De Lange said.

The Mayor of Beacon Bay, Mr Henry Breytenbach, has also appealed to Beacon Bay residents to support the Flood Victims' relief fund.

Donations can be paid to the Flood Victims' Relief Fund, P.O. Box 2001, Beacon Bay 5205 or at the payment hall, Civic Centre, Beacon Bay.

In Queenstown, the Lions Club has started a flood relief fund for the Free State flood victims.

Mr Johnny Arseniou appealed to the public to donate blankets, pillows and tinned food. Donations should be delivered to Cathedral Hall between 9 am and 6:30 pm today.

Arrangements have been made for contributions to be trucked to the disaster area tomorrow.

Anyone wishing to contribute to the fund who had a transport problem should telephone one of the following numbers in Queenstown and collections would be arranged: 4012 and 4621 (all hours), 2121 and 2025 (office hours).
It's too soon, of course, to quantify the flood damage in the Free State, the area worst affected. But there is reason to believe the flat nature of the countryside and relatively low level of agricultural development should limit the damage.

Worse, however, could still come. The huge volume of water now surging down the Orange River system is expected to wreak more havoc downstream.

Douglas endured a 10 000 m³ a second (cumec) flood on Tuesday, which was expected to reach Upington by Friday or Saturday. On the Harts River, the 61,3m³ Spitskop dam wall broke at 09h00 on Tuesday, sending a wall of water cascading towards Douglas.

Fortunately, the worst-hit flood areas — south and west of Bloemfontein — lie outside the maize belt. The worst agricultural damage is being recorded in the normally-dry valleys of the Modder and Riet rivers and their various tributaries, as well as in the Harts, Caledon, lower Orange and lower Vaal systems.

Material losses

"The area south-west of Bloemfontein has a relatively low farming potential and lies outside the major crop farming areas. In the valleys, farmers' greatest material losses would be in the infrastructure like dams, roads, fences, buildings and soil, as well as farm implements. Where wheat is a major crop, this had already been harvested. The biggest farming losses would be in stock deaths, mainly sheep and cattle," says Department of Agricultural Economics deputy director Hennie Botha.

He says maize is not an important crop in the affected area, but irrigation farmers in the Harts and lower Orange systems could face serious damage. Crops include vegetables, grapes, lucerne and some livestock. The savage impact of the five-day deluge is beginning to emerge as rainfall and run-off statistics begin to filter through.

"Until February 22, Bloemfontein had had 328,9 mm of rain for the month, compared with a monthly average of 99 mm and an annual average of 560 mm. While this situation is the norm for most stations in the area, Danielskluin in the northern Cape had 373,8 mm between February 19 and 22 and 476,2 mm for the month so far, compared with its annual average of only 385,6 mm," says Department of Water Affairs technician Margaret Entwistle.

While the 322m m³ Kalkfontein dam on the Riet River (by comparison, Hartbeespoort Dam, near Pretoria, has a capacity of 185m m³) was only 4% full last week, this had risen to 15% by Tuesday. The 76,7m m³ Krugersdrift dam on the Modder River near Bloemfontein rose from 31% last week to 197% on Tuesday morning, sending a 3,03 m wall of water over the top of the dam wall.

SA's two "heavies," the H F Verwoerd and P K le Roux dams on the upper Orange river, were respectively 110,66% and 95,94% full on Tuesday.
City relief teams to aid victims of N Cape flood

Staff Reporters

RELIEF teams from the Western Cape are on their way to help communities along the flood-ravaged Orange River in the Northern Cape.

The Cape Town civil defence unit’s special “command post” lorry, stocked with medical and technical supplies, left the city today.

And a relief column of policemen was due to leave Paarl later today for the South African border town of Vioolsdrif to set up a flood relief centre.

Cape Town civil defence chief Major Rod Douglas said the command post vehicle would bolster the communications network, which had been badly disrupted.

LONG-RANGE RADIOS

Its long-range radios would enable it to contact Cape Town from the Orange River area.

The sending of the vehicle follows a R50,000 contribution to flood relief voted yesterday by the city council.

Acting mayor Mr Gordon Oliver said the council was worried about the loss of life and property in the area.

Executive committee chairman Mr Dick Friedland promised authorities co-ordinating emergency work in the flood-hit area technical expertise and “whatever practical assistance we can offer”.

The raging Orange River floodwaters are expected to hit Vioolsdrif and the neighbouring town of Noordoewer on the SWA/Namibian side of the river during the weekend or early next week.

The police relief column will be led by Colonel Kalie Westraat, police district commandant in Springbok.

The column will leave Paarl this afternoon and is expected at the border tomorrow.

It is thought they will set up their headquarters at Noordoewer.

Boland police liaison officer Captain Oya Boomzaaijer, who will accompany the relief column, said 85 men from the Paarl reaction unit would be accompanied by two police divers.

They would be travelling in 10 four-wheel-drive vehicles and three troop-carriers.

The column will be joined by the police helicopter from Cape Town, four SAAF helicopters and two fixed-wing aircraft.

URGENT NEED

The South African Red Cross Society (Cape Region) has asked for blankets and contributions of clothing and non-perishable foodstuffs to be delivered to Red Cross House, 21 Broad Road, Wynberg.

A society spokesman said the most urgent need was for sugar, maize meal, milk powder, soya powder, baby foods, canned vegetables, canned meat and canned fish.

Also needed were cleaning materials and primus stoves.

Inquiries should be put to the director of public relations and fundraising, Mrs Rytte Hodd, (021) 71.7170.

Port Elizabeth is to reopen its Mayor’s Flood Relief Fund with a gift of R50,000 for flood victims.

The fund was launched 20 years ago when the city was devastated by floods.

Upington’s flood appetiser

(Cont’d from page 1)

would take longer than expected to arrive because it had spread so widely.

Earlier predictions were that high water would be early on Saturday morning. The breathing space is being used for last-minute sandbagging and removals.

Mr Venter said about 300 families in Upington had been evacuated since Tuesday.

A temporary caravan park

Cloudburst victims saved by helicopter

The Argus Correspondent

KIMBERLEY. Many people were rescued by police helicopter during a cloudburst at Hartwater in the Northern Cape.

The helicopter worked throughout the night rescuing people who had been trapped by rapidly rising floodwater.

Police liaison officer Captain Carel van der Westhuizen said the people rescued had had no warning and were not able to evacuate their homes.

Many had to be plucked from the rooftops of flooded buildings.

Among those rescued were Mr and Mrs Giel Swiegers and their three children who were airlifted at 3.30am today.

had been set up at the agricultural showgrounds and the railways had set aside train coaches for those who could not be housed elsewhere.

Companies and farmers have made available warehouse facilities for refugees to store goods and furniture.

Mr Venter said: “I am very impressed by the open-heartedness of our citizens who are pulling together in our hour of need."

In the luxury river-front suburb of Middelpos and nearby Badder Street, home-owners were trying various methods of minimising damage.

Some blocked windows and doors with thick black plastic, packed tightly with sandbags and earth. Others removed windows and doors, calculating that water flowed freely, there would be less chance of walls collapsing.

A household whose property is about 24m from the river has bricked up all his windows and doors.

Upstream from Upington at Kanon Island, the fertile stretch of land sandwiched between two arms of the river, the evacuation of workers and farmers continued yesterday.

The island is expected to be submerged and thousands of people have been moved to camps on higher ground.
Flood damage could cost more than R1bn.

Finance Minister Barend du Plessis said last night the cost of the latest flood damage could run to R600m or R700m. In addition, the estimate of damage during the September floods in Natal is now more than R400m.

The latest flooding has wiped out large tracts of farmland and a spokesman for the Oranje Co-op in Uplinton yesterday predicted financial devastation for the farming area.

A large proportion of this year's crops — mainly grapes, maize, lucerne and cotton — could be lost as a result of the floods.

By far the largest percentage of the cost of repairs to the infrastructure will come from taxpayers.

The Disaster Relief Fund has been exhausted by financial aid to victims of the Natal floods.

Disaster Fund chairman Janie Visser said altogether R18m had been paid out and a further R12m would be needed for relief for individual victims in Natal.

Infra-structural repairs in Natal cost R50m, another R82m had been paid to assist farmers.
Properties flooded in Upington

Two towns evacuated as river rises

By Melanie Gosling and Claire Robertson

Prieska

Mass evacuations are being carried out at Prieska and Upington as floodwaters rise.

About 200 families have been evacuated from Uppington since Tuesday.

Residential properties in Uppington were flooded today and more were expected to be partially submerged when the peak of the flood reached the town on Sunday.

Upstream at devastated Douglas, the water has begun to subside slightly, leaving a layer of mud and debris over the town.

Residents of a home for the elderly were evacuated to a Kimberley hospital yesterday because of a shortage of water in the town.

The SADF is to fly a water purification team to the town today, the spokesman said.

He emphasised that no lives were in danger in the area.

The water level of the Orange River was continuing to rise. Department of Water Affairs staff said here today.

All along the dusty streets of Prieska, sandbags were piled against doors and windows.

Closed down

Many shops, businesses and banks had closed.

Business ground to a halt yesterday as shopowners and bank staff scrambled to clear out their premises. A handwritten notice in the window of the Old Mutual building read: "Closed till after the floods, closed!"

The town was also experiencing water shortages and a Defence Force engineering team was on its way there to help cope with the situation, said a Northern Cape Joint Operations Centre spokesman.

Water pumps which supplied the town had to be removed from the river banks because of the rising water levels.

Latest indications were that the flood will peak on Saturday night or Sunday morning.

Mr Pieter Venter, the chief municipal information officer, said the deluge would take longer than expected to arrive, because it had spread so widely.

At Kanon Island, the fertile stretch of land sandwiched between two arms of the river, the evacuation of workers and farmers continued frantically yesterday.

The island was expected to be submerged and thousands of people have been moved to camps on higher ground.

At 3.30 pm yesterday the Fanie Loots Bridge at Prieska was closed by the police as the river crept to within 3 m of the road surface.

As the water continued to rise, activities in town were frantic.

Lorries trundled through the main streets, tipping huge mounds of earth; waiting workers packed sandbags which were stacked around shops and supermarkets.

See Page 8.

Rains strand tourists

This week's heavy rains have flooded bridges and stranded residents on the southern slopes of the Natal Drakensberg and tourists at some mountain resorts.

The Loteni Nature Reserve in the southern Drakensberg has been cut off for four days by the swollen Loteni River. Telephone lines are down, but the reserve has radio contact with Maritzburg.

Campers at the central Drakensberg Royal Natal National Park, which has recorded 220 mm of rain since Monday, have been forced to use the footbridge to the campsite for two days as the Mahai River has flooded the bridge on the main access road.
‘Forget the cakes — bring me sandbags’

From VERNON BRENT, Staff Reporter
UPINGTON. — As Prieska bore the brunt of the rampaging Orange River early today, Upington had its first taste of things to come.

Advance floodwaters reached the town yesterday afternoon and by 7pm the river was flowing at 5-million litres a second.

In a bizarre twist of fate, fire raged through reeds near the luxury suburb of Middelpos. Flames two metres high cast dense smoke over the area.

At Prieska, 250km upstream, shops and businesses shut down yesterday and 122 people were evacuated. Rows of empty houses showed the inhabitants were not taking lightly warnings that the floods would rival the previous worst of 1925.

As the water continued to rise, lorries tipped huge mounds of earth in the town centre and workers packed sandbags and stacked them around shops and supermarkets.

OVERTIME
A hand-written notice in the window of an insurance company's building read: "Closed till after the floods."

Department of Water Affairs staff monitoring water levels at Prieska hourly said the river had risen 3.6m in 24 hours and was flowing at 6.5-million litres a second at night.

Prieska town clerk Mr Dick Viljoen said his staff were working overtime to help people evacuate and pack sandbags around houses.

He said: "We are trying to protect our water purification works by building a 2m high wall of gravel and sandbags around it."

Mrs Christina Gousourd was frantically moving cakes, pumpkins, vetkoek and rusk to higher shelves in her home Industries shop.

When a farmer arrived with more vegetables and cakes she said: "Ag no man, take those away and bring me some sandbags instead."

At 3.30pm yesterday police closed the Fanie Loots Bridge to the east as water crept to within three metres.

To the hundreds of spectators lining the road it was like watching the tide come in. Among them was Mr Johan Erasmus who saw three of his farms ravaged by the flood.

His farm and two houses on the Modder River were submerged and crops of cotton, potatoes, beans and other vegetables have been ruined.

The cotton was due for harvesting in a week's time and the beans two weeks later. He said: "I cannot begin to estimate the damage."

He had heard so many conflicting reports of the extent and timing of the flood, he did not know what to believe.

"All I can say is that if nature wants you out of the way she will take you out."

In Upington precautionary water restrictions were announced. If water supplies are cut, the town has enough in reservoirs for four days.

Residents have also been warned by the municipality to lay in stocks of gas and candles in case power is cut off.

A team of police divers with rubber dinghies has been flown in.

Hundreds of residents lined the bridge and vantage points watching flood debris race to the sea.

It is now thought the flood will peak on Saturday night or Sunday morning.

Mr Pieter Venter, the chief municipal information officer, said the deluge

(Turn to page 3, col 6)

Flood bill is over R700m

The total cost to the State of the past financial year's floods is approximately 10% of general sales tax revenue. The latest floods would cost between R600-million and R1-billion.

Political staff told Parliament yesterday that flood losses in the past financial year were estimated at over R700-million, while the State transport and insurance companies would pay more. The demand on funds when those losses are added to the costs of the latest floods could be ''dramatically increased'' because of tight spending restrictions.

Mr du Plessis said today the floods would cost a total of R1-billion. If the road and rail transport sectors paid a normal service charge for the two years before the floods then all the damage on the road and rail transport sectors would cost between R600-million and R1-billion.

The estimate is based on a cost assessment of the cost of the floods in the Free State and Natal.

Budget officials told Parliament yesterday that the President would be able to provide a more accurate assessment of the cost of the latest floods this week.

The cost to taxpayers will be well over R700-million, while the State transport and insurance companies will pay more. The demand will increase dramatically because of tight spending restrictions. The National Health Insurance and more recently the 10% of the road and rail transport sector's service charge added to the costs of the latest floods could cost up to R1-billion.

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Cruel torrent brings havoc in its wake

Floods — Cape holds its breath

STRANDED: A road grader is temporarily stranded in the middle of the Klein Modder in the Northern Cape as rain and flood water continued to lash the area yesterday. As the capacity of the Orange River continued to swell, the floodwaters were expected to reach Upington tomorrow.

MELANIE GOSLING
UPINGTON — Towns along the Orange River in the northern Cape are bracing themselves for the peak of the floods which have left destruction and havoc in their wake in many parts of South Africa — and are expected to hit the area tomorrow.

The frantic scramble to evacuate low-lying areas is over. Furniture has been stored and houses boarded up. Now all the people can do is wait — and hope.

So far the floodwaters have not struck the towns of Prieska, Groblershoop or Upington. But farmlands along the river banks are under water and some farmhouses have been flooded.

People in Prieska watch anxiously as the river level rises by the hour; farmers watch hopelessly as their crops are washed away and their harvested grapes rot in fields — unable to reach the wine cellars of the flooded town of Douglas.

Most businesses, shops and banks in Prieska have closed down, and sandbags lie piled up against windows and doors as the town awaits the coming floodwaters.

The Old Mutual building in the town, which has been evacuated, has a handwritten sign in a window which reads: "Closed till after the floods."

The Volkskas Bank is still open, but all furniture has been removed.

Staff member Mr. Jeanne van Schalkwyk said yesterday that the bank had run out of money.

Unlike the floods in the Free State and Douglas earlier this week, the flooding in the northern Cape town has been slow, and the weather hot and dry.

Upington town officials:

*TURN TO PAGE 2.*
Floors will cost SA more than R1-bn

The flood catastrophes of the past two years are likely to cost South Africa more than R1 billion, and it will take years before all the damage is repaired.

The tab to be picked up by the taxpayer will be well in excess of R700 million, while the SA Transport Services, the Post Office, dozens of local authorities, the homeland governments and insurance companies will together have to cough up an even larger sum.

The latest demand on government funds follows the allocation of R24 billion to farmers in drought relief over the past seven years.

It comes at a time when the Government is trying to prune its expenditure in order to cut inflation, and when even modest demands for socio-economic projects have been turned down.

One small consolation is that money spent on reconstruction in flood-devastated areas will give a boost to certain businesses and stimulate economic activity in those regions.

The total cost to the Government of the floods in the past financial year is approaching the revenue earned by one percent of General Sales Tax.

Finance Minister Mr Barend du Plessis told Parliament yesterday that the current floods and last year's Natal floods would cost the State between R600 million and R700 million.

He said yesterday that the Health Minister, Dr Willie van Niekerk, would soon be able to provide a more accurate assessment of the cost of the floods in the Free State and Natal.

Earlier this week, Dr van Niekerk told the media the Natal floods of last year alone would cost R400 million.

Mr du Plessis said yesterday that the floods would necessitate adjustments to the annual budget he was preparing to present to Parliament next month.

It was obvious that a very high priority had to be given to the repairing flood-damaged areas.

Mr du Plessis pointed out that the extra allocation would be spread over a few years, as reconstruction work would take some time to be completed.

The Progressive Federal Party spokesman on finance, Mr Harry Schwarz, said yesterday that it would take some creative financing to pay for the flood damage while still keeping the economic recovery on track.

However, he believed it could be done, as there were various capital funds which could be tapped.

The National Disaster Fund appears, however, to be showing a shortfall of about R30 million just for the Natal floods.

The fund before the Natal disaster had been severely depleted by the Deomina and Lajingsburg disasters, and its balance was only R2 million.

Public appeals, donations by foreign governments and local big business and the Post Office's special postage stamp issue have raised only R6.5 million.

The taxpayer will have to make up the shortfall.

Demands on the National Disaster Fund because of the Free State and Cape floods are likely to run into tens of millions of rand.

The fund is intended to provide cash compensation to disaster victims for the destruction of property.
Dam has water for 114 years

Daily Dispatch Correspondent

PORT ELIZABETH — The contents of the H. P. Verwoerd Dam, South Africa's largest concentration of fresh water, is sufficient, at Port Elizabeth's present rate of water consumption, to supply the city for 114 years, even if it never rained again during that time.

A spokesman for the Department of Water Affairs at the dam said the contents of the dam, which was 124.3 per cent full at noon yesterday, was a staggering 7.95 billion cubic metres.

The dam is presently 130 kilometres in length and more than 30 kilometres wide at places. It is the same distance from Port Elizabeth to the centre of Grahamstown.

Port Elizabeth's current rate of water consumption, according to a municipal spokesman, is about 60,000 megalitres a year.

This meant the city would require 114 years to use up the water in the dam, a spokesman for the Department of Mathematics at the University of Port Elizabeth said.

The spokesman for the Department of Water Affairs said the dam's level had dropped by 15 millimetres yesterday, as outflow had started to exceed the inflow for the first time since heavy downpours in the area more than a week ago.

The Orange and Kraai rivers, he added, were still heavily swollen.

Yesterday the dam's inflow was 2,700 cusecs, compared with an outflow of 3,274 cusecs.

The dam's sluices had been closed to save the wall of the Kelmoes Dam at Upington from receiving too great an onslaught of water.

At the P. K. le Roux Dam, however, inflow still exceeded outflow by just more than 1,000 cusecs. The dam was 115 per cent full yesterday, with an inflow of 3,274 and an outflow of 2,272 cusecs.

The spokesman said the level of this dam was expected to rise until its outflow and the inflow to it from the Verwoerd Dam had "canceled each other out".
Daily Dispatch Reporter

EAST LONDON — The flood water which swept through Jamestown on Wednesday has subsided, after damaging houses situated on the river banks.

The town clerk of Jamestown, Mr C.R. Venter, said the rain had stopped and things were “getting back to normal.”

He said the road between Jamestown and Dordrecht was in a bad state with potholes in places.

“Most of the bridges over rivers on farms in the vicinity have been washed away.

“There has not been much stock loss on farms in this area, but farther north the situation has been worse.”

Mr Venter said that he had heard of five farms which had broken their banks. More than 300 people had to be evacuated on Wednesday after about a metre of water made it impossible for people to stay in their homes.

A spokesman for the weather station here said scattered thunder-showers could be expected along the coastline and the interior at the weekend.

“The wind will be a fresh and strong westerly,” the spokesman said.

Houses disappear under water as the Orange River flood spreads at Prieska yesterday afternoon.
Disaster declared in six districts wait for worst

CAPE TOWN — A state of disaster was declared in the Northern Cape yesterday as Prieska and Upington waited for the worst of the floods to hit them today and tomorrow.

As the floods continued on its devastating path through the country’s interior — leaving a death toll of at least 11 in the Cape and Free State — the magisterial districts of Barkly West, Gordonia, Herbert (Douglas), Kimberley, Prieska, Warrenton and Namakwaland were declared disaster areas for three months in terms of the Civil Defence Act.

These districts were also declared disaster areas by the State President in terms of the Fund-raising Act, 1976.

In a statement in Cape Town, the Administrator, Mr Gene Louw, said the civil defence organisations of local authorities, the South African Defence Force, the South African Police, the Red Cross and other organisations were doing excellent work in rendering assistance on a co-ordinated basis and should continue to do so.

"The declaration of a state of disaster will enable my administration to co-ordinate all relief aid to victims of the floods; even better and ensure that any means and sources that are available are used effectively to alleviate the distress that is being experienced over a wide area," he said.

Several business concerns, other organisations and individuals had meanwhile offered to assist in various ways and it was necessary to co-ordinate all these forms of assistance, Mr Louw said.

The Department of Water Affairs said in a statement yesterday that the expected peak flood arrival times would vary as new information reached the flood control office.

The worst of the flood waters appeared to be subsiding in the devastated Douglas area, according to the statement.

According to the police liaison officer for the Joint Operations Centre in Kimberley, Commandant Noels Visser, things in Douglas were "in a hell of a mess".

Thousands of people have been evacuated from the riverine and island near Upington and all that is left to residents is to wait for the "groot water" as one local police officer put it.

A total of about 5,000 people have been evacuated and Upington was 7.3m deep and flowing at 4,778 tons a second.

Upington’s population appeared to have swollen yesterday, with sightseers coming from as far away as Louis Trichardt in the northern Transvaal.

The main street had a continuous flow of cars, stopping at various vantage points to watch the river.

Some farm trucks, loaded to capacity with labourers, their wives and children, came into town and filled the riverside parks with a festive crowd.

The sad side to the 1988 flood is almost deliberate avoided. Some farmers face near total ruin if the river’s level breaches the large soil dykes which have been thrown up around many vineyards and cotton plantations.

The five wine cellars in the Orange River region have been taking in double the usual quota of grapes to help farmers harvest as much of their crops as possible before vineyards are buried in the deluge.

President P.W. Botha and Mr Louw are expected to visit Upington today.

Heavy rains lashed the Natal coast yesterday but the Louis Botha Airport weather office expected conditions to begin clearing from the south last night. - Saoa-DDC
Small towns await the ‘big waters’

BY PATRICK COLLINGS, REENE MOODIE and Sapa

THE Orange River flood waters were expected to peak in Prieska early this morning and seemed set to hit Upington and the neighbouring Kakamas and Kanon Island any time this weekend.

Thousands of people have been evacuated from the riverside and inland near Upington and all that is left for residents is to await the “groot water” (big waters), as one local police officer put it.

As the flood continued on its devastating path through the country’s interior — leaving a death toll of at least 11 in the Cape and Free State — the magisterial districts of Barkly West, Gordonia, Herbert, Kimberley, Prieska, Warrenton and Namaqualand were yesterday declared disaster areas for three months in terms of the Civil-Defence Act.

A massive relief operation is in progress countrywide, with police; the SADF, local municipalities and civil defence organisations coordinating airships of food and medical supplies and evacuating people from the path of the flood.

A total of about 5 000 people have been evacuated from Upington.

The five wine cellars in the Orange River region have been taking in double the usual quota of grapes to help farmers harvest as much of their crops as is possible before vineyards are buried in the deluge. Even so, indications are that as much as 20 000 tons of grapes will be lost.

Visit to Upington

President PW Botha and the Administrator of the Cape, Mr Gene Louw, are to visit Upington today.

In Prieska, the water was 21.04 metres deep at 2pm yesterday and flowing at a rate of 8 500 tons a second, according to Department of Water Affairs figures.

The flood, rising at the rate of five metres an hour, was expected to peak by late last night.

The town clerk, Mr Dick Viljoen, said 111 homes had been evacuated.

PATRICK COLLINGS reported from Prieska yesterday that a local hotel employee, Miss Mandy Symes, said many residents were frantic as experts expected the rising water to cover the local Frans Loots Bridge late last night. The bridge was closed to traffic yesterday.

Prieska’s mayor, Mr Hansie van der Westhuizen, whose own farm is threatened by the floods, said: “According to a manager of our local farmers’ Co-op, at least 30 of our 40 irrigation farmers face financial disaster.”

Upstream, the town of Douglas was beginning the task of mopping up and assessing the damage after the floodwaters, which peaked at 3pm on Thursday, began subsiding.

Commandant Neels Visser, police liaison officer for the Joint Operations Centre in Kimberley, said things in Douglas were in “a hell of a mess”.

Flood relief fund swells

Staff Reporter

MONEY poured in yesterday for the Northern Cape flood relief fund, with donations from business organisations bringing the total to at least R354 000.

Companies which announced donations yesterday included the Standard Bank (R160 000), Gencor mining company (R50 000) and BP Southern Africa (R50 000).

Uniflora, an international deciduous fruit marketing company, donated R20 000 and R15 000 worth of fruit on behalf of the Cape deciduous fruit industry.

Collection points for donations include chain stores and the WyMbarg Red Cross office.

Financial contributions may be sent to the Director of Fundraising, Private Bag X63, Pretoria, 0001.
Man drowns as flood rages near Upington

by VERNON BRENT
Weekend Argus
Reporter

UPINGTON. — The menacing Orange River claimed its first victim here today when a man drowned crossing flooded ground in a quiet riverside neighbourhood.

Shortly after midday, Mr Ouda Seloy, 28, disappeared while trying to cross a flooded ditch in a quiet cul de sac, Bell Street.

The water here had built up to 9 metres above normal.

Mr Redlinghauses, who witnessed the incident, said Mr Seloy wanted to come across to visit a friend.

"I told him not to fool around because it was dangerous.

"He did not listen, took off his shirt and jumped in.

"It seemed to me he could not swim properly. About five metres from land he started shouting for help.

"I dived in and got to within a 1½ m and he disappeared.

"I just saw bubbles."

Mr Redlinghauses also spent half an hour in a canoe poking with a paddle into the water.

Police divers also had no luck.

The water at the scene of the tragedy was very still as it creeps up gradually. There were no discernible currents on the surface.

TREES

It is believed the body might have got trapped in trees which are several metres below the surface.

The police station and the hospital as well as about 500 telephone subscribers were cut off this morning due to a faulty cable running under the Bull Street subway.

An emergency line was routed over the Railway bridge to install communication to the police station.

Technicians said the hospital line would be restored by this afternoon but that the suburbs of Middelpos and Keidehees would be cut off for several days.

The Orange River continued to rise steadily.

It measured 8.55 m at 10 o'clock and water was flowing at the rate of 6200 cubic metres per second.

Latest indications are that the waters will not rise to the 1974 level of 9.9 m.

However, the bulk of the flood water has yet to arrive.

In Friska the level has begun to drop after reaching a height of 12.5 m.

This was 15 centimetres below the 1974 level.

COME ON IN, THE WATER'S FINE!

Picture: PETER STANFORD, Weekend Argus

Floods up! A local Keimoes resident fearlessly dives into the raging floodwaters of the Orange River from the Keimoes bridge — expected to be under water later today.

Picture: PAGES 5

TO PAGE 5
Relief fund boosted

A GIFT of R500 000 from a national supermarket chain and others of R100 000 and R50 000 have boosted funds to provide emergency relief in the flood disaster areas.

The supermarket chain Checkers announced that it has cut into its advertising funds to the tune of half-a-million rands to provide relief.

Standard Bank has announced that it is contributing R100 000 to the Red Cross.

And the chairman of BP South Africa, Mr. Ian Sims, said his company had contributed R25 000 to the Red Cross.

Commodore Phillip Viljoen, inspecting officer at yesterday's quarterly divisions of the Mine Counter-measures Flotilla, presents Mrs Gwendolyn Douglas with her son Gavin's ceremonial sword.

Drowned navy man's mates ensure mum gets his sword

Military Reporter

THE ceremonial sword belonging to Sub-Lieutenant Gavin Douglas, the naval officer who drowned last year while trying to help Natal flood victims, has been presented to his mother.

Mrs Gwendolyn Douglas received the sword from Commodore Phillip Viljoen during the quarterly divisions of the Mine Counter-measures Flotilla in Simon's Town yesterday.

Lieutenant Douglas's shipmates on the strike craft SAS P W Botha bought his sword from the Navy and had it mounted to be presented to his family.

More than R600 000, over from-money collected by the ship's company to buy the sword, has been given to the Natal Flood Disaster Fund.

Mrs Douglas said she was very happy to receive the sword. "It is fitting that my son gave his life trying to save others and I am very proud of that," she said.

Commodore Viljoen, addressing Mrs Douglas during the parade, said it was heartbreaking to lose a son, but it was also an emotional experience losing a shipmate.

"I can assure you that the South African Navy is very proud of Gavin and will remember him as a respected officer who always gave his best for the service," he said.

On October 3, Lieutenant Douglas was one of seven naval personnel in two rubber dinghies who were scouring the banks of the swollen Umgeni River for missing people.

They hit rapids and the first boat was ripped apart and lost its engine. The four occupants reached the shore safely.

The boat carrying Lieutenant Douglas and two other men capsized and he was drowned. The other men got to shore.
The flood waters may be dangerous. Be prepared for flooding. If you must drive, keep a safe distance from other vehicles. If you hear a warning, evacuate immediately. Do not attempt to cross flooded areas. Keep children indoors. Do not try to rescue anyone from a flooded area.保命要紧。
man who touched

THE southern Free State was a bowl of mud after the floods, which raged through the area this week, had subsided.

And apart from signs of destruction everywhere, many were homeless.

The victims were Adam Odendaal and his wife Johanna, an elderly couple of pensioners who have lived in the Free State town of Heilbron all their lives.

Mr Odendaal lost the nation's heart when he appeared on television last week when he was told he was homeless.

The Odendaals were among the last to be seen here, after they were flooded.

"The water was up in the windows and in the attic," she said.

When Mr Odendaal returned home on Monday he found dead all the chickens in his yard in addition to the horses which had been killed by the flood waters.

His dog, a pit bull, was buried under the rubble.

"When I saw the bodies, I was told to leave -- that there was nothing left for my wife and I. That people in town told us to stay. And then I thought, 'I am an old man, I am not going to stay here."

Township, in the meantime, has seen an empty house.

Then people in Qhing, the township on the outskirts of Heilbron, have been affected.

They are now living in their own homes.

Flood waters had risen and forced the people to leave their homes.

The power company has restored power to the area.

"We were told to leave," a woman said. "We had to leave.

"Then the police came and took us to a safe place."

They now live in a tent town.

"We are just trying to cope," she said.

Tents

People in Qhing, the township on the outskirts of Heilbron, have been affected.

They are now living in their own homes.

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"We were told to leave," a woman said. "We had to leave.

"Then the police came and took us to a safe place."

They now live in a tent town.

"We are just trying to cope," she said.

Close encounters of a different kind in Edenville

Sunday Times Reporter

A SAGA of men and women was delayed by a flood of a different kind this week.

A large group of people were forced to leave their homes.

More than 70 stranded travellers perished in Edenville after being caught in a flood.

"Our problem was not the water," said a man who was rescued from the floodwaters.

"We were caught in a flash flood and had to leave our homes."

The Edenville school was used as a shelter for the flood victims.

"From Sunday to Thursday morning, no one could get out of Edenville."

"It was too dangerous," said a teacher.

"We are living in this school and we are trying to cope."

Members of the town council were present with letters of thanks from many of those who had sought refuge. And the town has received gifts from Edenville residents to help those affected by the flood.
The old

By ALAN DUGGAN

THEY knew a flood was coming — but nobody dreamed it would swallow half the town.

And when the muddy waters of the Vaal River swept through the town, carrying away everything they owned, only the strongest could fight away the tears.

The little Northern Cape town of Douglas had ample warning of the huge volume of water that was heading towards it from the north-east.

Sadly, the townpeople underestimated the danger — and many of them paid for their mistake with everything they possessed.

There was no "wall of water" as had been predicted — just a steady rise in the level until the swollen river transformed the town's lower reaches into a murky lake.

Helpless

The town clerk of Douglas, Mr. Louis de Jager, was among the early victims. Having moved his furniture to the upper level of his double-storey home, he watched helplessly as the river gradually flooded and submerged everything he owned.

But the head of the town's civil defence operation had no time to brood about his loss. He and other officials had little sleep as they fought to help other folk save what they could from the water.

On Wednesday night, elderly residents were moved to a temporary refuge on higher ground by a group of nuns and male helpers.

Said the mayor, Mr. Attie Coetzee: "The teamwork and spirit here has been magnificent. Our people have operated wonderfully."

Cheerful

But those spirits began to flag on Wednesday night as house after house was submerged. Scores of desperate homeowners commandeered tractors, trucks and sympathetic passers-by to help clear the way.

Guests at the Frederick Hotel (including a Sunday Times team) were awakened in the early hours of Thursday morning by water lapping at their bedclothes.

Flooded cars in front of the hotel were towed to high ground by four-wheel-drive vehicles.

Homeless people, bedraggled but remarkably cheerful, made fires in corner streets while they waited for dawn (power to the town had been cut).

One of the unhappiest people in Douglas this week was ostrich farmer Mr. Raymond Theron, who lost two homes and his entire livelihood — 200 ostriches (worth about R500 000) to the flood.

He paced back and forth beside the ever-rising water line as his house gradually disappeared.

He hadn't spent a single night in his new house and now it was gone.

"That's it," he said. "I'm finished."

The town's Catholic priest, Father Andreas Barth, 76, saw his church flooded the following day.

And a group of volunteers had worked through the night before in an attempt to clear the building of carpets and other fittings before the floodwaters struck.

A civil defence volunteer, Mr. Warwick Loveklee, told the Sunday Times that he had suspected what was coming and cleared his house of everything before the flood.

"Some people thought we were crying 'wolf'. But being proved right doesn't make us feel any better."

Municipal officials were adamant this week that Douglas would not give up in the wake of the most devastating blow in its history.

"Keep the town, Mr. Coetzee. "The floods are a tragedy, but we still have a town here. We'll start cleaning up as soon as we possibly can."

Raging waters bring a flood of tears to the town of Douglas

MUDY WATERS... a father carries his son down a flooded Douglas street  Picture: TERRY SHEAN

Don't let it happen again

By NOEL CORNS

Search for dam sites is national roads. Flooding at floods. Flooding the needs of all road users and flood victims. But the road needs a flood protection plan. The government has given the go-ahead for the construction of a dam to help solve the problem of flooding in the town of Douglas.

The dam is expected to be completed by the end of the year. It will provide flood protection for the town and its residents. The government has allocated a significant amount of money for the project, and the construction is expected to be completed within the budgeted time frame.
Flood reaches Upington as Free State counts losses

WHILE the central Free State counts its flood losses in life and property, a massive wave of water has now reached Upington in the Cape Province. People in low-lying areas have been warned to be ready to evacuate at any time.

Dr Van Niekerk, the Minister of Health and Population Development, who heads the special cabinet committee established to determine the flood damage, said an operations centre had been set up in Upington and the level of the water in the river was being measured hourly.

"The tremendous volume of water flowing down the Orange River will cause major problems," he said.

He confirmed that nine people had died in the floods so far, but added that the death toll could rise as there was no communication with several outlying areas.

One of the hardest hit areas however was the black township at Koffiefontein.

A newly constructed dam at Likhoele in the Mafeteng area of Lesotho, near Wepener in the Free State, burst after the heaviest rains of the year.

Earlier this week, a senior security officer at Mafeteng, Colonel Shosholohia Letieie, warned people living in the area their lives could be in danger.

The Bophuthatswana Defence Force had to rush tents and supplies to communities in the flooded areas of Taung, Kuruman and Ganyesa, a BDF spokesman said.

More than 1 300 houses have had to be evacuated in the Northern Cape due to the floods in the area, Administrator of the Cape, Gens Louw confirmed yesterday. -- Sapa
Upington rail cut as floods near Kakamas

From VERNON BRETHERST Staff Reporter

UPINGTON - Fears of an unprecedented disaster have proven unfounded here as the mighty Orange River threatened to breach the city's floodwalls.

Emergency authorities set up temporary shelters for residents of the flood-prone areas of the city. The river rose several feet above the 1974 flood level. The flow was 75,000 cubic meters per second.

Today all roads to Upington were closed. The city was on high alert.

 Floodwaters, however, were not able to breach the city's floodwalls, leaving residents unharmed. However, the high water levels forced many residents to leave their homes.

UNIONCASTLE, Gardens and Riverfront were the worst hit areas.

Flow regulated

Had the waters continued to rise, the situation would have been far worse. About 60 luxury riverside homes have been flooded, some ankle deep in mud. The city's floodwalls, however, were able to hold.

The flow had been regulated by the Orange River and Groblershoop dams, ensuring that the city remained safe. The flow was reduced to 60,000 cubic meters per second.

WADING THROUGH: Mr. Jannie Jacobs and his son "JDI" wade through their flooded house in the riverside suburb of Keidebnes at Upington.

WATER EVERYWHERE: Buildings in low-lying areas flooded by the Orange River.

UNDER PRESSURE: Telephone poles lean and the force of the floodwaters at Middelpos.

VICTIM SOUGHT: Mr. Red Rodelinehuy, in the canoe, and a friend the body of Upington's first flood victim.
a nation

‘Dear God, save my children’ was her prayer

By ANDY GALLOWAY

"FATHER, if you have to take my house, take it, but please save my children," was the frantic prayer offered by Mrs Tolla Taljaard as she, her mother, children and baby grandchild fled from the approaching wall of water that raced towards their house.

A shocked Mrs Taljaard from Shannon, outside Bloemfontein, recounted yesterday how the one-storey Renosterveldt had erupted into a solid wall of water.

"On Sunday morning we heard on the radio about the rain and after a while my mother, Mrs Swannie Swanpoel, walked over to the window and shouted: 'My children, look what is happening here!''"

Hysterical

Mrs Taljaard said they were faced with a wall of water, several metres high, rushing towards them from 200m away.

"My mother became hysterical and I shouted to the children to run for their lives," Mrs Taljaard said.

She grabbed her daughter's seven-month-old baby, Collin, and rushed for the vehicle which was parked in front of the house. By this time the water was swirling around the car and the house.

"I did not want to leave my house, but at the same time I did not want to see it being destroyed," Mrs Taljaard said.

"We drove off for about two kilometres and sat in the middle of the tarred road on a hill, watching a bridge in front of the home crumbling away.

"I sat with my hand on the steering wheel and prayed to God that he would not take away my house, but then I thought that I must not make an idol of it, so I said 'God, if you have to, you can take the house, but please spare my children!'"

... They sat in rigid fear for a couple of hours before Mrs Taljaard’s 11-year-old son Albert ventured back to the house. "It is a miracle," he said. "The flood seemed to have passed the house."

Strain

The concrete house in front of the house had acted as a type of dam wall, stalling the full force of the flood. But one still does not sleep well in the evenings," said Mrs Taljaard.

"The strain is something terrible. My husband is away and has missed all this. He will not believe his eyes when he comes back," she said.

"Our maid, Maria, and gardener, Piet, both lost their life's savings and their homes," she said.

AFTER THE FLOOD ... Tolla Taljaard and her grandson Collin

By CHARMAIN NAIJOO

TV viewers, shocked by the plight of flood victims, opened their hearts and wallets yesterday to the tune of R1m.

The money was collected in three hours yesterday via Good Neighbourliness, a telethon organized by Good Morning South Africa.

The result was quadruple the figure collected for the Natal flood fund last September.

Many last a hand: personalities manned telephones; GMSA anchor Marjorie Brooks worked on her wedding day because, she said, 'It's for an excellent cause'; the public donated generously, businesses not only provided large sums of money but also offered their premises for the collection of dry food and blankets.

Ringing

In Johannesburg, Durban and Cape Town, the telephones never stopped ringing, resulting in some heart-warming stories.

Discount tycoon Tony Fantor told of a 74-year-old pensioner who called in to pledge half of his life savings — R11,000. And, the old man told Tony, he wanted to give up half of his and his wife's monthly pension "for the rest of my life."

Two little girls, Mareli, 5, and Janita, 2, walked in with their mum, Mrs Benita Botha, to hand over their piggy banks filled with small change.

School children also offered their pocket money.

The largest donation came from the Chambers group — R500,000 in cash and kind. Artist Keith Alexander donated a painting worth R13,500.

And Colin Cameron, producer of the play Above The Wind, said proceeds of the preview would go to flood victims. The preview is at the Alexander Theatre on Tuesday at 8pm. Tickets cost R30.

Viewers donate R5-m — in 3 hours
Thousands open hearts to stricken

PORT ELIZABETH — Television opened the floodgates of South Africa's generosity to the stricken on Saturday morning.

Graphic television shots of raging rivers, flooded lands and devastated homes touched the hearts and the purses of the country's people and by the time the Good Morning South Africa telethon ended, pledges of well over R5 million had reached the SABC's studios.

In the Port Elizabeth studios, telephone callers from all corners of the Eastern Cape and Border pledged more than R287 000.

It was not only the management of companies that were giving, but their staff members. It was not only the mayor who visited the studio in their chains of office, but the municipal employees.

Soldiers and policemen and hoteliers and café owners and pensioners and students and firemen and housewives and nurses. All wanted to do their bit. Among them were:

• A Jamestown farmer's wife who said that the stock losses they had suffered in the recent floods in the North Eastern Cape were nothing compared with what had happened further downriver.

• A nine-year-old East London boy who had broken his piggy bank and was taking the entire R20 to the bank. The new bike would have to wait.

• A Jamestown farmer's wife who said that the stock losses they had suffered in the recent floods in the North Eastern Cape were nothing compared with what had happened further downriver.

• A nine-year-old East London boy who had broken his piggy bank and was taking the entire R20 to the bank. The new bike would have to wait.

Reed, outright winner of the recent Lisbon-Cape yacht race and his sponsors had 900 of the special covers printed with the idea of selling them to help finance the yachtsman's "last-shot" entry in the BOC single-handed round-the-world race in 1990–91.

He said yesterday: "It was a wonderful, uplifting experience just being in the studios on Saturday morning and experiencing this flood of humanity concern for those who have suffered loss."

He said yesterday the covers were offered "for R25 each or whatever you are prepared to pay for them."

"As far as I know, no one paid only R25 for a cover," Reed added.

"One up-country stamp-collector, unable to get through during the telethon, phoned about 10.30 am to say he badly wanted two of the covers and was prepared to pay R500 each for them. We'll be sending him two." — DDC
Floods subside after farms are inundated

UPINGTON — After days of waiting, the deluge of flood water finally arrived here yesterday leaving at least one person dead and causing millions of rands' worth of damage to areas along the river bank.

An unidentified man drowned on Saturday afternoon after he tried to cross the fast-flowing river. An attempt was made by police to find his body but it has not yet been recovered.

By midday yesterday, the water had started to subside and people were able to return to their partly submerged homes and start to assess the damage caused by the water.

Many residents told the Daily Dispatch correspondent about the helplessness they had felt as they watched the water encroach on their properties.

"You can't do anything; you are simply helpless — you just have to watch and wait," Mr Nico Steenkamp said as he waded through the back courtyard of his R200 000 home.

Neighbours waded from one house to another offering advice and support to their friends, vowing to help one another rebuild the area.

Telephone links with Groblershoop, Marydale and Renhardt were cut but an emergency line will be laid to restore communication with Groblershoop.

Officials of the Department of Water Affairs said the river had peaked for six hours at 9.9 m, which was lower than the figure of 9.9 m recorded during the floods of 1974. However, higher up the river, farmers said the water level had in fact passed the mark.

It was the farmers who were worst hit by the deluge of water, with thousands of acres of farm land below water.

In many cases the crops had not been harvested and were left to rot below the river water.

About 40 km to the southwest of Upington in the small town of Keimoes the story was much the same with farms along the banks of the Orange River flooded.

A farmer, Mr Christie Grobbelaar, said there were few farmers in the area whose farms were not under water.

Police have recovered the bodies of two men who drowned when their truck slid into a swollen stream about 10 km from Newcastle at the weekend. Two more men are still missing.

The weather bureau yesterday issued a special warning about a tropical depression which was moving southwards from the Mozambique Channel at 200 km a day. However, the bureau said the depression did not pose any danger at present.

More heavy falls of rain have been forecast for the eastern half of Botswana today and thunderstorms with moderate falls are expected over the southern and eastern Free State, Eastern Cape Interior, Transkei and Natal.

Cloudy and cool weather with occasional light rain and drizzle is expected along the Border coast.

See also page 9
SA/Namibian border towns await the main floodwaters

The Star's Africa News Service

WINDHOEK — The main floodwaters of the Orange River are due at the towns of Vioolsdrif and Noordoewer on the SA/Namibian border later today.

The D F Malan bridge between the two communities has remained open to vehicle traffic. The SWA police have been notifying motorists bound for the Cape on the main road south from the Territory — which goes through Noordoewer and Vioolsdrif — about the state of the bridge.

A number of irrigation schemes in the two settlements are flooded and a power-line and a generator have been swept away. Late yesterday, the river was still at least 2 m below the level of the D F Malan bridge.

Meanwhile, it seems initial fears that Namibia would be cut off from South Africa will not materialise. With the water level declining at Upington — the other main artery to SA — Sats in Windhoek is accepting goods traffic for points south of Upington after placing a ban on the acceptance of all goods for outside the Namibian border last week.
Donate to flood relief, Schwarz urges MPs

Political Staff

Members of Parliament should each donate a portion of their February salary to the flood disaster fund, said Progressive Federal Party MP for Yeoville Mr Harry Schwarz.

"It wouldn't be a bad idea if members of Parliament, instead of voting other people's money, voted as a body to give a portion of this month's salary to the Disaster Fund," said Mr Schwarz during the Additional Appropriation second reading debate in the House of Assembly yesterday.

"It would be a gesture that the public of South Africa would understand and would show that we don't just talk about things but put our money where our mouth is," he said. He suggested about 10 percent of each MP's salary could go to the fund.

Provision

Mr Schwarz called on Finance Minister Mr Barend du Plessis to amend this additional budget to make provision for the unforeseen additional expenses that had arisen as a result of the floods in the northern Cape and the Free State.

Mr du Plessis said an amendment was not necessary now and that the money needed for flood relief could be handled administratively in the last month of the fiscal year.

Repeating Mr Schwarz's suggestion that MPs contribute to the flood disaster fund, Mr du Plessis said there were moves in the National Party caucus to approach NP MPs and there had also been negotiation among parliamentary whips to include MPs from other parties.

"People" did not want anything to do with the objectors because they did not do military service.

"I will put them into jobs, but I won't go out of my way to do things on their account," he said. — Sapa.
New flood water to swamp Douglas and then Prieska

By Adele Baleta and Dan Side

New flood water is expected to reach the little northern Cape Town of Douglas tomorrow morning after heavy rains fell in the catchment area of the Kalkfontein Dam at the weekend.

A Water Affairs spokesman said a mass of water that would raise the level by 4.7 m was racing towards Douglas at a rate of 4000 cu m per second (cubic metres) following heavy downpours in the Kalkfontein Dam area on Saturday, which caused the Riet River to swell once again.

The water, was expected to reach the town tomorrow morning.

Water, flowing at a rate of 6200 cubic metres, will then move on to Prieska on the banks of the Orange River early tomorrow night and the level could rise by 5 metres, the spokesman said.

On Friday the water is expected to join the end of floodwaters at Upington.

The floods are starting to reach Namibia with the levels of the Orange River rising at Noordeower, the border town on the main Namibia-Cape Road.

However, the spokesman said the water had not broken the bridge at the border at Vloldrift, but the main road had been closed.

Commandant Neels Visser stationed at Defence Force headquarters in Kimberley said people on the lower reaches of the Orange River were returning to their homes today.

"All appears to be back to normal," he said.

The Air Force was still transporting medical and food supplies to farms along the Orange River today.

One of South Africa's biggest farm co-operatives, Sentraboer, expects to be hard hit by insurance payouts.

Mr Ray Lambert, re-insurance manager of Sentraboer, which offers flood cover for all types of buildings, household contents, farm implements and machinery and stored crops, said the floods affected an area representing about R8 billion of the R16 billion exposure carried nationally by his company.

"Most farmers haven't yet been able to get off their properties and into their co-ops to file their claims. But we expect that the final bill will be hefty," he said.

However, last week's devastation is not expected to be anywhere near as big a burden to major short-term insurers as last September's Natal disaster, said the Insurance Association of South Africa today.

Spokesman Mr. Rodney Schneibeuger said claims would not begin to rival the estimated R400 million to R500 million that will be paid out in Natal.

"The reason," he said, "is because there is not as much industrial and commercial damage — and that's what costs us the money in Natal."
Store gives R500 000

CHECKERS store chain had donated R500 000 to the Flood Disaster Fund after cutting its media advertising budget to benefit the stricken areas in the country.

Deputy managing director Mr Sergio Martinengo, said the donation was made over and above making Checkers stores available as collection points for food, blankets and other forms of contributions to the fund.

Mr Martinengo spoke after the chain's managing director, Mr Clive Well, announced that the company would be cutting its advertising on television, radio and newspapers for about a month beginning yesterday.

The floods have affected Natal, the Northern Cape and the Free State.
Sandton: pollution of rivers and streams

131. Mr D J DALLING asked the Minister of Water Affairs:

Whether his Department took any action in 1987 in regard to the pollution of rivers and streams which flow through Sandton; if so, (a) what action, (b) in respect of which rivers and streams and (c) with what result.

The MINISTER OF WATER AFFAIRS:

Yes

(a), (b) and (c) The hon member is referred to my reply to his question 212 (for written reply) in 1986. The action is being continued and the results have thus far remained unchanged.

An accident occurred, however, during August 1987 at a manufacturer of synthetic detergents. A tank containing raw material collapsed and deposited its contents into the stormwater system and on to adjacent ground. As much of the material as possible was removed. Since this incident, serious fouling occurs in the Sanddrain after rain storms.

Subsequent to this incident the Department of Water Affairs instructed the company concerned to carry out certain modifications to its property in order to prevent a re-occurrence of such an accident and to prevent water pollution under normal conditions.

The Municipality of Sandton was informed that it was in fact the authority responsible for controlling water pollution by industries within its municipal area.

Water from Natal for use in Transvaal

144. Mr M J ELLIS asked the Minister of Water Affairs:

(a) How much water was obtained from Natal for use in the Transvaal in 1987, (b) what was the price charged per litre of water and (c) (i) to whom and (ii) (aa) to whom and (bb) when was this money paid?

The MINISTER OF WATER AFFAIRS.

(a) 601 million cubic metres

(b) The total cost for the State for the supply of Tugela River water, via the Sterkfontein Dam to the catchment area of the Vaal River, amounts to 0.015 cents per litre. In determining the Government water tariffs the total cost for providing all water supply components, as well as any other expenditure are taken into account, whereas an average tariff for the supply of water is determined, which tariff presently amounts to 0.014 cents per litre for domestic and industrial use and 0.0014 cents per litre for agricultural use.

(c) (i) The following institutions to whom the water was supplied, paid for the water and it was then, where applicable, recovered from the consumers concerned.

Rand Water Board
Eskom
ISCOR
SASOL
OPS Goldfields Water Board
Western Transvaal Water Company
Municipality of Kimberley
Other small consumers
Irrigators

(ii) (aa) The Department of Water Affairs
(bb) Throughout the year.

Citizen Force/Commando members: exemption from attending camps

180. Prof N J J OLIVIER asked the Minister of Defence:

(1) What percentage of Citizen Force and Commando members called up to attend camps (a) applied for deferment and (b) failed to report for service and (ii) requested exemption from rendering service in townships in 1987:

(2) what total number of persons called up for military service in 1987 requested exemption on (a) religious and (b) other specified grounds?

The MINISTER OF DEFENCE:

(1) (a) 0.0% (b) 0.0%

(ii) 2.5% (iii) 0.0%

(12) (a) 305

(b) Educational: 23

Essential Posts: 962

Service in other Forces: 15

Occupational Circumstances: 38

Medical: 38

Others: 46

Operational area: persons killed/injured

156. Prof N J J OLIVIER asked the Minister of Defence:

Whether he will furnish information on the number of persons killed and injured in the operational area in 1987; if so, (a) how many (i) members of the South African Defence Force and (ii) civilians were killed and injured in each case; (b) how many persons were killed and injured by members of the South African Defence Force in the operational area in that year;

The MINISTER OF DEFENCE:

Yes, in certain instances as explained below

(a) (i) As our enemy may abuse statistics on the number of SA Defence Force members who have been killed in the operational area for propaganda purposes, it is not customary to divulge the figure.

(ii) The South African Defence Force only keeps statistics with regard to deaths and injuries which were the result of Defence Force activities or which had direct bearing on such activities.

(b) Killed: 360 of whom 340 were terrorists. The remainder were killed in shooting accidents, motor vehicle accidents and crossfire during contact with the enemy, etc.

Injured: It is not possible to determine the number of injuries sustained. Injuries can vary from slight to serious and are in many instances not reported.

South African Medical Services: professional staff establishment

186. Prof N J J OLIVIER asked the Minister of Defence:

(1) (a) What is the professional staff establishment of the South African Medical Services and (b) how many posts were (i) vacant, (ii) filled by persons rendering service in terms of section [a] 22, (bb) 23(ba) and (cc) 44 of the Defence Act, No 44 of 1957, and (iii) filled by civil servants on a contract basis as at the latest specified date for which figures are available.

HOUSE OF ASSEMBLY
Two more drown in raging floodwaters

Johannesburg — The death toll in the floods sweeping the country rose yesterday when the bodies of two people — a 10-year-old girl and an adult man — were found in the Upington area.

Reports said they had drowned in the Orange River.

Earlier reports from Natal said police had recovered three of the bodies of four people who drowned in the Klip River at the weekend when their vehicle was washed off a low-water bridge.

It was not clear last night what the official death toll was in the floods that have caused damage estimated at millions of rands, but news reports have mentioned more than 20 deaths.

Meanwhile Patrick Collings reports from Upington that the small town of Kakamas has been cut off from surrounding towns in the north and residents there fear that the flood water will also cut off roads leading to the south.

Hundreds of acres of vineyards are submerged under the muddy flood water. A number of farm houses are also flooded to their roofs.

About a kilometre of the road linking Kakamas to Keimoes is under water, with the other two to three metres of water and throughout yesterday people were being ferried to and fro by a police dinghy.

Mrs Johanna Visser, wife of a local farmer, had been trapped on the Kakamas side of the river since Saturday. She was reunited with her husband Abraham late yesterday.

In a drama of another sort a baby girl about three days old, with critical breathing problems, was yesterday flown to Upington Hospital in the arms of the co-pilot of the John Rolfe helicopter. The girl and her mother, Mrs Anna Dodds, had been marooned at Louisdale Clinic on the southern side of the Orange River near Upington.

A hospital spokesman last night described the infant’s condition as critical.

Earlier yesterday, Sapa reports, radio stations said the road link between Cape Town and Windhoek could be severed if the Orange River rises at Vrijoulsdrift, the only bridge on the route still open.

Reports from Vrijoulsdriift said a rise of less than two metres would push the Orange River past its 1974 level and the bridge would have to be closed.

The other major crossing to the north, the bridge at Onsepkasans, was closed on Sunday night.

Rail links between Namibia and South Africa were closed yesterday, government spokesman said.

Large-scale power failures have occurred at Augrabies, north-west of Kakamas, and Eskom was laying an emergency cable to the town.

Onl ythree main routes to Bloemfontein were still closed yesterday: From Petrusburg, Jagersfontein and Reddersburg. Authorities expect the roads to be reopened this week.
Second wave of flooding to hit Douglas

The Argus Correspondent
JOHANNESBURG. — A second wave of flooding is expected to reach Douglas in the Northern Cape tomorrow morning after heavy rain fell in the catchment area of the Kalkfontein Dam at the weekend.

A water affairs spokesman said today “a wave of water 4.7m high” was racing towards Douglas at a rate of 8 million litres a second after heavy downpours in the Kalkfontein Dam area on Saturday caused the Riet River to swell again.

A flood level increase of 8m, flowing at a rate of 6.2 million litres a second, would then move on to Prince Albert early tomorrow night, the spokesman said.

On March 4 the water is expected to join the floodwaters at Upington.

The floods are starting to reach SWA/Namibia, with the levels of the Orange River rising at Noordoewer, the border town on the main SWA/Namibia-Cape road.

Road closed

The spokesman said the water had not broken the bridge at the border at Vleedrif but the main road had been closed.

He said there were reports of heavy rain over the northern Karoo and at Beaufort West and Victoria West last night but it could not be established what effect the rain would have on the flooding.

A Defence Force spokesman in Kimberley said people on the lower reaches of the Orange River were returning to their homes today.

He said: “All appears to be back to normal. The water has subsided.”

The air force was still taking medicines and food to farms along the Orange River today.

The spokesman thanked people for their gifts of food, clothing and blankets. He appealed for more money for the disaster fund as Defence Force stores were packed and there was no room for more supplies.

— page 3.

Call on MPs to give 10% of pay to flood fund

Parliamentary Staff

MEMBERS of Parliament should each give a portion of their February salary to the flood disaster fund, said Progressive Federal Party MP for Yeoville Mr Harry Schwarz.

He suggested about 10 percent of each MP’s salary could go to the fund.

“It wouldn’t be a bad idea if members of Parliament, instead of voting other people’s money, voted as a body to give a portion of this month’s salary to the disaster fund,” said Mr Schwarz during the Additional Appropriation second-reading debate in the House of Assembly yesterday.

“It would be a gesture that the public of South Africa would understand and would show that we don’t just talk about things but put our money where our mouth is,” he said.

Mr Schwarz called on Finance Minister Mr Barend du Plessis to amend this additional budget to make provision for additional expenses that arose from the floods.

Mr du Plessis said an amendment was not necessary now and that the money needed for flood relief could be handled administratively in the last month of the fiscal year.

Replying to Mr Schwarz’s suggestion that MP’s contribute to the flood disaster fund, Mr du Plessis said there were moves in the National Party caucus to approach NP MPs and there had also been negotiation among parliamentary whips to include MPs in other parties.

WEATHER TODAY
E Cape dam levels up

EAST LONDON — It seems as if the heavy rains which plagued the entire country recently did do some good, with the level of dams in the Eastern Cape rising considerably.

A spokesman for the Department of Water Affairs in Cradock said the H.F. Verwoerd Dam, the largest concentration of fresh water in South Africa, was still overflowing and had been measured at 19 per cent above maximum capacity on Sunday.

In the Border region, the Gobu Dam (100.8 per cent) is also overflowing, while the Bridle Drift Dam (96.9 per cent) and Nahoon Dam (94.4 per cent) are approaching that stage.

The percentage levels of other Eastern Cape dams are: the Grass-ridge Dam (84.6 per cent), Kat River (69.8), Paul Sauer (94.9), Churchill (50.8), Waterdown (50.2), Groendal (47.3), Commando Drift (46.5), Charlie Malan (41.8), Menzi (31.06), Van Rynnevald's Pass (25.4) and Boervlei (4.2). — DDR
Floods cut off Kakamas

Daily Dispatch Correspondent

UPINGTON — As the floods still continue to wreak havoc, the small town of Kakamas has been cut off from the surrounding towns in the north and residents fear that the flood waters will also cut off roads leading to the south.

Hundreds of acres of vineyards are submerged under the muddy flood water and a number of farm houses are also flooded to their roofs.

About a kilometre of the road linking Kakamas to Keimoes is under two metres of water and throughout yesterday people were being ferried to and from the town by a police boat.

Numerous rescues had to be carried out.

All public road and rail links between SWA/Namibia and South Africa were also closed yesterday.

The water level in the Orange River basin was rising by a metre an hour and all people living on the river banks were moved to higher ground.

The tempo of water flowing into the lower Orange River slowed down slightly but officials expect the flood level to resume rising, following heavy rains that lashed the catchment area in the Free State and Botswana at the weekend.

A special Civil Defence committee has established its headquarters at Keetmanshoop in southern SWA/Namibia to co-ordinate and monitor "Operation Water Pool".

The Department of National Health yesterday completed an immunisation programme against cholera.

Officials of the Department of Water Affairs are making contingency arrangements to combat expected fresh water shortages in parts of southern SWA.

Problems with the supply of fresh produce from South Africa are expected, while farmers, cut off from their markets in the Republic, face financial loss.

Four of the eight people feared drowned in two flood-related incidents in Natal at the weekend are still missing.
Parts of Ladysmith hit by overflow from Klip river

Houses and streets in the low-lying areas of Ladysmith were flooded this morning when the Klip river overflowed.

Ladysmith town clerk Mr P Hurter said today that there had been heavy rains in the river's catchment area.

"Some streets in the town are closed and about five or six houses underwater, but the waters are already subsiding. They were at their peak around 4 am today," Mr Hurter said.

Captain K van der Westhuizen of Upington police said today that the Orange River floodwaters were subsiding. Many hundreds of people were still housed in tents and hotels.

The Star's Africa News Service reports from Windhoek that the main Orange River flood has reached the Atlantic Ocean at the mouth of the river between Alexander Bay and Oranjemund.

Water rose to within 2.5 m of the roadway on the Ernest Oppenheimer bridge linking the two diamond mining communities. The level was still lower than that of the 1974 flood.

Houses are being evacuated in Alexander Bay, but in Oranjemund, which is some way from the river and on high ground, it is business as usual. Consolidated Diamond Mines spokesmen said there was no danger of interference with diamond mining at Oranjemund.

The Ernest Oppenheimer bridge has already been prepared for the flood by CDM engineers, who have removed its railings to lessen pressure on the structure. Further down the river, at the mouth, CDM's heavy earthmoving equipment has bulldozed a large sandbar to make the passage of the water easier.

STILL INUNDATED

The towns of Noordoewer and Vioolsdrift, astride the main Cape Town-Windhoek road, remain inundated, and the F. P. Malan bridge over the river there remains closed to traffic.

Vioolsdrif has lost many of its telephone links and is also reported to be without electricity, but the situation in Noordoewer is better with telephone and power links uninterrupted.

Residents in the town do not believe the flood will exceed the 1974 level.

Zola Budd pledges 'I am British'

The Star Bureau

LONDON — Zola Budd gave athletics officials both a verbal and written assurance yesterday that she is committed to living in, and running for, Britain.

A statement from Miss Budd said: "I consider myself British and I have severed all links with South Africa except for my family ties. Britain has given me the opportunity to make the utmost of my running talent and I am determined not to let Britain or myself down."

British officials said later that they now had all the assurances they required.

Terry McLean reports from Auckland that any demonstrators causing trouble when Miss Budd runs at the world championships at Ellerslie racecourse on March 24, could be in for trouble.

During New Zealand trials on Sunday, there was great crowd hostility to a group of demonstrators.

"If someone had leaped the fence," said Commonwealth decathlon gold medallist, Roy Williams, "I am quite sure those demos could have come close to being lynched."

Viewers want more debates

CAPE TOWN — Viewers want more political debates on TV, says the SABC.

A corporation spokesman said the SABC was "very satisfied."

About 300 people had telephoned the SABC afterwards.

3Bop disaster areas

President Lucas Mangope of Bophuthatswana has declared the flood-stricken districts of Kudumane, Taung and Giayyesa, where nine people have drowned, a disaster area.

The chairman of the Cabinet Committee on Disaster Relief, Minister Seroko Kgobokoe, said that since the heavy rains started on February 16, 3,700 mud houses had been destroyed and 350 small stock lost in the Taung area alone.

A disaster fund has been opened at the Standard Bank, Mmabatho, for donations from the public.

See Page 13.
By DENNIS CRUYWAGEN, Staff Reporter

TWO Air Force Alouette III helicopters are standing by to airlift passengers — including three babies — from the Trans-Karoo express train, marooned at Hutchinson in the Karoo by rising floodwaters.

The 48 passengers had been stranded on the train since yesterday. Food and water have run out, there is no milk for the babies and the train's batteries are weakening.

A spokesman for Southern Air Command at Silvertons said a mobile operations team was assessing the situation and if necessary the helicopters would airlift the passengers to buses.

Preference would be given to the babies, their mothers and an elderly woman passenger in a wheelchair.

The Alouette III can transport about five people at a time.

It is impossible to reach the area by road and the railway line is cut off to the north and south.

The spokesman said a huge area — from Victoria West northwards to Loxton and southwards to Nelspoort — was cut off by floodwaters.

The floods also disrupted the prestige Blue Train service.

The Blue train to Johannesburg is stopped at Three Sisters. Its 130 passengers were treated to crayfish and cocktails in the air-conditioned dining car late last night as they waited for buses to take them to Kimberley.

But when they reached Victoria West they were stranded for the night. They were due to be flown by chartered aircraft to their destinations today.

The Trans-Orange express returned to Cape Town and passengers are being flown to their destinations.

The Air Force spokesman said the helicopters and the operations team were sent from Port Elizabeth to Victoria West yesterday afternoon to be ready in case of emergency.

Severed

As more reports of Karoo flooding poured in, police said communications with Loxton had been severed and that a helicopter would fly to the town to check on the situation.

The town is midway between Beaufort West and Carnavon.

Major Mike Lombard, police liaison officer for the South Western Districts, said telephone links with the town had been broken and there had been no communication via the police radio.

He said the SAAF helicopter would fly to the town from Beaufort West.

Major Lombard said the national road had been closed at Nelspoort, north of Beaufort West, because of flooding.

But he said the floodwaters seemed to be stabilising.

Boy drowns

A 13-year-old boy drowned in floodwaters at Groblershoop yesterday, bringing the death toll since the start of the floods in the northern Cape to 10.

Captain Karel van der Westhuizen, a police spokesman at Upington, said the boy, Andries Julius, had been playing in the flood waters with friends when he drowned.

He said floodwaters of the Orange River had reached a peak yesterday at Onsepkans, about 200km from Upington, where a number of houses were under water.

A dozen Navy men, including eight divers, are assisting in flood relief operations in the Northern Cape.

A spokesman for Naval Command West at Simon's Town said four inflatable boats, each with two divers and a coxswain, had been operating on the Orange River since Saturday.

Two boats were operating in the Vioolsdrift area and the others at Alexander Bay.

Houses and streets in the low-lying areas of Ladismith, Nataal, were flooded this morning when the Klip River overflowed.

Ladismith's town clerk, Mr Pieter Hurter, said there had been heavy rains in the river's catchment area.

Some streets in the town are closed and about five or six houses under water but the waters are already subsiding. They were at their peak around 8am today.

Saps reports from Windhoek that the DF Malan Bridge at Vioolsdrift on the main route between Cape Town and SWA/Namibia would be closed indefinitely as the road on the southern side of the border had been washed away.

An official spokesman, Mr Wytte Van Wyk de Vries, said at Reetmannaag today the water level in the Orange River at Noodewer on the SWA/Namibian side reached a peak at 10.8 metres last night and was expected to maintain that level for at least the next 10 days.

Three babies marooned

A 13-year-old boy drowned in floodwaters at Groblershoop yesterday, bringing the death toll since the start of the floods in the northern Cape to 10.

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Second wave of flood waters to hit Douglas

JOHANNESBURG — A second wave of flooding is expected to reach the little northern Cape town of Douglas this morning after heavy rain fell in the catchment area of the Kalkfontein Dam at the weekend.

A Water Affairs spokesman said a mass of water that would raise the level by 4.7 metres was racing towards Douglas at a rate of 6,000 cubic metres per second (cusecs) following heavy downpours in the Kalkfontein Dam area on Saturday, which caused the Riet River to swell once again.

Water, flowing at a rate of 6,000 cusecs, will then move on to the banks of the Orange River early tonight and the level could rise by 8 metres, the spokesman said.

The water is expected to join the end of flood waters at Upington on Friday.

At Upington, as the level of the flooded Orange River continued to drop yesterday, supplies were being airlifted to families stranded on islands in the river.

Airforce helicopters flew in food, tents, medical supplies as well as firewood.

The Blue Train on its way to Cape Town and the other to Johannesburg, were stranded at De Aar after they were unable to go beyond Biesiespoort.

A spokesman for South African Transport Services said that buses would transport the passengers to stations from which they had left.

Between 200 and 300 people had to leave their homes at Hitchcock Post while 10 homes at the Kromrivier Station near Three Sisters also had to be evacuated.

At Hutchinson a stream of water about 2 km wide flowed through the coloured residential area after a dam wall collapsed.

The thunderstorms caused extensive damage to railway lines and trains between Cape Town and the north were delayed.

Two Blue Trains and the Trans-Orange express are stranded by new flooding in the Karoo and rail freight has been delayed by fierce winds which swept the Worcester area yesterday, blowing down powerlines.

The Blue Train from Cape Town and the other to Johannesburg were stranded at De Aar after they were unable to go beyond Biesiespoort.
Stamp aid extended

DURBAN "Stamp aid has been decided to extend the scope of the surcharged stamps for flood relief in Natal to cover the Free State and Northern Cape, the Minister of Home Affairs and Communications, Mr Stoffel Botha, has announced.

All funds collected from today by the sale of surcharged stamps and from donations by large users of the postal service, will be paid over to the disaster relief fund for utilisation in all areas.

A new stamp will appear shortly to replace the present surcharge stamps, which are printed with the words, Natal Flood Disaster.

Proceeds raised before yesterday will be paid to the Natal fund.

R175 000 storm damage

QUEENSTOWN Storm damage to roads and bridges in the Drakensberg Divisional Council area is estimated at R175 000.

The divisional council secretary, Mr Benny Phillips, said the areas most affected were Dordrecht, Jamestown, parts of the Lady Grey district and Aliwal North.

He said most damage was caused by flooding from burst dams which washed away sections of roads and bridges.

Several farms were isolated at the height of the flood but only one road in the region was still closed, he said.

This was the M5 route from the Molokwane turnoff to Dordrecht.

Mr Phillips said motorists were not inconvenienced as there were alternate routes.

In addition to extra labour, two graveling units had been moved to the worst-hit areas. Mr Phillips said they were working as quickly as possible to restore roads and bridges in the region. - DDR
Stranded train passengers rescued

By Adele Baleta and Melanie Gosling

Passengers stranded on a Trans-Karoo train since Tuesday when flood waters washed away railway lines between Victoria West and Hutchinson, are being taken by bus to Cape Town today.

Sats spokesman Mr Leon Els said today flood waters had subsided sufficiently last night for buses to reach the stranded train and its 248 passengers.

"The passengers were taken to the Victoria West hotel overnight and are now on their way back to Cape Town by road. From there they will be flown to Kimberley or Johannesburg, but at this stage we have no confirmed times of arrival," Mr Els said.

He said the 65 passengers on the Blue Train had been taken to Cape Town by bus yesterday and then flown to Johannesburg.

A police spokesman at Victoria West said there was no serious flooding in the Karoo towns of Victoria West, Hutchinson, Nelspoort and Britstown where heavy rains fell last night.

He said the main road between Frazerburg and Williston was closed yesterday after the Sak River overflowed, and the road linking Vosburg and Britstown was still closed to traffic today. A dam wall near Williston had broken.

He said the N1 north of Nelspoort had been re-opened this morning and there were no rain clouds over the area this morning.

The railway line between Bloemfontein and Koffiefontein is closed and goods are being shuttled between the towns by Sats container trucks.

Commandant Neels Visser of Defence Force headquarters in Kimberley said today that conditions in the Northern Cape were returning to normal.

"The water level of the Orange River has subsided and people are being re-established in their homes," he said.

At the small northern Cape town of Douglas the level of the Vaal River was dropping, and houses away from the banks of the river were no longer flooded.
NEARLY 250 Trans-Karoo express train passengers were still stranded at Hutchison in the Karoo early this morning after this week's floodwaters left large sections of railway line in the area impassable.

The 248 passengers have been stranded at the station since Tuesday morning.

"Help is expected by noon," the Transport Minister, Mr Eli Louw, told Parliament yesterday.

Nine buses are standing by to bring them back to Cape Town, a SABS spokesman said last night. The buses are expected to arrive in the city by 2pm today and passengers will then be placed on the first available flights to their destinations.

Hundreds of passengers stranded in trains — including the Johannesonburg and Cape Town-bound Blue Trains — had been ferried to safety, the minister said.

He said that so far 15 stretches of line in six different regions, including Namibia, had been affected. "In all about 82km of line and 229 points have been flooded."

Mr Louw said the damage to rail lines by floods in the Northern Cape and Free State will cost more to repair than the damage done in last September's devastating Natal floods.

Torrential rains

"Provisionally, the damage is estimated at about R31 million, but it will definitely be higher, as more flooding is expected."

"The flood damage in the Natal floods was about R26 million."

Reports from Durban yesterday that torrential rains lashed the Natal South Coast, but no deaths have been reported.

Munster, near Port Shepstone, bore the brunt, with the low-lying parts of the village completely isolated yesterday afternoon.

The Port Shepstone-Port Edward road has been closed. One bridge has been washed away and another is under water.

Our Johannesburg Correspondent reports that thousands of people affected by the floods are now in danger of contracting malaria.

Officials yesterday warned in a statement that areas along the Malopo river in the north-western Cape and the lower Orange River valley from Prieska to Ooskepans were epidemic areas where malaria occurred after rivers have been flooded.

To combat the risk of waterborne diseases, 12 water tanks providing more than 6,000 litres of water have been installed. — Political Staff, Staff Reporter and Sapa
Dinner, auction, in aid of flood relief

EAST LONDON — Several businessmen and a chef from a beachfront hotel here, have organised a dinner and wine auction to raise money for the victims of the floods.

Ms Mike de Stadtler said that she and Mr Jeff Schueremans, had decided to do something for the victims.

Several local personalities, including Mr Dirkie Scott, Mr Tony Bryant and Mr Errol Spring, have been asked to be waiters for the evening.

A chef, Mr Schueremans, said he would auction his services for one evening.

The function will be held on Saturday, March 12, at 6 pm at a cost of R25 a head.

Anyone wanting to buy tickets is asked to contact Miss Anne Bastien at 26 270.

Meanwhile, a senior administration clerk at the Department of Health, Mrs Ann Fleming, said donations of food and money had been coming in.

The pupils of West Bank High School donated boxes of food and clothing yesterday.

A cheque for R120 was handed over by them to Mrs Fleming. — DDR
Helicopter to check roads after floods; trains rescheduled

Daily Dispatch Reporter

EAST LONDON — A six-seater aircraft has been chartered by the Automobile Association (AA) to assist the provincial administration in assessing and reporting road and traffic conditions in light of the floods.

The general manager of the AA's publications and travel services division, Mr Ben Matthee, said yesterday that the aircraft would carry road engineers and senior traffic officials to assist in aerial surveys and forming better overall views of washaways.

"Road conditions are changing hourly as more rain falls onto already waterlogged areas, thereby increasing the load on rivers with further potential washaways."

The aerial surveys will help us report the latest information to the relevant authorities and the media, so that the travelling public can be kept in the picture more effectively than at present.

"This project is our way of saying thank you to the traffic officials and those involved in road and communication network repairs," Mr Matthee said.

The East London AA area manager, Mr Dion van Niekerk, said the aircraft was a public service to help with the smooth flow of traffic.

"Once we get information from the aircraft it will be distributed to all branches of the AA.

"The aircraft is not intended as a permanent service and will only be used until road conditions return to normal."

The disruption of rail services caused by the floods has led to some re-scheduling.

The acting superintendent of South African Railways passenger services, Mr Martin Slabber, said a new route for the East London-Johannesburg train was introduced on Monday.

The passenger train from East London to Johannesburg now branches off at Stormberg and runs via Rosmead, Noupport, De Aar, Kimberly and Klerksdorp.

The train leaves East London daily at 2.30 pm and arrives in Johannesburg at 6.01 pm the following day.

Passengers travelling from East London to Bloemfontein must travel to Johannesburg and then by special train, via Kroonstad, to Bloemfontein.

The train leaves Johannesburg at 7.45 pm and arrives in Bloemfontein at 6.50 am the following morning.

The return trip from Bloemfontein leaves at 8.30 pm and arrives in Johannesburg at 6.33 am.

Passengers must then change to the East London train which leaves at 2.50 pm and arrives in East London 30 hours later.

Mr Slabber said passengers were not being charged extra for any of the new routes.
Farmers happy with Border’s rainfall

EAST LONDON — Farmers have welcomed the good rains that have fallen over the Border.

The commodity services manager of the East Cape Agricultural Union, Mr Arthur Purchase, said the only report of flood damage to farms was the drowning of 1000 angora goats at Steynsburg.

Mr Purchase said there was a general feeling of optimism among farmers.

"There is good moisture content in the soil for the establishment of winter grazing and this augurs well for the months ahead."

"In areas where there has been luxuriant grass growth, especially in the sour veld regions, farmers may have to supply protein and mineral licks and supplementation for livestock earlier than normal."

"Alexandria and Paterson still need rain but farmers generally in the Border are happy with the rainfall so far," he said.

"However, one of the biggest problems facing vegetable producers is getting their produce to market."

Mr Purchase said farmers who used large trucks to transport vegetables to market were being held up by floodwaters and by road and bridge washaways.

"This is one of the factors contributing to an increase in vegetable prices with consumer demand outstripping supply."

The officer in charge of the East London weather office, Mr Louis Vermaak, said widespread rain had fallen over the Border yesterday. Adding that further heavy falls could be expected in the next few days.

Farms to the north of Dordrecht had up to 50 mm of rain but little fell in the town.

In the 24 hours up to 8 am yesterday, Kei Mouth had 53 mm; Haga Haga 96 mm; Moolpaas 75 mm; Dordrecht 14 mm; East London 22 mm; Elliott 57 mm; Stutterheim 27 mm; Komga 23 mm; Cathcart 11 mm; Umtata 12 mm; Lady Frere 18 mm; Ncora Flats 84 mm and Port St Johns 26 mm.

Mr Vermaak said the cloudy and cool conditions would continue for the next 24 hours, with occasional rain along the coast and over the southern and southwestern interior.

Over the north-eastern interior there will be further showers.

"The outlook for Saturday is for a rise in temperatures with thunder activity and rain over the interior, reaching the coast in places."

"However, on Sunday we will have cooler, cloudy conditions with rain on the coast and thunder activity with rain over the interior," Mr Vermaak said.
EAST LONDON — A sum of R10 000 has been pledged by the East London City Council to assist flood victims in the Free State and Northern Cape.

The mayor, Mr Robert de Lange, said the council had intended to make a pledge during the SABC's countrywide appeal last week, but telephone lines had been continually jammed.

"We wish we could have donated more, but would like to take this opportunity to encourage others to dig deep into their pockets.

"East London has experienced its share of flood devastation, and it is appropriate that we should do something practical."

Greens Hoërskool has already raised over R1 225 for the fund.

The headmaster, Mr D. P. Marais, said he had appealed to scholars on the day prior to the collection, and had been amazed at the generosity with which they had responded.

"We held an inter-class competition which helped to swell the fund — it was won by the Std 9 class, which contributed R321.44.

"We are hoping that other schools and businesses will follow our example and hold similar fund-raising drives," he said.
Natal coast hit by floods

Heavy rain, flooding ravages vast region

Staff Reporters and The Star's Africa News Service

Torrential rains and flooding are continuing to blight vast areas of southern Africa.

From the Limpopo Valley in Mozambique to northern Natal and the south coast, the northern Cape and Namibia, flooding and more downpours have caused a swathe of death and destruction over the past three weeks.

Rain is battering the Natal south coast, with Port Edward receiving nearly 300 mm in the last 48 hours. Reports streamed in of damage to Port Edward.

Dozens of houses and flats were reportedly flooded, streets had to be closed off when low-lying roads became submerged because of water flowing down to the sea.

In other parts of the country:
- Defence Forces and police emergency relief teams are distributing food to about 40000 northern Cape people who have been stranded on islands in the vicinity of Keimoes and Rabon Island by floodwater.
- A number of people who left their homes in Upington for fear of flooding have returned. Some of the houses are still under water, and repair and clearing-up operations have not yet begun. It is expected that the Orange River will maintain its present flooded level for at least a week.

Travel routes

- Police have advised motorists who are planning to travel from Kakamas to Upington to use the gravel road south of the Orange. Traffic from Cape Town to Upington should use the route via Louisvale to get from Kenhardt to Nieuwoudtville.
- Battered by three floods in the past 18 months, Ladysmith in northern Natal was hit yet again on February 21 and some residents are still homeless.
- A delegation of government, provincial and municipal representatives is to visit Ladysmith today to assess the flood damage.
- The Weather Bureau in Pretoria yesterday released rainfall figures for 20 towns in the four provinces which were hit by the floods, showing that last month they doubled, trebled and even quadrupled; the rainfall levels for the same period last year.
- Bloemfontein's rainfall trebled last month compared with 1987. Last month's rainfall (533 mm) almost reached the legislative's capital's average annual rainfall figure.
- Johannesburg, with 467 mm last month, was down on the long-term average of 124 mm.
- The cost in human lives in the current floods is nowhere near as high as the September deluge in Natal, in which the toll exceeded 300. The countrywide floods have claimed at least 29 lives.
Now floodwaters threaten the oceans

By ADRIAN HADLAND and SAPA

Most are pouring 10,000 cubic metres into the sea — are relatively small.

The sea is "very resilient," he said, but if the silty flood water stays in the regions around the water mouths, the damage could, in the long-term, be "detrimental." Meanwhile, earth-moving machinery from the diamond diggings at Alexander Bay have been used to cut channels through the dunes at the river mouth to prevent major flooding of the town and estuary. Large parts of NamibRand Nature Reserve were cut off yesterday as torrential rains swept away roads and rail links at Aeh, north of Mariental.

Resident in the small Free State town of Douglas, which was almost completely submerged under water last week, had something to celebrate on Wednesday. A man drove a lorry load of beer into the town after Civil Defence officials had already described Douglas as being "entirely cut off from the outside world."

"No-one knows who he is or how he did it," said the town clerk, Louis de Jager. "Either he was drunk or he just closed his eyes and put his foot down."
More severe flooding forecast and heat continues in Cape Town

Staff Reporters and Argus Africa News Service

Torrential rains and flooding are continuing to blight vast areas of southern Africa.

From the Limpopo Valley in Mozambique to northern Natal and the south coast, the northern Cape and Namibia, flooding and more downpours have carved a swath of death and destruction over the past three weeks.

Only the southern Cape, where temperatures have soared up to 35 deg C in the past few days, will escape the rain—at least until Sunday.

Rain is battering the Natal south coast, with Port Edward receiving nearly 500mm in the last 48 hours.

Reports streamed in of damage to Port Edward. In nearby Margate, a young police constable received 20 stitches in his head after the van he was driving was dumped in a sink hole that appeared in a street in the town.

 Destruction goes on

In other parts of the country:

- A Defence Force and police emergency relief teams are distributing food to about 3,000 northern Cape people who have been stranded on islands in the vicinity of Keimoes and Kanon Island by floodwater.
- A Defence Force spokesman said medical personnel had earlier visited the people to give them advice on water purification methods.
- A number of people who left their homes in Upton for fear of flooding have returned. Some of the houses are still under water and repair and clearing-up operations have not yet begun. It is expected that the Orange River will remain at its present flooded level for at least a week.
- Police have advised motorists who are planning to travel from Kakamas to Upington to use the gravel road to the north of the Orange. Traffic from Cape Town to Upington must use the route via Louisdale to get from Koornhof to Nieuwoudtville.
- Battered by three floods in the past 18 months, Ladysmith in northern Natal was hit yet again on February 21 and some residents are still homeless.
- A delegation of government, provincial and municipal representatives visited Ladysmith today to assess the flood damage.
- Torrential rains last month pushed rainfall figures in many areas of South Africa to record levels.
- The Weather Bureau in Pretoria has released rainfall figures for 28 towns in the four provinces which were hit by the floods showing that they last month doubled, trebled and even quadrupled the rainfall levels for the same period last year.

At Van Reenen, a catchment area for the Klip River which runs through Ladysmith, rainfall figures trebled last month compared with last year's figure.

Torrential rain this week drenched the Natal coast, causing limited flooding in some low-lying areas and blocking some roads.

With 451mm rain, Sani Pass in the Drakensberg last month quadrupled its rainfall compared with last year.

The cost in human lives in the current floods is nowhere near as high as the September deluge in Natal in which the toll exceeded 300. The countrywide floods have claimed at least 25 lives.

Last month in the far Western Transvaal town of Jaque Kempdorp eight times more rain (946mm) fell there compared with February last year (136mm).

Bloemfontein's rainfall trebled last month compared with 1987. Last month's rainfall (533mm) almost reached the legislative capital's average annual rainfall figure.

In Ficksburg, west of Bloemfontein, where rainfall figures have been measured since 1927, six times more rain fell there last month (394mm) compared with February last year (60mm).

While the Free State's Trompsburg measured seven times more rain (417mm) last month than it had in February (47mm) 1988 — to equal its annual average rainfall.

Two other towns, Delesville and De Wet's Dorp and Alwahl North and Kimberley in the Cape quadrupled their rainfall last month.

The rainfall at Douglas — a small northern Cape town, where the water level of the Vaal River was dropping and houses away from the banks of the river were no longer flooded, more than doubled (270mm) its rainfall compared with last year's figures (104mm).

Johannesburg, with 46.7mm last month, was down on the long-term average of 124mm.

From Maputo it is reported that about 15,000 people were evacuated from their homes in the southern Limpopo Valley this week because of a threat of floods caused by heavy rains.

Mozambique's Secretary of State for Agricultural Water Resources, Mr Rui Goncalves, appealed for food for peasant families who were moved out of their riverside homes in the Chokwe and Guia districts.

More rain is forecast for much of the country, with the only brief respite from the wet coming late on Saturday, according to the Pretoria Weather Bureau.

Scattered thunderstorms and falls of between 10mm and 20mm are expected over southern Transvaal and the flood-hit Natal north coast, Orange Free State, northern Cape and eastern parts of South West Africa.

Continuous rains are expected in Natal until Sunday and a general flood warning has been issued.

### Maximum & Mean Temperatures

**February 1988**

- **Max:**
  - 0°C
  - 2°C
  - 4°C
  - 6°C
  - 8°C
  - 10°C
  - 12°C
  - 14°C
  - 16°C
  - 18°C
  - 20°C
  - 22°C
  - 24°C
  - 26°C
  - 28°C
  - 30°C
  - 32°C
  - 34°C
  - 36°C
  - 38°C
  - 40°C

- **Mean (°C):**
  - 0°C
  - 2°C
  - 4°C
  - 6°C
  - 8°C
  - 10°C
  - 12°C
  - 14°C
  - 16°C
  - 18°C
  - 20°C
  - 22°C
  - 24°C
  - 26°C
  - 28°C
  - 30°C
  - 32°C
  - 34°C
  - 36°C
  - 38°C
  - 40°C

- **Av max 10 yrs:**
- **Av mean 10 yrs**

### Hot and bothered: Feeling hot and bothered? No wonder — the graph shows that maximum temperatures (the top jagged line) soared above the February average maximum (upper heavy line) on 13 days. Average mean temperatures (the bottom jagged line) showed an even more noticeable trend, being on or above the 10-year average mean (lower heavy line) on 20 days.
Committee ‘unable to visit’ test range

By BARRY STREEK

FOR the second successive year, the Council for the Environment has reported that it has been unable to find out whether the development of Armscor’s missile-testing range near the De Hoop nature reserve was being developed in accordance with the Hey report.

The council’s Overberg committee is meant to determine if the development of the testing range is in accordance with the Hey report, which investigated the environmental impact of the project on the area.

In its 1987 report, which was tabled in Parliament yesterday, the council said no meetings of the Overberg committee were held during the year under review.

“The committee received no documentation and was unable to visit the range.

“The committee established that it was unable to determine whether the test range was being developed in accordance with the Hey Committee’s report."

In its 1986 report, the council said it had tried to satisfy itself that the development of the Overberg test range was in accordance with the Hey report, but it had been unable to do this because the oral and written evidence was “deemed insufficient”.

In 1983 Armscor made a number of public undertakings to minimize the environmental impact of the missile range.

After environmental bodies called for an independent monitoring body, the Minister of Defence, General Magnus Malan, said in May 1984 that Cape provincial environment officials would be permanently on the site to help monitor the environmental impact.

In October 1984, an environmental committee was appointed by the then Minister of Environment Affairs, Mr John Wiley, to monitor activities at the missile range and report on the implementation of the Hey report.
FLOOD DAMAGE BILLS MOUNT

With rain still lashing the flood-stricken Free State and northern Cape, the final damage bill could exceed the estimated R200m suffered in Natal's recent deluge. A total bill of more than R1bn is feasible.

Damage to farmlands in the northern Cape alone runs into "hundreds of millions of rands," says Northern Cape Agricultural Union chairman Jack Strauss. But with more heavy rains falling in the catchments, it could take months to get an accurate assessment.

Strauss's Free State counterpart Sakkie Cronje estimates provisional farm damage at R100m. In both provinces irrigation lands, crops, buildings and farm implements suffered the worst damage. Should the rains continue, stock disease could add to the toll.

Cronje says the Department of Agriculture has asked farmers to give comprehensive damage details by March 11 so government can estimate additional budgetary commitments.

But any assessment can only be provisional at this stage. In some Free State districts up to 80% of farm dams have been destroyed. A figure of R20m for damage to railway lines in the OFS has been quoted.
PROKLAMASIE
van die
Staatspresident van die Republiek van Suid-Afrika
No. 37, 1988
VERKLARING VAN OORSTROMINGS IN SEKERE
DISTRIKTE IN DIE ORANJE-VRYSTAAT TOT 'N
RAMP

Kragtens die bevoegdheid my verleen by artikel 26 van
die Wet op Fondsinsamelings, 1978 (Wet 107 van 1978),
verklaar ek hierby die oorstromings wat die landdros-
distrikte in die Bylae genoem sedert 20 Februarie 1988
getref het vir die doelindes van genoemde Wet tot 'n ramp.

Gegoed onder my Hand en Seël van die Republiek van
Suid-Afrika te Kaapstad, op hede die Drie-en-twintigste dag
van Februarie Eenduisend Negehonderd Agt-en-taglig.

P. W. BOTHA,
Staatspresident.

Op las van die Staatspresident-in-Kabinet:
W. A. VAN NIEKERK,
Minister van die Kabinet.

SKEDULE

Bloemfontein
Boshof
Brandfort
Botshabelo
Dewetsdorp
Edenburg
Pauresmith
Jacobsdal
Jagersfontein
Koffiefontein

Petrusburg
Philipolis
Reddersburg
Rouville
Smithfield
Springfontein
Trompsburg
Wepener
Zastron

PROCLAMATION
by the
State President of the Republic of South Africa
No. 37, 1988
DECLARATION OF THE FLOODS IN CERTAIN
DISTRICTS IN THE ORANGE FREE STATE TO BE A
DISASTER

Under the powers vested in me by section 26 of the Fund-
raising Act, 1978 (Act 107 of 1978), I hereby declare the
floods which hit the magisterial districts mentioned in the
Schedule since 20 February 1988 to be a disaster for the
purposes of the said Act.

Given under my Hand and the Seal of the Republic of
South Africa at Cape Town this Twenty-third day of
February, One thousand Nine hundred and Eighty-eight.

P. W. BOTHA,
State President.

By Order of the State President-in-Cabinet:
W. A. VAN NIEKERK,
Minister of the Cabinet.

SCHEDULE

Bloemfontein
Boshof
Brandfort
Botshabelo
Dewetsdorp
Edenburg
Pauresmith
Jacobsdal
Jagersfontein
Koffiefontein

Petrusburg
Philipolis
Reddersburg
Rouville
Smithfield
Springfontein
Trompsburg
Wepener
Zastron
Mopping up operations as the flood waters ease

FLOOD-damaged railway lines and roads, around the country are being repaired as quickly as possible as flood waters recede, but many services are still closed.

Train services and roads between Johannesburg and Bloemfontein are open for use, Sats spokesman Sandra Gertenback said yesterday.

Train passengers, whose travel plans have been disrupted by cancelled services, may exchange their tickets for bus or airline tickets for travel on the same day, she said.

This offer will stand until Monday, March 7. Reservations for travel by bus can be made by calling (011) 773-4128. Passengers may also have their tickets refunded or endorsed for travel at a later date, Gertenback said.

Other train services cancelled until further notice are: Trans-Karoo in both directions between Johannesburg and Cape Town (today); Blue Train in both directions between Pretoria and Cape Town (today).

The Trans-Karoo in both directions between Johannesburg and Cape Town (tomorrow); South-Wester in both directions between Johannesburg and Windhoek (tomorrow).

The Trans-Karoo in both directions between Johannesburg and Cape Town (Sunday); and the Trans-Karoo in both directions between Johannesburg and Cape Town (Monday); the Blue Train in both directions between Pretoria and Cape Town (Monday); the Trans-Orange between Cape Town and Durban (Monday).

Train passengers can make inquiries by calling (011) 773-5878 to 773-5882.

The AA advises extreme caution between Bloemfontein and Edenvale, Three Sisters and Beaufort West, and Mariental and Keetmanshoop.

The R23 from Heidelberg/ Newcastle/Ladysmith is open, with detours at Ladysmith.

The R102 (Durban/Scottburgh) bridge is closed north of Scottburgh and travellers are advised to use the alternative route via the N2/Park Rynie turnoff and north along the R102 to Scottburgh.

The N2 Natal North and South Coast road is open, as is the N3 Johannesburg/Durban road and the N7 Cape Town/Namib road and the R29 Johannesburg/Kimberley/Victoria road.
Rain batters Natal coast

Johannesburg — It was sunny in parts of the north-eastern Cape for the first time in two weeks yesterday, but rain battered the Natal coast.

Durban’s heaviest deluge this summer — 82.8mm — pelted down on Wednesday to swamp roads and swimming pools, pushing the rainfall for the first two days of March above the whole month’s usual average.

The south coast, still crippled by the September and February floods, was reeling under the 300mm that has fallen since Tuesday, washing away newly repaired roads, bridges and drains.

As the downpour continued yesterday, there was peak-hour traffic chaos as damp distributors stalled cars.

Dozens of houses and flats in Port Edward were reportedly flooded, and streets had to be closed off.

In Port Shepstone, a municipal worker clearing flood damage had to be dug out of a hole after collapsing debris half buried him.

In other parts of the country:

- Defence force and police emergency relief teams are distributing food to about 2,000 people stranded on islands near Keimoes and Kanon Island.
- A number of people who left their homes in Upington for fear of flooding have returned. Some of the houses are still under water.

It is expected that the Orange River will remain at its present level for at least a week.

- The level of the Bloemhof Dam in the Vaal River system was still rising yesterday.

- The regional director of Transport Services in the Free State, Mr Johan Uys, said repairs to the main railway line in the province were progressing well. Mainline trains are on time where they are running, although the Trans-Natal to Johannesburg was delayed.

- Heavy rain fell over the north-western areas of the Witwatersrand.

Roads and houses in low-lying areas were flooded, but no reports of serious damage were received. — Sapa.

More reports page 23
Bank probes resources of water in Region D

by Matthew Mooniey
business editor

EAST LONDON — The Development Bank of Southern Africa is considering several major proposals for Region D.

This emerged yesterday in an address by the chairman of the Regional Development Association Committee, Professor Charles Wait, at an East London Chamber of Commerce breakfast meeting.

He said the regional liaison committee — it comprises representatives of Border, Ciskei and Transkei — had submitted an application to the bank to fund the preparation of a water resources development plan for the region.

It includes the following broad terms of reference:

- A broad review of existing water resources development schemes in the region and any problems that may exist;
- A review and comment on future water resource development;
- A review and comment on the existing administrative structures and procedures governing water resource development;
- A broad view of the quality of water used by the various sectors.

Prof Wait said the bank had also requested to fund the development of a teacher training model which would result in cost-effective primary and secondary teaching.

"The purpose is to improve the relationship between financial cost and educational effectiveness."

Negotiations with the bank had reached an advanced stage to develop a tourism strategy for Region D.

"The objective of phase one is to stimulate an atmosphere of awareness, interest and involvement to advance tourism."

Prof Wait said negotiations were underway to see what assistance could be given to local bodies to promote tourism in a package style between the sub-regions.

The Berlin effluent pipeline problem was also being looked at to see what "can be done about the chicken and egg situation" there. This was a reference to the debate on whether the pipeline should be built before industries were set up there or whether the Industries should be established there first to justify building the pipeline.

Earlier Prof Wait outlined the development structures in Region D which played a supportive role, how they were comprised, how they functioned and what their strengths and weaknesses were.

He traced the history of institutions from 1960 when the policy of industrial decentralisation was first started.

The institutions comprised the regional development associations locally which coalesced to form the regional development advisory committees and finally the national regional development advisory council.

He said the councils had access to cabinet but when a matter was largely of a local nature, "the maze through Pretoria" could be circumvented and the advisory committees could get the matter directly before the cabinet.
Amid the floods, drought

BLOEMFONTEIN — Despite the flood of water in the Orange River, Bushmanland is experiencing one of its worst droughts in living memory.

Most farmers in the districts of Kakamas, Pofadder and Kenhardt last had sufficient rain in 1979, and many in this area of three million hectares are still receiving phase five drought aid, and making use of stock grazing schemes.

Following the floods in parts of the Free State and the Northern Cape, the level of most dams has begun to drop. The content of the Hendrik Verwoerd and P K le Roux dams has dropped to 114% and the Krugersdorp Dam is 127% full.

The content of the Kalkfontein Dam has dropped to 134% and that of the Rustfontein Dam to 105%.

The flooded Orange River has claimed its sixth victim with the drowning of a 14-year-old girl near Kakamas. The girl, Maria Louw, was swept away as she tried to walk across a gully. — Sapa
Torrential downpours still causing havoc

South Africa to record levels.

The Weather Bureau in Pretoria has released rainfall figures for 20 towns in the four provinces which were hit by the floods, showing that last month they doubled, tripled and even quadrupled the rainfall levels for the same period last year.

At Van Reenen, a catchment area for the Klip River which runs through Ladismith, rainfall trebled.

Torrential rain this week drenched the Natal coast, causing limited flooding in some low-lying areas and blocking some roads.

With 451 mm, Sani Pass in the Drakensberg last month quadrupled its rainfall compared with last year.

In the far Western Transvaal town of Jan Kempdorp eight times more rain (340 mm) fell there compared with February last year (36.5 mm).

Bloemfontein's rainfall trebled. The 533 mm which fell almost reached the city's average annual figure.

In Paarlsmith, west of Bloemfontein, where rainfall figures have been measured since 1927, 394 mm fell compared with 36 mm in February last year.

Trompsburg measured seven times more rain (417 mm) last month than it had a year ago (47 mm) to equal its annual average rainfall.

Two other Free State towns, Dealesville and De Wetsdorp and Aliwal North and Kimberley in the Cape quadrupled their rainfall.

At Douglas in the Northern Cape, where the water level of the Vaal River is dropping and houses away from the banks of the river are no longer flooded, 270 mm this February compares with 104 mm last year.

Johannesburg, with 40.7 mm last month, was down on the long-term average of 124 mm.

In Namibia, the resort of Ais-Ais in the Fish River Canyon is under water.
Apartheid must go, Neac

Neac president, Japhtha Lekgetho... calls for the dropping of apartheid laws.

By STAN MHLONGO

THE National Environmental Awareness Campaign this week launched a new move against apartheid and called for the immediate scrapping of related laws.

Neac president, Japhtha Lekgetho, said the organisation which was founded after the Soweto riots of 1976, has grown in size and stature and now commands much respect among residents.

He said apartheid laws were "a contributory factor to the increase in alcoholism, drug abuse and delinquency".

Lekgetho said the problems of blacks arise from the lack of an orderly environment, which emanates from the fact that the government - until recently regarded blacks purely as temporary sojourners in the country.

He said ignorance was rife among black local authorities. They did not use proper planning when addressing township problems.

He said it was essential for any environment to have the correct facilities.

"The absence of infrastructure in the urban environment has been a major contribution to the anger of black people."

"In the rural areas, blacks have encountered various problems because of the disruption of farming activities by apartheid laws. This has been in the form of the distribution of land and the introduction of legislation prohibiting the ownership of land by blacks."

"The government's removal policy too, has ensured that a large number of people are concentrated in small areas," added Lekgetho.

He added that apartheid laws had backfired, in that by giving blacks ill-serviced inferior amenities they had contributed to some of the ills that had spread to white areas.

Lekgetho said Neac would shortly establish a research station in Soweto "where a more scientific approach to agriculture will be encouraged, thereby enhancing the image of the farmer, improving agricultural methods and generally contribute, through better crop production, to the upliftment of the people."

"By Stan Mhlongo"
Flood victims pick up the pieces of their lives

By Melanie Gosling

Carpets from the church lay in wet piles on the grass while workers carried wooden pews back inside. Outside the town hall piles of sodden papers lay in heaps as the mud was hosed from the building.

Most people in Ritchie were able to save their furniture. But Mr Manie Groenewald was not so lucky.

"It rained so hard for so long the dirt road was soggy and we could not get trucks to my house. I just had to watch everything being ruined."

The bridge across the Riet River, 20 km from Douglas, has been washed away.

Mr Gerard Cilliers, whose farm was under water, said the damage to his property would run into hundreds of thousands of rands.

Worst hit

Of all the towns along the river, Douglas was worst hit. Telephone lines are down, walls are flattened and several houses have collapsed.

Mr Wessel Pieters is and his wife, Susan, had bought their house a week before the floods.

The couple, wearing gumboots, trudged through the knee-high mud in their bedroom collecting belongings they had not had time to move out before the floods.

"We'll have to get spades and dig the rest of this mud out. It's going to be one helluva job," Mr Pieters said.

According to residents, Douglas's town clerk, Mr Louis de Jager, was so busy helping to organise the evacuation of others that he had no time to remove his own furniture.

Inside his home antique chairs poke out of the mud and clothes hang brown and sodden in cupboards which have burst open. The pantry shelves are lined with muddy bottles and Mrs de Jager's toiletries lie under a layer of silt in the bathroom.

A friend of Mr de Jager, who calls himself "Duitse", said he and 15 men from the army spent a day digging mud out of the house.

The town's two hotels are empty, with high water marks along their walls. Most of the shelves in the local cafe are empty.

"Because the bridge has gone the truck from Kimberley can't get through so we can't get any more stock," the cafe owner explained.

About 200 farm labourers, who were evacuated from Kanon Eiland about 20 km from Upington, are living in the "tent town" next to the river.

Chairs, tables, beds and cupboards are crammed into the tents. Most of the people do not even know if their houses on the island are still standing. They can't reach the island because the road is washed away. Many of them have no money. It is two weeks since they were last paid their weekly wages of about R25.

"The soldiers brought us mealie meal and fish on Wednesday but we have not been given other food since then," Mrs Griet Dreyer said.

"We will have to start looking for other jobs. We can't go on living with no money until the road is built again," Mrs Gerrit Pretorius said.
Support for flood victims

By Janine Simon

Organisations across the country have leapt into action to help stunned flood victims.

Collection depots for clothes, food and blankets have sprung up at shopping centres, supermarkets, and religious and community-organisation outlets. Special appeals for funds are drawing substantial donations from companies, city councils and the public.

Relief and development organisations which had been working with flood-hit communities before the waters came have assessed the damage and are starting to tackle the huge task of rehabilitation.

MEDIA APPEAL

Within a day of the media appeal for aid by the National Council for Child and Family Welfare, Gencor gave R50 000 for Free State, Natal and northern Cape flood victims.

Other business concerns and individuals also responded, offering help varying from staff collections, clothing and food to personal assistance with packing and distribution of goods, she says.

All council donations will be distributed to local child welfare agencies and then directly to families in need.

In the Transvaal, organisations including Lions International, Round Table, supermarket chains, religious organisations and even nursery schools have made some contribution to the flood-relief effort.

For example, Eastgate shopping centre’s collection point for the Southern Transvaal Red Cross, which opened on Saturday, is “well under way”, says PR Mrs Maureen Harbor.

A new appeal from Johannesburg’s Imanishalom Congregation and Temple David for donations has been received.

According to a spokesman, the National Disaster Relief Fund is also looking much healthier. In addition to the R3 million raised in last week’s SABC appeal, donations are pouring into its Pretoria offices.

Regional municipalities have done their bit with a R250 000 donation from Johannesburg and R10 000 from the Sandton Town Council pledged to the fund. Both municipalities have set up collection points for goods and non-perishable foods.

Operation Hunger’s executive director Mrs Ina Perlman says feeding in flood-hit areas is “totally under control”. The organisation’s existing structures are being expanded to help with self-help rehabilitation.

World Vision is preparing a rehabilitation and rebuilding programme for flood victims.

If you wish to help, cheques may be sent to The Secretary, National Disaster Relief Fund, Private Bag X63, Pretoria, or any branch of Volkskas into account number 00 00 28 29 28.
EAST LONDON — The Nahoon Dam overflowed yesterday for the first time in more than a year but there was no cause for concern, the city’s chief city engineer, Mr Graham Keppie, said.

Mr Keppie added that the heavy rains on Saturday night had caused the dam to overflow by one metre onto the spillway yesterday afternoon, but by early last night the level had dropped to 0.6 metres.

He said it was a good thing that people were alert to the fact that the dam was overflowing, but there was no need for alarm unless more heavy rain fell soon.

He said the city engineer’s department and civil defence were monitoring the situation.

The Bridle Drift Dam was also overflowing, but “only just”, Mr Keppie added.

Meanwhile, a Torquay Road resident, Mr Robin Ross-Thompson, said the Nahoon River was “slightly higher than normal, but was more like a high spring tide”.

A spokesman for the civil defence unit, Mr O.H. Becker, said the Abbeysford causeway was not overflowing and the water in the river had subsided “quite a bit” by last night.

“There is no danger at the moment and we just hope we don’t get any more heavy falls,” he said. — DDR.

EAST LONDON — Light occasional rain with a 30 per cent probability of heavy falls in the evening is expected today.

A spokesman for the Weather Bureau at East London airport said 33.3 mm of rain was recorded in East London from Saturday until 8 am yesterday.

Umtata had 18.9 mm; the Grey, Fish point 20 mm and Kei Mouth 40 mm.

In Dohne 31.9 mm was measured, 18 mm was recorded at Komga while Queenstown received only 9.5 mm.

Howison’s Poort Dam near Grahamstown was overflowing on Saturday and more than 130 mm of rain had fallen by 7 pm yesterday.

A spokesman for the City Engineer’s Department said Grahamstown had more than four times as much as any of the surrounding districts over the weekend.

At Settlers Dam, Grahamstown’s main reservoir, the level was rising slowly, the spokesman said.

Port Alfred had 25 mm. At Shaw Park, 20 mm was measured and Mr Dick Bladen of Southwold farm said the farm had received about 40 mm while at Salem 27 mm was reported.

Sevenfountains received only 3.5 mm and “rain so light as not to register” at Port Brown.

At Carlisle Bridge 10 mm was recorded.
VERKLARING VAN OORSTROMINGS IN DIE DORPSGEBIED VAN LADYSMITH IN NATAL, TOT 'N RAMP

Kragtens die bevoegdheid my verleen by artikel 26 van die Wet op Fondsinsamelings, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die dorpsgebied van Ladysmith op 21 Februarie 1988 getref het vir die doelcindes van genoemde Wet tot 'n ramp.

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Vierde dag van Maart Eenduisend Negehonderd Acht-en-taggig.

P. W. BOTHA.
Staatspresident.

Op las van die Staatspresident-in-Kabinet:
W. A. VAN NIEKERK,
Minister van die Kabinet.
Railway lines repaired

EAST LONDON — Some railway lines in the Free State and Northern Cape which were damaged by the floods have been repaired, and some services were back in operation, the South African Transport Services has announced.

The Trans-Karoo between Johannesburg and Cape Town in both directions and the Johannesburg-East London train via Kimberley and De Aar operated yesterday.

The Blue Train between Johannesburg and Cape Town in both directions will operate today as will the Trans Karoo and the Algoa from Port Elizabeth to Johannesburg will also operate today.

The senior superintendent for operations for Sats here, Mr Kris Mynhardt, said the train services were not yet back to normal.

He was not sure when they would run normally again. — DDB

Bridge repairs to start

DURBAN — Repair work on the John Ross Bridge over the Tugela River, which was severely damaged in last year's floods, should begin early next month, the executive director of roads in Natal, Mr Ray Smith, said yesterday.

The province received 20 proposals following its call for tenders and a short-list has been drawn up.

"The Executive Committee will make a final decision based on our recommendations at its meeting on March 15," Mr Smith said.

"We expect work to begin after the Easter weekend and we want it finished by the start of the builders' holidays in December. We've looked at the floods and done surveys and feel the new bridge will be able to handle the largest known flood which has taken place so far." — DBC

Council gives to fund

PRETORIA — The Teachers' Federal Council decided at a special meeting here yesterday to make a financial contribution to the Flood Relief Fund.

The chairman of the council, Mr Dudley Schroeder, expressed the council's sympathy with those who had suffered during the floods.

The council also expressed its appreciation for the display of goodwill in the state of emergency and the hope that the damage to educational facilities would be repaired soon so as to enable educational institutions to function normally.

Mr Schroeder, who is the headmaster of Queen's College, Queenstown, said the council appreciated the contributions made by schools throughout the country to the fund. — DDB

Fresh vegetable prices rise amid Q'town shortage

QUEENSTOWN — There is a shortage of fresh vegetables here and prices have risen sharply during the past few weeks.

While vegetables were obtained from the Gamtoos River Valley and areas along the coast to East London, Queenstown dealers bought a large percentage of their produce from the Transvaal Lowveld and the Free State.

The recent floods had contributed greatly to the shortage, but according to the commodity manager of the East Cape Agricultural Union, Mr Arthur Purchase, other factors were also responsible.

"Initially, there were road and rail delays from the north following the floods. When floodwaters did not subside, farmers were unable to harvest their crops."

In addition, produce from the Transvaal Lowveld became available at the start of winter, while that from the middle veld was now ending. It was a combination of these factors that led to the current shortage.

Mr Purchase said it was his opinion that potatoes, now selling for up to R15 a pocket, would be in short supply for a long time and that prices would rise considerably.

He reasoned that areas in the north-western Natal Province had been hardest hit by the floods, and consequently there would be a severe shortage.

"The possibility also exists that some seed potato growers would sell their produce as table potatoes if prices of table potatoes exceed the price they could get for the seed variety."

The level of the Settlers' Dam has risen by nearly five feet in recent days to 54.53 capacity, following weekend rains.

Cape still reeling from flood damage

JOHANNESBURG — About 3,000 families are still reeling from the floods that have hit the Cape Region.

The South African Wool Board said that the floods had caused extensive damage to wool production in the area.

Daily Dispatch Reporter

"We estimate that about 5,000 sheep have been lost in the floods," said Mr. Pieter van der Merwe, the board's marketing manager.

"The flooding has caused extensive damage to wool production in the area."
Cape still reeling from flood damage

JOHANNESBURG — Although large-scale and widespread flooding appears to have eased, certain areas in the North-Eastern Cape are still experiencing problems.

In low-lying areas at Middelburg, roads are closed and farms cut off after the Klein Brak River flooded on Friday night, forcing people to evacuate their homes.

At Colesberg, the weather cleared yesterday but the main dam broke on the farm of the former chairman of the South African Wool Board, Mr Pieter van Rooyen, and farmers in his area were cut off from the main access road to town.

Theunissen reported 50 mm of rain over the weekend.

The Weather Bureau issued a "special warning" with its regular forecast yesterday, saying heavy rain falls could be expected over Namaqualand, southwestern Cape and Bushmanland, spreading to the Karoo and southern Cape last night. — Sapa
The Amalinda Stadium was covered in water after 30 mm of rain had fallen in East London yesterday.

Daily Dispatch, 9/13/85

Flood fears dismissed

EAST LONDON - Authorities at the Regional Disaster Office, the eastern South African city, said that by late Thursday, there were no signs of flooding in the region. They added that the situation was monitored continuously and that no high-risk areas had been identified.

Heavy rain fell in the city yesterday and 30 mm was measured by the Daily Dispatch.

Buffalo Flats and Nahoon Dam residents contacted the Daily Dispatch after reports spread that a general flood warning had been issued. All residents reported that the water was rising slowly and that no evacuation was necessary.

None of the callers had heard the actual broadcast themselves. The city's emergency services and the Regional Disaster Office said they were monitoring the situation closely and that there were no signs of flooding.

The Nahoon Dam was full and the Bridgedrift Dam was overflowing, the civil defence officer said. The civil defence officer said they were on standby purely as a precautionary measure.

"We are monitoring the situation and will continue to do so through the night, but so far the flow of the rivers is less than at the weekend. All small rivers are running, but they are nowhere near flooding," he said.
NEW WASHAWAYS, HOODS

NEW WASHAWAY

Hoods in Lagoon, homes hooded, rail lines cut after heavy rain

The Argus Correspondent

1934, 5/6

FOUR STOREY HOME, WOLLONGONG

FOUR STOREY, $10,000 HOME, WOLLONGONG

FOUR STOREY, $10,000 HOME, WOLLONGONG

The Argus Correspondent

1934, 5/6
N Cape braced for second deluge as rains swell rivers

JOHANNESBURG (SIP) 10/15/85

Northern Cape towns are braced for a second but milder battering this week as flood waters from three northern Free State rivers and a massive run-off from the Lesotho highlands swell the Orange River.

After heavy rainfall in Lesotho and the upper Free State at the weekend, the Department of Water Affairs in Pretoria predicted that 3,000 cubic metres per second of water would reach the town of Douglas yesterday. At noon it was just over half this rate.

The flow rate of the Orange River at Prieska at noon yesterday had already reached 5,900 cubic meters and the Department of Water Affairs predicts that the same rate of flow is expected at Upington today.

The Orange River may burst its banks again at Prieska, they said.

The floods are not expected to be as severe as those in the past few weeks, a spokesman for the Joint Operations Centre in Kimberley said.

"Although the river will rise again, there is nothing to fear," he said.

- Three men drowned in raging flood waters in the QwaQwa area yesterday, and a Kakamas schoolboy drowned in the Hartbees River at the weekend.

About 180 people were forced to leave their QwaQwa homes, and 36 clay huts collapsed under the force of water in the area.

The Department of Water Affairs in Pretoria has also warned farmers living below the Bloemhof Dam to evacuate people and equipment to higher ground as it opened the sluice gates feeding the Vaal River at 8 am yesterday.

The department said the Bloemhof Dam, which was last full in 1982, was at about 110 per cent of capacity and that the level was rising.

The Hartbeespoort Dam near Johannesburg began overflowing late yesterday afternoon for the first time since 1981.

The largest dam in the country, the Hendrik Verwoerd Dam, is already at 137.75 per cent of capacity — its highest level yet. The PK le Roux dam is at 116.7 per cent of capacity.

"The chief forecaster for the Weather Bureau in Pretoria, Mr Mike Lang, said the weather system that caused the deluges of the past few days "has now moved northwards and away from the country.

"We are back to more normal, late summer rainfall patterns."

- Two routes between Bloemfontein and Johannesburg, and the N1 to Cape Town are now open to traffic. — Sapa
R150m in claims expected after flood

Claims resulting from flood damage in the Free State and Northern Cape are expected to hit the insurance industry for an estimated R150m-R180m.

However, losses are not expected to be as high as Natal, due to the absence of heavy industry in the affected areas.

"Losses should be substantially lower than during the Natal floods, which were just below R400m," said one source.

Floods in Natal wiped out industry with plant and machinery claims therefore high — though more quickly ascertainable than current losses.

The more recent floods affected mainly agriculture and were prolonged. Damage caused through seepage would only manifest itself later.

Swiss Re-insurance assistant-GM Gareth Bradburn said: "Although it is too early to assess losses accurately, insured damages are expected to be about R150-180m. The figure could be higher if some industries were hit, though we aren't aware of these yet. Sentraboer operations GM James Hogg said: "Because the water has not yet totally receded, we can't estimate overall insured losses.

"We have settled a lot of claims relating to contents of dwellings, but nothing structural," he said.

SA Insurance Association CE Rodney Schneeberger said it was too early to give any single figure, and assessors who had been sent to the affected areas had returned because they were still unable to gain access to some areas.

Mutual and Federal claims superintendent Derek Aitken said: "Claims should be sizeable — between R10-20m in total — although it is difficult to hazard a guess at this early time."

Santam senior GM Jack McLachlan said head office had no estimates from the Kimberley office: "Though many claims have been received, no assessment of damage has been possible. However, using a daily tally of figures, Bloemfontein estimates claims of R2m to date. These relate to residential properties."

General Accident assistant GM Peter Trushan estimated losses in the R1m area, "though it is too early to do more than guess at his stage," he said.

Protea Insurance assistant GM Mike Gillings said the company was looking at claims of about R2m in total.
DURBAN — The Natal floods and a variety of other factors combined to reduce the profitability of the shipping, clearing and forwarding group, Grindrod Unicorn Group (Grincor) in the year to December.

Attributable profits were down 37,5 per cent and earnings a share 47 per cent compared with the previous year.

Turnover was up 26 per cent at R274,6-million, but operating profit was down at R20,2-million (R21,4-million).

Attributable profits were R4,6-million (R7,4-million). Earnings a share were 18,4c (34,8c).

The group has declared a final dividend of 7c per share, making total distribution 12,5c (17,9c).

The directors said the combination of factors adversely affecting earnings were:

- Excessive costs relating to the merger of the Grindrod and Mitchell Cotts shipping and transport operations.
- A loss of R2,8-million incurred in Airfrexpress acquired as part of the merger.
- Heavy initial costs incurred by the new South African coastal roll on-roll off service.
- Disruptions caused to trading by the Natal floods and the SATS strike.
- Reduction in rand earnings due to the strengthening of the rand against the US dollar.

The directors add, however, that they are satisfied that abnormal costs will not be repeated and have therefore decided to reduce the dividend cover as they expect the company to return to acceptable levels of profitability in 1988. — Sapa
Natal, Cape flood warning

DURBAN - Torrential rain lashed the storm-wrungy and waterlogged Natal coast again on Tuesday night, bringing down swollen rivers in torrents, causing roads to cave, submerging bridges and flooding houses and businesses.

A new flood disaster - which could prove to be more devastating than any other since the multi-million rand damage of last September - is now staring Natal and the Eastern Cape in the face.

The weather bureau in Pretoria has issued a special warning that falls of between 60 mm and 100 mm are possible at places over the Southern Free State, Eastern Cape and Natal.

Forecasters predict that intermittent rain and thunderstorms could be expected for the next 24 to 36 hours.

Partly cloudy and cool conditions are expected along the east coast but in the interior heavy thundershowers - in places are forecast.

The wind will be fresh easterly to north-easterly.

The bodies of two unidentified men were found in the Umvongo lagoon yesterday as heavy rain continued to lash the Natal coast with Durban recording almost 100 mm in a 24-hour period.

The Umzimvubu River caouseway at Scottburgh was washed away for the fifth time since the floods in September.

The rain in Natal, which had been confined to the coastal area from Durban to Southbroom, has spread and now covers virtually the entire province.

An appeal has been made by both provincial and municipal traffic authorities for drivers to be extra vigilant as most roads are slippery and treacherous.

In Queenstown, one of the town's two storage dams, the Bongolo Dam, is at its highest level since it overflowed during 1976.

The dam is 95 per cent full and the level only has to rise another 32 mm before it overflows.

The second supply dam, Waterdown, near Whittlesea, is 81 per cent full. The assistant town engineer, Mr Andy Jerrard, said although the dam's capacity was down the town had an adequate water supply for the rest of the year.

There were 14 wet days in Queenstown during February when a total of 154.62 mm was measured. The average February rainfall figure for the town is 96.79 mm.

The heaviest rainfall was on February 20, when 81.8 mm was recorded.

The following places in the Eastern Cape reported 9 mm or more in the 24 hours up to 6 am yesterday: Rustenburg 91 mm; Kariega 48 mm; Ahejde 31 mm; Komga 14 mm; Reit Long 10 mm; and Port Alfred 10 mm.
Gonubie churches
join forces to aid flood victims

EAST LONDON — Eight churches in Gonubie are combining forces to try to raise money and food for the victims of the recent floods in the Free State and the Northern Cape.

The Reverend Steve Mann said the ministers from all the churches in Gonubie were involved and were asking the public for donations of money, clothing and non-perishable food.

Mr Mann said all the churches would serve as collection points until March 27. The public could contact him at 403722 for further information.

He said there would also be a combined week of church services called "Holy Week" for the victims of the floods.

"The highest need will get priority and people must not worry about their donations getting to the people as we have arranged all that."

He said it was "tremendous" that the churches in the community had joined together to help the victims. Although they did not have a fixed target, the churches would like to try to help about 150 families.

Meanwhile, R880 has been paid in at the Dutch Reformed Church office for the Flood Disaster fund.

The municipal council has decided to send two municipal employees to collect donations in town.

Other donations may also be paid in at the municipal revenue office. — DDR
R180m flood claims?

JOHANNESBURG — Claims resulting from flood damage in the Free State and Northern Cape are expected to hit the insurance industry for an estimated R150 to R180 million.

However, losses are not expected to be as high as in Natal, due to the absence of heavy industry in the affected areas.

The assistant-general manager of Swiss Re-insurance, Mr. Gareth Bradburn, said:

"Although it is too early to assess losses accurately, insured damages are expected to be about R150 to 180m."

The general manager of Sentraboer operations, Mr James Hogg, said: "Because the water has not yet totally receded, we can't estimate overall insured losses."

South African Insurance Association's chief executive, Mr Rodney Schneeberger, said it was too early to give any single figure.

The Mutual and Federal claims superintendent, Mr Derek Aitken said: "Claims should be sizeable — between R10—20m in total — although it is difficult to hazard a guess at this early time."

Santam's senior general manager, Mr Jack McLeachlan, said the head office had not yet received any estimates from the Kimberley office.

The assistant general manager of General Accident, Mr Peter Trustham, estimated losses to be R1m.

Protok Insurance's assistant general manager, Mr Mike Gillings, said the company was looking at claims of R2m in total.

An Allied Insurance spokesman estimated losses at R1m. — DDC.
FLOOD RUN... The remnant of a council-built home in Chippingworth which was demolished when the foundations were washed away in the recent floods. (Picture: Byline)

Mother tells of flood nightmare

Over Correspondent

A Chippingworth mother yesterday described how her council-built home crumbled when the foundations were washed away in the recent floods. Mrs N. Chitty, a member of the flooded housing estate, said the house had almost collapsed.

"The floods hit us hard," she said. "Our home was literally shattered. The water was so high we had to climb out of the windows."

Mrs Chitty said the house had been built on a flood plain and that the council had warned her of the dangers. "But no one believed them," she said.

The house was left with a hole in the roof and the walls were black with mud. Mrs Chitty said she had been forced to move into a council flat.

"It's been a nightmare," she said. "We've had to live in a flat for the past few weeks and it's been a constant struggle."

Mrs Chitty's husband, Mr Chitty, said they had been left with nothing but their clothes. "We've lost everything," he said. "Our furniture, our clothes, our everything."

The council is now investigating the matter and has promised compensation. Mrs Chitty said she was glad to have received some support from the council.

"It's been tough," she said. "But the council has been very helpful and I'm grateful for their support."

The council has launched an investigation into the incident and has promised to provide additional support to affected residents.

"We're doing everything we can to help," said a council spokesperson. "We've been working hard to ensure that our residents are looked after and that they receive the help they need."

The council has also promised to provide additional support to residents affected by the floods. "We're doing everything we can to support our residents," said the spokesperson. "We're working hard to ensure that they receive the help they need."
Homes, roads flooded again

BLOEMFONTEIN — Downpours have brought fresh flooding to the Free State, Northern Cape and Natal, washing away railway lines, delaying trains and flooding homes once again.

Houses in the Cape and Free State — to which residents were able to return only days after the previous flood — were evacuated again and recently repaired bridges and roads were again under water yesterday after the heavy rains.

More than 200 mm of rain fell in half an hour in some places and heavy rain is forecast over the Free State, the Eastern Cape and Natal today.

At Sannaaps residence looked helplessly yesterday as a huge mass of water threatened their homes. Many had already been evacuated after the Koring Spruit broke its banks.

Heavy rain continued to fall in many parts of Natal overnight, and reports of further mudslides have been received.

At least six families were completely cut off by a mudslide which closed off a road outside Kledrift.

A mudslide 50 metres wide and three metres deep landed on the main Durban to Johannesburg railway line just south of Mariannhill station.

Rain has been widespread in the Free State, while other areas have received water.

The Argus Express between Port Elizabeth and Johannesurg has come to a standstill at Springfontein.

The line was washed away at Ekosow and Driefontein and the train with 180 odd passengers has been trapped between the two stations since 4am yesterday.

The Amatola, on its way to East London, was delayed by more than three hours.

See also page 17

Cabinet reshuffle announced

Political Correspondent

CAPE TOWN — The cabinet reshuffle which will elevate two rising stars in the National Party — Dr Dawie de Villiers and Dr Stoffel van der Merwe — into the cabinet.

The move, effective from the end of the month, follows the decision of Mr Alwyn Schlebusch, 70 — the most senior member of the cabinet — to retire.

The reshuffle, mainly at the deputy-minister level, does not appear to reflect any major ideological shifts in the government and none of the promotions affect any coloured politicians in the tri-cameral parliament.

The most significant promotion is the elevation of Dr De Villiers to Minister in the State President's Office entrusted with administration and privatisation — a move that is likely to give special impetus to the government's privatisation drive.

Dr De Villiers, as the new head of the Cabinet Committee for Privatisation, will be charged with overseeing changes to giant parastatal corporations like Iscor, Eskom and Foskor — which are earmarked for privatisation.

Mr Botha said yesterday that a special adviser — who is unnamed as yet — would be appointed to assist Dr De Villiers, whose responsibilities will also include the Competitions Board and the Commission for Administration, which handles the civil service.

The other major promotion is the appointment of a deputy minister, Dr Stoffel van der Merwe, to Minister of Information in the State President's Office, with additional responsibility for the SABC and the film industry.

In making the announcement, Mr Botha said the government planned to adopt "a more concentrated effort towards developing the film industry without interfering in its affairs".

He said Dr Van der Merwe would continue with his current role of negotiating with black South Africans on behalf of the government.

Other changes announced by Mr Botha yesterday were:

- The Deputy Minister of Finance, Mr Kent Durr, will replace Dr De Villiers as Minister of the Budget and Works in the white "two affairs" Ministers Council.
- The Deputy Minister of Development Planning, Mr Piet Badenhorst, will become the Minister of Health Services and Welfare in the Ministers Council.
- The Deputy Minister of Law and Order, Mr Reelf Meyer, will replace Mr Badenhorst as Deputy Minister of Constitutional Development and Planning.
- The MP for Krugersdorp and chairman of the law and order standing committee, Mr Leon Wessels, will become the Deputy Minister of Law and Order.

Mr Botha also announced that the government had decided to appoint the chairman of the "Regional Board", Mr Danie Graaf, as the Administrator of the Transvaal at the end of April when Mr William Cronwagen resigns.

Mon 5 Apr
Rains may signal 10 year wet cycle

DURBAN — A complete change in atmospheric conditions over the whole of South Africa has been responsible for the recent widespread deluges — and specialists say the current conditions are likely to persist for a further decade.

The head of the geography department at the University of Durban-Westville, Professor Dawie de Villiers, says during the past 18 months the country has been under the influence of low-pressure cells drawing moist air from the Indian Ocean.

It appeared these conditions were cyclical, and that the current rains could signal the start of a 10-year wet cycle.

Prof. De Villiers said if this were the case, the country would have to brace itself for further flooding during the coming decade.

He said the reason for the advent of the wet cycles was not easy to determine, but that it could have to do with sun-spot activity. — Sapa
Flood relief

Farmers who suffered crop and stock losses during the floods in the Free State and Northern Cape will be compensated and will also be assisted in the restoration of resources and infrastructure.

The Minister of National Health and Population Development, Dr Willie van Niekerk, and the Deputy Minister of Agriculture, Dr Kraai van Niekerk, have said in a joint statement that arrangements have been made to determine the extent of losses in the agricultural areas of the two provinces.

The Air Force is to take photographs from the air to determine the extent of the damage and to assist with planning and organising follow-up operations on the ground.

Farmers can report flood damage at agricultural information offices, magistrates offices and co-operatives. A questionnaire has been compiled for farmers to fill in for this purpose.
Engineers outline input to curb flood—damage

EAST LONDON — The estimated cost of the flood damage could be as high as R1 billion and the question arose whether anything was being done to prevent the damage and death in the event of floods, the chairman of the South African Institution of Civil Engineers, Dr L de Clercq, said.

He was commenting on the situation on roads, railways, dams and bridges where civil engineers were responsible for both design and construction of multi-million rand projects.

He said big dams were designed to resist even rare floods because of the potential catastrophic consequences because of failure to withstand flood damage. Although much is known about maximum flood levels, further research is needed following the failure of both Spitskop and Tygerpoort dams.

After promulgation of the Water Act in July, 1988, a survey was undertaken, and is still in progress, to determine the safety of large dams. Major problems have been identified but time has not allowed all problems to be rectified.

"However, the expertise related to dam safety has increased dramatically over the last 20 years. Dams under construction have in-built safety features not previously incorporated into the design of the Spitskop and Tygerpoort dams.

"As far as roads are concerned civil engineers should be informed if major arteries to major centres are to stay open even during rare floods. Roads are not designed to survive potential maximum floods without damage because of massive cost escalations involved in the construction of such a project. But as far as bridges are concerned, potential flood damage is pivotal in the design and construction.

"Even in the recent extreme cases of flooding, no bridges were washed away in the Free State or on the Natal road. Bridge approaches considered to be a safety mechanism for bridges subjected to stress, were washed away in some instances and at a relatively small cost."

Dr De Clercq points out that contrary to press reports, old bridges did not survive flood damage better than new bridges. No bridge built 25 years ago or later, washed away.

"Obviously more advanced technology ensured that sturdier and stree-resistant foundations were built. Other safety measures, previously unknown, were incorporated to obviate failures during rare floods."

"After the flooding of towns like Ladysmith, consensus is that urgent attention is needed to prevent building in flood-prone areas. The institution calls for only civil engineers to be allowed to indicate flood lines on development plans for new townships."

"Engineers should be required to indicate projected 50-year flood lines and probable maximum flood lines to enable the construction of buildings, installations and houses outside flood lines."

"Nevertheless, even where building takes place outside the 50-year flood line, it may still be prone to flooding, albeit less frequently," he said.
**Iscor loses out**

Flood-severed supply links between Sishen and Kimberley have cost Iscor some 60,000 t in last iron ore production and forced it to the sealanes to supply its Natal blast furnaces.

An ore shipment from Saldanha will be discharged from the 30 000 t Nosar Sharon in Durban harbour this week and then railed to Newcastle. Spokesman Piet du Plessis says Iscor has been forced countrywide to trim production by 18% for two weeks as a result of floodwaters cutting off supplies of ore from Saldanha.

Iscor’s Thabazimbi mine stepped up its ore output from 45 000 t to 75 000 t and stocks were run down to counter the supply hitches. But, adds Du Plessis, no downward disruption of client orders is expected.

The convoluted exercise underlines the difficulties of accurately accounting for flood costs. As investigators begin the process of tallying costs in the northern Cape and OFS, it is sobering to reflect that Natal has yet to produce a final bill for last September’s floods.

Rodney Schneebberger, director of the SA Insurance Association, says insured losses arising from Natal’s September flood — largely covered by the international reinsurance community — are likely to be around R400m. An estimated equivalent sum was not insured, leaving a final bill of around R800m. This includes the public and private sectors, Natal and KwaZulu, agriculture, industry and commerce and private residential property.

Preliminary indications are that the OFS flood will not prove as costly, says Schneebberger. In the case of Natal, the highest losses were in industry and commerce, whereas the OFS floods were largely confined to farms and homes.

Natal Provincial Administration (NPA) secretary Roy Hindle says aggregated flood bills of local authorities and the NPA itself are now estimated at R175m. The biggest single item was R100m for NPA roads and bridges. Government had allowed the full amount applied for in the additional estimates presented at the reopening of Parliament. The balance will be included in the new year’s budget.

KwaZulu secretary in the Department of the Chief Minister Stanley Armstrong puts infrastructural damage in the Zulu homeland at R60m. Of this, R17m will be added to the Department of Works’ current budget and the balance will be budgeted for in the new year.

Of the 87 000 claims lodged by KwaZulu residents against the State President’s Disaster Relief Fund, 41 880 claimants have been paid damages totalling R14m. Payouts are said to be around half of the amounts claimed.

Repairs to waterworks and irrigation equipment total R17m and to agricultural roads R4m, while Transport Minister Eli...
More than mopping up

South Africans have never experienced the ferocity of the floods which have hit the sub-continent since Cyclone Demoina in 1984. In retrospect, that was the beginning of a period of meteorological violence with which we are still attempting to come to terms.

Was there sufficient warning? Well, the Department of Water Affairs' (DWA) prestigious Water resources of the RSA stated in 1986, before the 1987 and 1988 floods: "Droughts are often terminated by severe floods." But that could hardly have prepared anyone for the severity of the past five months' events. Natal's Ladismith is the most visible victim of the latest calamity, having barely recovered from its fifth or sixth flood in as many months. Last week, the Klip River burst its banks again. More could yet come. While Natal suffered heavily in the September 1987 floods — insured damage is put at some R400m, with an additional R400m to be picked up by government for damage to the provincial infrastructure — both the torrential nature and extended duration of the Free State/northern Cape floods caught everyone by surprise.

The normally arid, semi-desert area has experienced floods in the past — the 1974 floods were the most recent — but never of such long duration and intensity. The cause also differs from the 1984 cyclone and the 1987 Natal cut-off low that created four days of torrential rains.

At fault was an "extraordinary" weather system, according to Weather Bureau chief forecaster Mike Edwards — an extended tropical low that wedged in from the north-east and became trapped over central Botswana and, later, the south-western Free State, feeding in warm, moist air. While such systems are fairly common in summer, this one was different; it has now stayed put, in various stages, for several weeks (see chart).

The tropical low's warm, heavily moist air from the central African zone did not solely create the deluge. This was triggered off when the low met up with a typical westerly system, which swept in cold, moist air from the south. In the "convergence zone" of the two systems, an explosion of moisture occurred from February 20 onwards, with the undercutting colder air forcing up the moist, tropical air and creating tremendous precipitations. The Free State and northern Cape became marshlands overnight — Bloemfontein has already received some 700 mm of rain over the past month, against an annual average of 560 mm. Most stations reported record falls (see graph).

The exact causes of this weather system are not clear, though several factors are playing their part. The well-known El Nino phenomenon in the central Pacific, west of Peru, has been identified as a major cause of SA's seasonal droughts.

El Nino occurs when the normal westerly tropical trade winds slacken or disappear, allowing hot Pacific water to move eastwards to Peru. This supplants the cold Humbolt Current flowing along the South American coast, creating a ripple effect on global weather patterns.

Warm and cold ocean currents, therefore, play a major role in influencing the climate — witness the cold Benguela Current and its formative effect on the dry south-western parts of Africa; while the warm Mozambique Current creates a temperate, moist cli-
mate along the eastern seaboard. While the so-called "greenhouse effect" — the gradual warming-up of global temperatures caused by the increased burning of fossil fuels and higher carbon dioxide content of the air — has been cited as another probable cause of possible weather changes, a southward thrust of the Mozambique Current could have triggered the tropical storm prevalent in central SA. Whatever the cause and duration of SA's new bally tropical weather and its concomitant floods, damage assessments remain provisional. But, obviously, several hundred million rand could be added to the country's flood bill, creating further severe budgetary demands at a time when government is attempting spending restraint. Loss of production could add further millions to the bill.

The Department of Agriculture has requested farmers to send in provisional loss assessments by March 11 — obviously to be in time for the March 16 Budget. Worst damage was sustained by farm-lands, crops, houses on river banks and infrastructure like roads, bridges, railway lines and irrigation canals.

Long-term damage to the country's agricultural potential lies in the loss of millions of tons of irreplaceable topsoil. According to Pretoria University's head of Water Engineering, Albert Roodboom: "With some 60% of SA's veld in a poor condition due to overgrazing and bad farming practices, something will have to be done urgently to restore the balance — or we will suffer irreversible loss through soil erosion.

"Ongoing research on the long-term effects of bad farming practices is needed, so that this can be spelt out to white and black farmers."

A demised catchment area such as the Drakensberg foothills above Ladysmith — also increases the "funnel effect" of raging floodwaters which are not absorbed or retarded by any vegetation cover.

Apart from the loss of farming potential and the gradual desertification of the country, the Karoo is apparently moving 70 km eastwards every 10 years — the water retention potential of major dams is also gradually being reduced by massive silting. Several now have an effective life of only a few decades.

But, on the positive side, the drought has been broken over large areas and the improved grazing in the central Karoo, eastern Cape and Kalahari regions could lead to a rebuilding of the nation's sheep stock.

A further positive effect is the creation of jobs and a capital injection into rural economies as government and the insurance industry fork out millions over the next few years to rebuild what has been destroyed. (It should be remembered, however, that without non-ideological planning, many places now devastated were moribund anyway.)

And as the floods gradually subside and cost tallies are sent in by farmers, townsmen, Water Affairs, Saps, State departments, municipalities and so on, several important lessons for the future are being spelt out. A prominent civil engineer calls the breaching of the Spitskop Dam on the Harts River a "major embarrassment" for Water Affairs, while the cut-off of rail and road links and extended flooding of residential buildings and farmlands could also yield several lessons.

The most important include:

square The major flood control role played by the huge Hendrik Verwoerd and P K le Roux Dams on the Orange River. With the Vaal system contributing the lion's share, the retaining ability of the two dams halved the potential size of the flood and thus saved Uppington from virtual annihilation. This might influence the future structure and strength of a new Spitskop Dam.

square The role of the 21-year flood line that

square Engineering design in the dam, road, rail and bridge building areas will obviously have to take note of the increasing frequency of "very rare" floods. But while the loss of the 27-year-old John Ross bridge at the mouth of the Tugela last year was an indictment of bridge engineering design, no bridges built within the past 20 years were swept away. "We had learnt our lessons prior to the floods," says director/founder of SA's largest firm of civil engineers, Van Wyk & Louw, Hennie de Klerk.

And, adds Pretoria University civil engineer Professor Will Alexander, cost remains the major factor in determining the level of safety that can be built in;

square The cost of any construction is determined by economic, strategic, social and political factors. Civil engineers design and construct according to a client's needs — but they should increasingly be co-opted on the design and viability decision-making group that plans construction. This is the view of Institute of Civil Engineers' director Gerhard de Villiers;

square The Ladysmith experience could lead to a reassessment of the wisdom of building on a floodplain. Possibilities being considered include canalisation and the erection of dykes — but the wisest decision could be to move the residents and business premises to safer heights;

square Dam construction safety and measures to safeguard many of the country's older dams should now get top priority. "Failsafe" systems like deliberately building a weaker, collapsible section to reduce pressure on the main wall might have to be considered, as well as sufficiently strong spillways;

square The same would apply to road and rail construction and the provision of sufficient guttering in flat, extended plains where water pressures can build up and destroy sections of strategic road and rail links;

square Bridge construction is also being reassessed, with solid concrete structures seen as the solution. Improved foundations near river mouths, as well as the building of lower bridges that can be flooded, if necessary, while withstanding the might of the water, could be a safer option; and

square Future township planning should not be handled without input from professional civil engineers.

So the floods have taught SA some savage and costly lessons.

Fortunately, loss of life in the OFS floods has been slight — but the economic impact should lead to a serious rethink in several areas to prevent the recurrence of future losses.

Should SA now enter a "wet season" of several years, spending more money on essential safeguards might not be too high a price to pay for reduced damage.

The very perception of increased future risk should help to reduce damage. (See Economy)
Rivers in flood again

PRETORIA — The Department of Water Affairs here has announced that although certain rivers in the Free State were in flood once again, the situation could not be compared with the floods of February this year.

It was reported that a substantial volume of water was flowing in the Modder, Riet, Harts, Caledon and Orange Rivers.

The department expects water flowing in the Modder, Riet and Harts Rivers, which flow into the Vaal River, to reach Douglas today.

The peak flow is expected to reach Prieska on Tuesday where the water is expected to flow at 4,000 cumecs.

It is expected that the water level will not rise higher than six metres.

This should reach Upington by late Wednesday at its expected rate of 4,000 cumecs.

A coloured man, however, was swept away by the raging waters.

The man was one of eight workers who were on a lorry that was stuck in floodwater between Kenhardt and Van Wyksvlei near Bloemfontein.

His body has not yet been found.

Bloemfontein reported that 100 millimetres of rain fell in the catchment area of the Kaffir River south-west of Dewetsdorp.

The Dias 500 celebrations in East London could be a damp affair with rain forecast for today and Sunday.

A senior forecaster at the weather office, Mr Louis Vermaak, said cloudy and warm conditions with scattered thundershowers were forecast for the coastal region today.

It would be cooler in the northern interior where fairly general rain and thundershowers were expected.

Sunday would bring showers and thundershowers in the interior with the possibility of showers over the coast.

£ note spent

LONDON — Britain withdrew its pound banknote yesterday — nearly 200 years after introducing it to conserve gold for a war effort. Pound coins replace them. — Sapa-Reuters.
Looming havoc for flood-hit Free State

JOHANNESBURG. — Further devastation to areas of the Free State still recovering from last month's floods loomed yesterday.

The Weather Bureau has issued a special warning of possible further heavy rainfall in many parts of the province.

As homes were again being evacuated in the Free State and mudslides occurred in parts of Natal, a bureau spokesman said heavy rains were predicted for the central and southern Free State, the eastern Cape north of the Winterberg and the Drakensberg area of Natal.

In Bloemfontein, further rain could spell disaster as streams in the city were all in flood again.

A spokesman for the Joint Operations Centre in Kimberley, Warrant Officer Hendrik Naude, yesterday warned of renewed flooding in the already hard-hit areas of Modderrivier and Ritchie if the deluge continues in the catchment areas of the Riet and Modder Rivers.

Downpours

The N1 South has been closed between Edenburg and Reindersburg. Motorists travelling south or on their way to Bloemfontein from the south have been advised to use the route via De Wetsdorp, Wepener, Rouxville and Aliwal North.

Houses in the Kornerspruit area were evacuated when the river burst its banks.

At Shannon outside Bloemfontein, 120mm of rain was measured within 30 minutes on Thursday night, flooding houses and roads.

At Wepener, the Caledon River is reported to be rising quickly. There are fears the Sandspriut, which was in spate on Thursday and flooded several houses at Wepener, could again flood.

Heavy downpours in the central Karoo have caused widespread damage in the Brandvlei area and at places most farms received 100mm and more. The Sak River is again in flood.

A kombi was washed off the road about 20km from Brandvlei, but the driver and passengers were not injured.

A spokesman for the Department of Water Affairs says they are particularly concerned by the flood water in the Caledon and Orange rivers. — Sapa
Northern Cape awaits new floods

Four drowned as deluge hammers SA

Staff Reporters

Northern Cape towns are braced for a second but milder battering this week as flood waters from three northern Free State rivers and a massive run-off from the Lesotho highlands swell the Orange River.

Following heavy rainfall in Lesotho and the upper Free State at the weekend, the Department of Water Affairs in Pretoria predicts that 3,000 cubic metres per second (cubic) of water will reach the town of Douglas today, and 5,000 cubic metres are expected to stream past Prisiers tomorrow.

The Orange River may burst its banks again at Prisiers, the department said.

The floods are not expected to be as severe as those in the past few weeks, a spokesman for the Joint Operations Centre in Kimberley said today.

"Although the river will rise again, there is nothing to fear," he said.

Almost 6,000 cubic metres of water was measured at the Oranjedraai gauging weir on the Lesotho border yesterday. This water is expected to reach Prisiers by the end of this week after it passes through the Hendrik Verwoerd and PK le Roux dams.

The largest dam in the country, the Hendrik Verwoerd Dam, is already at 126 percent of capacity — its highest level yet.

However, Mr Mike Laing, chief forecaster for the Weather Bureau in Pretoria, said the weather system that caused the deluges of the past few days "has now moved northwards and away from the country. We are back to more normal late summer rainfall patterns."

Roads impassable

Slowly-lying areas of towns along the banks of the Sand, Vals and Vals rivers in the northern Free State were flooded at the weekend, and many roads and bridges became impassable.

Three men drowned in raging flood waters in the QwaQwa area yesterday, and a Kakamas schoolboy drowned in the Hartbees River at the weekend.

About 160 people were forced to leave their QwaQwa homes, and 33 clay huts collapsed under the force of water in the area, where 143 mm of rain fell yesterday.

The homeless are being sheltered in tents provided by the SA Defence Force.

The Department of Water Affairs in Pretoria warned farmers living below the Bloemhof Dam to evacuate people and equipment to higher ground as it opened the sluice gates feeding the Vaal River at 8 am today.

The department said the Bloemhof Dam, which was last full in 1982, was at about 109 percent of capacity and that the level was rising.

The Hartbeespoort Dam near Johannesburg began overflowing late yesterday afternoon for the first time since 1991. Ten sluice gates were opened to allow water out of the dam yesterday. Four of the sluice gates are still open.

Traffic chaos as Reef gets a drenching

Municipal Reporter
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<th>Date</th>
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<td>19/12/88</td>
<td>The heavy rain washed away roads in Johannesburg.</td>
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<td>A massive drain blockage caused a dam of water to build up at the Randfontein dam.</td>
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10 drown in raging floods

JOHANNESBURG — Floods claimed the lives of at least ten people at the weekend.

Three men were swept away by raging floodwaters in the Qwaqwa area where about 180 people were forced to leave their homes after 143 mm fell yesterday.

It was reported earlier in the weekend that six people had been swept away by the Sand River at Sengkat in the Free State and were believed to have drowned.

A 16-year-old boy was swept away in the Hartbees River near Kamas when a retaining wall he and his friends were walking on collapsed.

The level of the Vals River at Bothaville is rising rapidly and the river is flowing 800 metres wide.

The town clerk, Mr. Arthur Snyman, said 15 families were evacuated after the river burst its banks.

More than 100 mm has fallen in the vicinity of Coligny, Venterdorp and Klerksdorp in the past few days and the Schoonspruit is still in flood.

The civil defence chief said people in low-lying areas will be kept informed and given early warning if they have to leave their homes.

The Hartbeespoort Dam began overflowing late on Saturday for the first time since 1981.

Meanwhile, the Klip River at Ladismith flooded low-lying areas of the town yesterday afternoon and many houses were evacuated after a flood warning issued by the Civil Defence Department in the morning.

Water was flowing knee-deep through streets in the low-lying areas but no houses were flooded, a police spokesman said.

The river reached a level of seven metres, but has started to subside.

The Oliviershoek pass in the Drakensberg between Natal and the Free State has been closed to traffic because of a large mudslide.

The bridge and road across the Renoster River at Koppies has been badly damaged and may be closed.

DDC-Sapa

s greet aravel

The Portuguese national flag was unfurled by the ambassador of Portugal, Dr. J. M. P. de Villas-Boas, the South African flag was unfurled by Mr. De Lange, the South African Harbour Services flag was unfurled by the port di-
Flood payout of R15.5m approved

JOHANNESBURG — The agricultural industry's leading short term insurer, Sentraboer, has approved payouts on claims for flood damage in the Free State and northern Cape totalling R15.5-million.

The chief executive of Sentraboer, Mr Pierre Marais, said so far more than 600 claims had been received and more were expected after the torrential rains which fell towards the end of last week.

In many parts of the vast area affected, damage could not be assessed until flood waters had subsided.

Total claims payouts would be substantially greater than the R15-million already approved.

Sentraboer would be responsible for R1.5-million of the R15.5-million and reinsurers for the rest.

Meanwhile a spokesman for crop insurers, Sentraces, has said it was impossible to estimate damage or claims while flood waters were still so high.

Floodwaters in three Free State towns have now subsided and residents are taking stock of flood damage as mopping up operations got underway yesterday.

The town clerk of Bothaville, Mr Arthur Snyman, said people had been evacuated from 68 houses an hour before the floodwaters hit the town.

Families have been accommodated by friends and relatives.

Mr Snyman said the worst damage was to businesses in low-lying areas of the town.

"A R600 000 shopping complex which was opened three months ago has been completely destroyed. The water reached the ceiling of the supermarket and all is lost," he said.

A Defence Force spokesman said conditions had stabilised in Kroonstad and repairs were being carried out at the towns sewage works and an old age home where the power supply had been cut off by the flood waters.

The spokesman said the fire brigade had rescued a man who was carried away by floodwaters.

The major damage to the town was at the Kroonpark Holiday Resort where six of the 44 holiday huts were undamaged.

The town clerk of Senekal, Mr J. A. Botha, said the water supply to the town had been reconnected.

He said members of the public, municipal staff and members of civil defence were assessing the extent of flood damage and cleaning up operations had begun.

"We evacuated 12 families and their furniture has been stored in the town hall."

A police spokesman said six people who were reported missing from a stone quarry next to the Sand River near Senekal are safe.

"We found them in a nearby township on Sunday," he said. — Sapa
JOHANNESBURG. — Northern Cape towns are braced for a second but milder battering this week as floodwaters from three Northern Free State rivers and a massive run-off from the Lesotho highlands swell the Orange River.

After heavy rainfall in Lesotho and the upper Free State at the weekend, the Department of Water Affairs in Pretoria predicted that 3,000 cubic metres per second of water would reach the town of Douglas yesterday. At noon it was just over half this rate.

The flow rate of the Orange River at Frieska at noon yesterday had already reached 5,900 cubicms and the department says the same rate of flow is expected at Upington today. The Orange River may burst its banks again at Frieska, the department said.

The floods are not expected to be as severe as those in the past few weeks.

**Dam reaches highest level yet**

SA's largest dam, the Hendrik Verwoerd, is already at 120% full - its highest level yet. The Ples Uitzicht Dam is 117% of capacity.

Three men drowned in raging floodwaters in the Qwaqua area yesterday, and a Kakamas schoolboy drowned in the Hartbees River at the weekend.

About 180 people abandoned their Qwaqua homes, and 38 clay huts collapsed under the force of water, where 143mm of rain fell yesterday.

The Hartbeespoort Dam near Johannesburg began overflowing yesterday for the first time since 1981.

At least 22 roads between cities and towns are closed following the latest floods in the Free State, Northern Cape, Western Transvaal and Natal, according to the Automobile Association. — Sapa
Flood: houses evacuated

PRETORIA — Hundreds of houses in the town of Christiana were evacuated yesterday to avoid the peak of the Vaal River floodwater which was expected last night.

Another 500 property owners were warned of the approaching flood.

Boehmhoef in the Western Transvaal and the Northern Cape towns of Warrenton, Windsorton, Riverton, Barkly-West, Delporteboog and Douglas were also endangered.

Property owners along the Vaal River below the Bloemhof Dam were warned by the Department of Water Affairs that the level of the river would rise above that of the 1975 floods.

The department forecast that the peak of the floodwater would reach Douglas tomorrow.

The rain in the Transvaal in the past two weeks has not solved the problems of farmers in the area, according to a survey by the Transvaal Agricultural Union.

The survey showed that grain farmers in particular suffered losses because of rain that was too late.

In some areas crop losses of up to 60 per cent are expected.

There were only isolated cases of flood damage in the province — Saps.

R350 000 boost for soccer

UMTATA — Professional soccer in Transkei has been given a R350 000 boost with the announcement of a R350 000 sponsorship, spread over three years, by Transvaal.

The Transkei Premier League's PRO, Mr Boy Nguba, said the sponsorship was the largest ever given to Transkei soccer.

He said prize money this year would total R100 000, it would be R120 000 in 1999 and R130 000 in 1999.

This year the champion team would receive R22 000, with prizes of R15 000, R10 000 and R5 000 going to the next three teams.

A sum of R11 000 would go to travel expenses and R20 000 for travelling expenses.

The league would be known as the Transvaal Premier League — DHR.
Upington braced as second flood looms

The Argus Correspondent

JOHANNESBURG. — Flood-battered Upington is braced for floods worse than those of last month and than the deluge of 1976, said police liaison officer for the Northern Cape, Captain Carel van der Westhuizen.

As the second deluge of water in three weeks rushes downstream, residents of low-lying areas are moving goods and livestock to higher ground.

Many people are being evacuated from towns in flood-threatened areas of the Western Transvaal and the Northern Cape.

HELICOPTERS

Helicopters are on standby at Upington to help with possible evacuations.

Almost 8 000 cubic metres of water a second (cumecs) is expected to reach the town on Monday.

At Prieska the Orange River is expected to be in peak flood by Sunday as the flow increases to 7 900 cumecs, the same level as the February floods, said a spokesman for Water Affairs.

However, a spokesman for the Kimberley Joint Operations Centre said the floods would be more controlled than those of last month because of the planned opening of three Vaal Dam sluices and eight of the 20 sluices at Bloemhof Dam on the Vaal River. Two of the Bloemhof sluices were closed last night, and almost 4 000 cumecs was flowing from the dam.

Today, as the crest of the Vaal River sped towards Christiana in the Western Transvaal, bridges between Upington and Kakamas and Upington and Reimoos were under water and closed to traffic.

Evacuation of towns along the Vaal River was proceeding efficiently, officials said. Bloemhof in the Western Transvaal and the Northern Cape towns of Warrenton, Windsort, Riverton, Barkly West, Delportshoop and Douglas are all threatened by the latest flood.

The south bank of the Orange River in the Leerkrans area has been breached. Kanon Island on the Orange River and 63 other islands were being evacuated.

Captain van der Westhuizen said the sunny weather during the past three days and the drying out of sudden ground had assisted the evacuations.

At Warrenton, where the river is in spate and much wider than normal, many families were evacuated and others put on standby.
Millions for East Cape

CAPE TOWN — More than R1.1 million is due to be spent in the Eastern Cape and South Western Districts by the Department of Water Affairs during the 1988–9 financial year.

And nearly R6 m is scheduled to be spent on various schemes in the next few years.

Estimates tabled in Parliament yesterday also earmarked a further R52 m for the Orange-Fish project of which R20.8 m is to be spent on agriculture in the Sundays River area.

Another R16.6 m is for the same purpose on the Fish River.

This means that by the end of the 1988–9 financial year R75.4 m will have been spent on the grand scheme while another R49.9 m still has to be allocated.

Expenditure on water supply works now in progress will see:

• R180 000 spent at Burgersdorp.
• R220 000 at Decape.
• R105 000 at Grahamstown.
• R150 000 at the L.C. Steyn Prison at Kirkwood, and
• R190 000 at Port Alfred.

In addition, R120 000 is earmarked for Plettenberg Bay and the same amount for Mossel Bay and R10 000 for Oudtshoorn.

New water supply works will also start at Cradock, Graaff-Reinet and Queenstown. — DDC
More disaster areas are declared

By Adele Balca

More flood-stricken parts of the country have been declared disaster areas with the Department of Water Affairs warning that, by the weekend, Priskas and Upington could be hit by worse floods than those in February.

A Water Affairs spokesman advised residents in these northern Cape towns to evacuate houses below the February floodline.

"The Orange River is expected to flow at a rate of 8,700 cumecs through Priskas — situated beyond the confluence of the Vaal and Orange Rivers — on Saturday."

The Orange River's peak flow of 8,400 cumecs is expected to pass through Upington on Sunday and the water level could rise half-a-metre above the February floodline.

The level of the Vaal Dam was measured at 110.20 percent last night and the department reported a decrease in the inflow.

Six sluice gates have been opened and the outflow from the dam has increased from 730 cumecs to 1,100 cumecs.

The level of the Bloemhof Dam increased from yesterday's figure of 110 percent to 115.66 percent and it is reported that two of the six sluice gates have been closed.

At Christians in the western Transvaal, flood waters have wreaked havoc at the Rob Ferreira game reserve where six white rhinos valued at R230,000 were found drowned yesterday after being stranded on an island.

FLOODWATERS RECEIVING

Town Clerk Mr A J Cornall said floodwaters were receding and the level of the Vaal River early today was 205,3 m.

"A total of 94 homes have been flooded some up to the gutters. Everyone was evacuated by the time the floods peaked in the town on Tuesday night. The water supply is operating normally," he said.

President Botha yesterday declared 20 flood-ravaged Free State magisterial districts as disaster areas.

The Minister of Health, Dr Willie van Niekerk, made an "urgent" call on public to contribute generously to the emergency fund for the floods.

Flood damage has left portions of six major and 12 minor roads closed throughout the country, an Automobile Association report said yesterday.

The N1 between Kroonstad and Winburg is closed but stretches between Bloemfontein and Edenhurst and Coetshoogd and Three Sisters are open with gravel and tarred deviations.

Also closed is the R39 between Bloemhof and Christians and the R40 between Bethlehem and Kestell.

In the northern Cape, roads closed include those between Kimberley and Delworthop, Kimberley and Douglas, Keimoes and Rehoboth and Keimoes and Kokamas.

In Natal, routes between Nottingham Road and Lotesli and Blouwville and Impendle are closed.

Three Natal nature reserves — Injalsiti, Lotesli and Vergelegen — are closed and the road to the Kalahari Gemsbok Park in the northern Cape is closed.
Families evacuate and wait for floodwaters

JOHANNESBURG — Evacuations are taking place in a string of towns in flood-threatened areas of the Western Transvaal and the Northern Cape.

As the second deluge of water in three weeks pounds down-country, residents of low-lying areas are moving goods and livestock to higher ground.

Flood-battered Upington is braced for floods worse than last month's and the deluge of 1973, said the police liaison officer for the Northern Cape, Captain Carel van der Westhuizen.

Helicopters are on standby at the town to help with possible evacuations.

Almost 8,000 cubic metres of water is predicted to reach the town on Monday next week — higher than the February rate of flow.

At Prieska the Orange River is expected to be in peak flood by Sunday as the flow increases to 3,000 cubic metres, the same level as the February floods, a spokesman for the water affairs department said.

However, a spokesman for the Kimberley Joint Operations Centre said that the floods would be more controlled than those of last month due to the planned opening of three sluices on the Vaal Dam, and eight of the 20 sluices at the Bloemhof Dam on the Vaal river.

Two of the Bloemhof sluices were closed on Tuesday night, and almost 4,000 cubic metres had assisted the evacuations.

At Warrenton, where the river is coming down in spate, many families were evacuated and others put on standby.

Water surged over the Laagwater Bridge at Warrenton, but the span on the road between Warrenton and Christiana was still open to traffic.

Bloemhof's Town Clerk, Mr. Dudley Callaghan, said all roads to and from Bloemhof were opened yesterday and there is a detour on the road to Christiana.

Houses west of Warrenton were being evacuated and many other families were put on standby.

The Riverton Pleasure Resort has again been evacuated in the face of further flooding.

At Barkly West residents were warned to be ready to pack their belongings if the water level of the Vissel rose further.

At Douglas, the water is expected to reach a level only one metre lower than during the February floods. A peak flow of 4,200 cubic metres is expected to reach Douglas on Saturday.

The sluices of the P.K. le Roux Dam are still open. At Hope Town the level of the Orange River was up a metre and still rising.

The town secretary of Christiana, Mr. D.W. van Niekirk, said a least 600 people had been evacuated from the town.

He said although residents in the low-lying areas of Bloemhof and Graskop had barricaded their houses with sandbags the water had flooded their homes.

A spokesman for the Rob Ferreira Game Park — about 2 km from Christiana — said police have mounted a helicopter search for six black rhinos and four ostriches that went missing yesterday.

"Fortunately there were no campers at the caravan park as it is completely flooded," the spokesman said.

At Prieska further downstream on the Orange River, the town clerk, Mr. Et Viljoen, said: "The level of the river was nine metres this morning, which is three metres less than during the February floods."

A spokesman for the South African Transport Services said yesterday all main-line train services were operating normally.

"The only exception is the Trans-Orange line from Durban to Cape Town which has been diverted via Kimberley, Orkney and Kroonstad, and not via Bloemfontein." — Sapa
New deluge empties towns

TOWNS along the lower reaches of the Orange River were again evacuated yesterday as water from the second deluge in three weeks raced to the sea through the Western Transvaal and the Northern Cape.

And the Minister of National Health, Dr Willie van Niekerk, has announced that another 70 magisterial districts in the Free State were being included on the disaster area list.

Residents of low-lying areas again left their homes and moved goods and livestock to higher ground, as even higher water levels threatened the Northern Cape.

Upington is preparing for a water level higher than that of the earlier flood this year and the 1975 flood.

Helicopters are on standby at the town, where an estimated peak flow of 7800 cubic metres of water, 200 cubic metres more than the flow three weeks ago, is expected by Monday. Many of the houses in the town are still under water.

The Secretary of the Gordonia Divisional Council, Mr W Snyman, said yesterday that almost 300 tents had been issued in February and many flood victims who had returned to their homes had again asked for tents yesterday morning as the water started rising again.

He confirmed that between 80% and 90% of the irrigated farmland was still under water after the February flooding.

The Department of Water Affairs has issued a flood warning saying that a peak flow of 7800 cubic metres will reach Prieska on Sunday March 20, resulting in a similar water level to that of February.

A Water Affairs spokesman said three sluices on the Vaal Dam and six of the 20 sluices at the Bloemhof Dam on the Vaal River were opened, thus regulating much of the water to the lower regions and so preventing walls of water from surging over the banks.

At Douglas, the water is expected to reach a level only one metre lower than during the February floods. A peak flow of 4200 cubic metres is expected to reach Douglas on Saturday.

The sluices of the P K le Roux Dam were still open and at Hopetown the level of the Orange River was up a metre and still rising.

In the Western Transvaal, Christiana's Town Clerk, Mr D W van Niekerk, said at least 120 people had been evacuated. "There was more flooding overnight, and at least 20 houses were at least one metre under water. Another 10 houses are less than a metre under water," he said.

The flooding occurred despite the fact that residents in the low-lying areas of Bloemhof and Christiana had barricaded their houses with sandbags. — Staff Reporter and Sapa
Disaster declared

CAPE TOWN — President Botha has declared
Witkopshoek in Westvaal
a flood disaster area in
terms of the Fund-raising
Act of 1978, the Minister
of National Health, Dr
Willie van Niekerk, said.
A proclamation will be
published soon in the
Government Gazette.
— Sapa.

Morale low in flood-hit Douglas

By Melanie Gosling

KIMBERLEY — Morale
is low in the flood-ra-
vaged northern Cape
town of Douglas.
Residents, still stunned
from the shock of last
month's deluge, wait anx-
iously as a second wave
of water hurtles down the
swollen Vaal River to-
wards their battered
town.
The pungent smell of
mud hangs heavily over
the town. Piles of silt lie
in gutters
Only the bars operate in
the two local hotels
that were evacuated be-
fore the last floods. And
it is in the pubs, on street
corners, and in cafes that
people gather to anxiously
discuss the impending
floods.
Some of the flooded
houses in Douglas have
collapsed and caved-ins
pockmark the streets.
The town clerk, Mr
Louis de Jager, estimated
the damage in the town
was between Rf million and Rf million.
"I don't think people in
toria) realise what has hap-
pended," he said. "They
are still stunned. Perhaps
in a month's time the re-
ality of what they have
been through will hit
them."
He said the latest re-
ports indicated the flood
would peak in Douglas
to-night or early to-
morrow. He hoped pre-
dictions that the flood
level would be lower than
last month's were ac-
curate.

NCape towns
await flood

By Staff Reporters

As dam levels along
the Vaal River
dropped today, north-
er Cape towns on the
Orange River were
waiting apprehensive-
ly for the flood waters
to reach them for the
second time in less
than a month.
The Department of
Water Affairs said the
Vaal Dam had decreased
by 14 per cent from yest-
day's 116,66 per cent.
The inflow has dropped
from 700 cumecs to
630 cumecs.
The Bloemhof Dam
dropped from 116,05
per cent to 116,04 per
cent.
The Hendrik Verwoerd
Dam in the Cape is
120,97 per cent of capacity
but inflow is subsiding.
Residents of low-lying
areas at Keimoes —
about 40 km from Uping-
ton — evacuated their
homes yesterday as the
Orange River swelled.
The Department warned
that the upstream towns of
Prieska and Upington could be hit
at the weekend by worse
floods than those in Feb-
uary.

"About two houses
have been evacuated in
the town but most prime
farmland is underwater.
Although predictions
are that the water level
in Upington will rise to
above the February
floodline, by the time the
floods reach us the water
will have abated. We are
well prepared."

Bridges were under
water yesterday and the
road from Keimoes to
Kenhardt and Cape Town
was closed.

No links

In the February floods
the bridge at both On-
seepkans and Noor-
doefer were closed. If
the bridges at Noor-
doefer and Upington are
closed at the same time,
then Namibia will again
be without rail and road
links to South Africa.
Windhoek Post Office
workers are working
overtime to sort tons of
surface mail which has
only just arrived after
railway washaways.
More delays could be expected
if links are again cut.

Keimoes town clerk,
Mr E Meyer, said one
city of the town had been
cut off but local police
had provided transport
enabling residents to
cross the flooded area.
River towns warned of worse flooding to come

JOHANNESBURG — More flood-stricken parts of the country have been declared disaster areas with the department of water affairs warning that the weekend storms could hit by even worse floods than experienced in February.

A water affairs spokesman advised residents in the two northern Cape towns to evacuate houses below the February floodline.

The Orange River is expected to flow at a rate of 8,600 cumecs through Prieska — situated beyond the confluence of the Vaal and Orange Rivers tomorrow.

The Orange River's peak flow of 8,600 cumecs is expected to pass through Upington on Sunday and the water level could rise by a half metre above the February floodline.

The level of the Vaal Dam was measured at 116.22 per cent on Wednesday night and the department reported a decrease in the inflow.

Six sluice gates have been opened and the outflow from the dam has increased from 730 cumecs to 1,150.

"A total of 94 houses have been flooded, some up to the gutters. Everyone was evacuated by the time the flood peaked in the town on Tuesday night. The water supply is operating normally," he said.

Meanwhile, 30 flood-ravaged Free State magisterial districts were declared disaster areas by the state president on Wednesday.

The Minister of Health, Dr Willie van Niekerk, said in a statement that the declaration had been in terms of the Fund Raising Act and made an urgent call on members of the public to contribute voluntarily to the emergency fund for the floods.

Flood damage had left portions of six major and 17 minor roads closed throughout the country, said Wednesday's Automobile Association report from Johannesburg.

The N1 between Kroonstad and Winburg is closed but stretches between Bloemfontein and Colesburg and between Edentown and Hoopstad, Bulfontein and Hoopstad, Bulfontein and Colesburg, Bloemfontein and Heilbron, and Heilbron, Bloemfontein and Vredefort are open, with a number of gravel and tarred sections.

Also closed is the R29 between Bloemhof and Christians and the R49 between Bethlehem and Kestell.

Other minor routes still closed to traffic in the Free State are the roads between Kroonstad and Koppies, Virginia and Henneman, Virginia and Ventersburg, Welkom and Bloedrift, Bulfontein and Hoopstad, Bulfontein and Wesselbron, Hertogsvlei and Christians, Bloemfontein and Jagersfontein, Smithfield and Bethlehem and Smithfield and Rouxville. — Sapa
A deluge of costs

September’s Natal floods caused an estimated R800m damage, of which roughly half was insured, the bulk with re-insurers.

But the floods ravaging the Free State, northern and central Cape, western and north-western Transvaal and Natal (again) since February could add a further R750m-R800m to the bill.

Assocom chief statistician Ed Verburgh says while the insurance industry talks of claims of R150m-R180m, public sector officials say damage from the latest flooding to infrastructure, housing, crops and farmland could add a further R600m to the bill. “Government — and, by implication, the taxpayer — will have to stand good for the latter, which could halt efforts to boost the economy through possible tax cuts.”

Damage in Natal last year was split between insured damage to housing, commerce and industry on one hand and infrastructural and farm damage on the other. The latest floods have mainly hit infrastructure and agriculture — largely uninsured.

While it is too early for accurate damage assessments (areas in the lower Orange valley have been under water for weeks), damage to roads, bridges, railway lines, power and telephone lines, irrigation canals, houses and buildings, together with agricultural losses, could add up to more than the total Natal flood bill, Verburgh estimates.

Along the lower Orange river, for example, extensive vineyards may have been destroyed. Though the loss of valuable topsoil is difficult to quantify, consequential damage to farmland productivity will no doubt add considerably to the bill. To the “direct” costs of repairing hundreds of breached farm dams, roads, houses and outbuildings, the loss of crops, livestock and equipment, must be added the cost of lost production.

On the infrastructural side, the picture is little better. Broken railway lines and bridges, national and regional roads, bridges and breached dams like Spitskop, will take years to reinstating. Although most of the country’s dams are filled to capacity and the drought is largely broken, the destruction caused by SA’s worst floods in living memory will be a costly burden to bear.
No. 41, 1988
VERKLARING VAN OORSTROMINGS IN SEKERE DISTRIKTE IN NOORD-KAAPLAND TOT 'N RAMP

Kragtens die bevoegdheid my verleen by artikel 26 van die Wet op Fondsinneming, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die landrodsdistrikte in die Bylae genoem sedert 20 Februarie 1988 getree het vir die doeleindes van genoemde Wet tot 'n ramp.

Gegewe onder my Hand en Seel van die Republiek van Suid-Afrika te Kaapstad, op hede die Vier-en-twintigste dag van Februarie Eenduisend Negehonderd Aagt-en-tagig,

P. W. BOTHA,
Staatspresident.

Op las van die Staatspresident-in-Kabinet:

W. A. VAN NIEKERK,
Minister van die Kabinet.

BYLAE

Barkly-Wes.
Douglas.
Gordonia.
Kimberley.
Prieska.
Warrenton.

No. 42, 1988
INWERKSTELLING VAN DIE WET OP INTESTATE ERFOPVLGING, 1987 (WET 81 VAN 1987)

Kragtens die bevoegdheid my verleen by artikel 3 van die Wet op Intestate Erfopvolging, 1987, bepaal ek 18 Maart 1988 as die datum waarop genoemde Wet in werkking tree.

Gegewe onder my Hand en die Seel van die Republiek van Suid-Afrika te Kaapstad, op hede die Tweede dag van Maart Eenduisend Negehonderd Aagt-en-tagig,

P. W. BOTHA,
STAATSPRESIDENT.

Op las van die Staatspresident-in-Kabinet:

H. J. COETSEE,
Minister van die Kabinet.

No. 42, 1988
COMMENCEMENT OF THE INTESTATE SUCCESSION ACT, 1987 (ACT 81 OF 1987)

By virtue of the powers vested in me by section 3 of the Intestate Succession Act, 1987, I fix 18 March 1988 as the date on which the said Act shall come into operation.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town this Second day of March, One thousand Nine hundred and Eighty-eight.

P. W. BOTHA,
State President.

By Order of the State President-in-Cabinet:

H. J. COETSEE,
Minister of the Cabinet.
GOVERNMENT GAZETTE, 18 MARCH 1988

No. 43, 1988

OORGANG VAN SEKERE GROND IN DIE DISTRIK MARICO IN DIE PROVINSIE TRANSVAAL NA DIE REPUBLIEK BOFUTHATSWANA

Kragtens die bewoegheid my verleen by artikkel 1 van die Wet op die Uithering van die Grense van Bepaalde State, 1980 (Wet 2 van 1980), bepaal ek hierby dat die grond in die bygaande Bylae vermeld, geleë in die distrik Marico in die provinsie Transvaal, met ingang van 31 Maart 1988 ophou om deel van die Republiek van Suid-Afrika te wees en deel word van die Republiek van Bophuthatswana.

Gegewe onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Tweede dag van Maart Eenduisend Negehonderd Agt-en-tagig.

P. W. BOTH, Staatspresident.
Op las van die Staatspresident-in-Kabinet:
G. VAN N. VILJOEN, Minister van die Kabinet.

BYLAE
PROVINSIE TRANSVAAL

Distrik Marico

Die plaas Bergvliet 23 JO en Gedeelte 5, Gedeelte 6, Gedeelte 8, Gedeelte 9 en Restant van Gedeelte 1 van die plaas Rietgat 91 UP.

GOEWERMENSKENNISGEWINGS

ADMINISTRASIE: VOLKSRaad
DEPARTEMENT VAN PLAASLIKE BESTUUR, BEHUISING EN WERKE

No. 454 18 Maart 1988

WYSIGING VAN KENNISGEWING 1272 VAN 1981 MET BETREKKING TOT BEPERKINGS OP DIE ONDERVERDELING VAN GROND OP STANDPLASE OF DIE OPRITGING, VERANDERING EN GEBRUIK VAN GEBOUE TER BEVORDERING VAN SLUMOPRUI- MING EN 'N STADSIERNLUWINGSKEMA TE POTCHEFSTROOM, PROVINSIE TRANSVAAL

Hiermee word vir algemene inligting bekendgemaak dat Kennisgewing 1272 van 1981 gedateer 19 Junie 1981 gewy- sig word deur die uitsluiting van die erv in die Bylae hiervan omskryf sodat die beperkings ingevolge die Kennisgewing ten opsigte van die erv verval met inwerkingtreding op datum van publikasie hiervan.

BYLAE

Die volgende erv in die dorp Potchefstroom:

<table>
<thead>
<tr>
<th>Ecknom</th>
<th>Grootte</th>
<th>Kaart LG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gedeelte 19 van Erf 2639........</td>
<td>892 m²</td>
<td>A1627/49</td>
</tr>
</tbody>
</table>

No. 43, 1988

PASSING OF CERTAIN LAND IN THE DISTRICT OF MARICO IN THE PROVINCE OF THE TRANSVAAL TO THE REPUBLIC OF BOPUTHATSWANA

Under the powers vested in me by section 1 of the Borders of Particular States Extension Act, 1980 (Act 2 of 1980), I hereby determine that the land defined in the accompanying Schedule, situated in the District of Marico in the Province of the Transvaal, shall, with effect from 31 March 1988, cease to be part of the Republic of South Africa and shall become part of the Republic of Bophuthatswana.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town this Second day of March, One thousand Nine hundred and Eighty-eight.

P. W. BOTH, State President.

By Order of the State President-in-Cabinet:
G. VAN N. VILJOEN, Minister of the Cabinet.

SCHEDULE
PROVINCE OF THE TRANSVAAL

District of Marico

The farm Bergvliet 23 JO and Portion 5, Portion 6, Portion 8, Portion 9 and Remainder of Portion 1 of the farm Rietgat 91 JP.

GOVERNMENT NOTICES

ADMINISTRATION: HOUSE OF ASSEMBLY
DEPARTMENT OF LOCAL GOVERNMENT, HOUSING AND WORKS

No. 454 18 March 1988

AMENDMENT OF NOTICE 1272 OF 1981 WITH REGARD TO RESTRICTIONS ON THE SUBDIVISION OF LAND OR STANDS OR THE ERECTION, ALTERATION OR USE OF BUILDINGS OR STRUCTURES IN FURTHERANCE OF A SLUM CLEARANCE AND URBAN RENEWAL SCHEME IN POTCHEFSTROOM, PROVINCE OF THE TRANSVAAL

It is hereby notified for general information that Notice 1272 of 1981 dated 19 June 1981 is amended by the exclusion of the erv described in the Schedule attached hereto in order that the restrictions in terms of the Notice in respect of this erv lapsed with effect as from the date of publication hereof.

SCHEDULE

The following erv in the township of Potchefstroom:

<table>
<thead>
<tr>
<th>Property</th>
<th>Area</th>
<th>Diagram SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portion 19 of Erf 2639 .........</td>
<td>892 m²</td>
<td>A1627/49</td>
</tr>
</tbody>
</table>
KENNISGEWING 166 VAN 1988
DEPARTEMENT VAN WATERWESE
LESOTHO-HOOGLANDWATERPROJEK.—HEEFFING VAN VORDERING OP WATER VERSKAF UIT STAATSWATERWERKE IN DIE VAALRIVIER VIR STEDELIKE EN NYWERHEIDSDOELEINDES

1. Kragsens die bevoegdheid my verleen by artikel 138F (1) van die Waterwet, 1956, het ek, Gert Jeremia Kotze, in my hoedanigheid van Minister van Waterrese, met ingang van 1 April 1988 'n vordering van twee sent (R0,02) op elke kubieke meter water wat uit die Vaalrivier vanaf en insluitende die Grootdraadam tot by die samevloeiing van die Vaalrivier en die Oranjrivier uit of deur middel van enige Staatswaterwerk aan enige persoon of liggaam vir uiteenlopende gebruik vir stedelike of nywerheidsdoeleindes verskaf of beskikbaar gestel word deur die Staat. Met dien verstande dat die vordering nie van toepassing is op enige sodanige water wat kragsens 'n toekennin van die Staat gratis uit of deur middel van sodanige Staatswaterwerk verskaf of beskikbaar gestel word nie.

2. Die vordering word deur die Direkteur-generaal van Waterrese verhaal gelyktydig met enige vordering wat ek kraftens artikel 66 van die genoemde Wet het ten opsigte van die verskaffing of beskikbaarstelling van sodanige water.

3. Op enige vorderings wat na die betaaldatum nog nie betaal is nie, word rente op die onbetaalde bedrag gelê teen die rentekoers wat op daardie datum kraftens artikel 26 (1) van die Statistis- en Ouditwet, 1975 (Wet 66 van 1975), van toepassing is.

4. By die toepassing van hierdie kennisgewing is een kubieke meter gelyk aan een kiloliter.

G. J. KOTZÉ,
Minister van Waterrese.
(18 Maart 1988)

KENNISGEWING 167 VAN 1988
ADMINISTRASIE: VOLKSRAAD
DEPARTEMENT VAN LANDBOU EN WATERVEROORSIENING

KENNISGEWING VAN VERGADERING VAN SKULDEISERS KRAGTENS ARTIKEL 22 (1) VAN DIE WET OP LANDBOUKREDIT, 1966

Hierby word 'n vergadering van ondergenoome applikant en sy skuldeisers op die plek en datum hieronder genoem, belê, met die doel om skuldeisers in staat te stel om hul vorderings teen die applikant te bewys en 'n skikkingsvoorsel van die Landboukreditraad te oorweeg.

J. H. RADEMEYER,
Direkteur: Direktoratuur Finansiele Bystand, Departement van Landbou en Watervoorsiening.

Aanvoer van Application by | Plek van byeenkomst/Place of meeting | Datum en tyd/Date and time
---|---|---
Piet Frederik Salverus Viljoen, Posbus/P.O Box 1470, Klerksdorp, 2570 | Kansoor van die Landdros/Magistrates Office, Klerksdorp | 13 Mei/May 1988 om/ at 9:00.00.


NOTICE 167 OF 1988
DEPARTMENT OF AGRICULTURE AND WATER SUPPLY

NOTICE OF MEETING OF CREDITORS IN TERMS OF SECTION 22 (1) OF THE AGRICULTURAL CREDIT ACT, 1966

Meeting of the undermentioned applicant and his creditors is hereby convened at the place and date mentioned hereunder for the purpose of enabling creditors to prove their claims against the applicant and of considering a proposal for compromise by the Agricultural Credit Board.

J. H. RADEMEYER,
Director: Directorate Financial Assistance, Department of Agriculture and Water Supply.

(18 March 1988)
KENNISGEWING 166 VAN 1988
DEPARTEMENT VAN WATERWESE
LESOTHO-HOOGLANDWATERPROEJ. — HEFFING VAN VORDERING OP WATER VERSKAF UIT STAATSWATERWERKE IN DIE VAALRIVIER VIR STEDELIGE EN NYWERHEIDSDOELEINDES

1. Kragtens die bevoegdheid my verleen by artikel 138F (1) van die Waterwet, 1956, het ek, Gert Jeremias Kotzé, in my hoedanigheid as Minister van Waterwes, met ingang van 1 April 1988 ’n vordering van twee sent (R0,02) op elke kubieke meter water wat uit die Vaalrivier vanaf en insluitende die Grootdraadam tot die samevoeling van die Vaalrivier en die Oranjrivier uit of deur middel van enige Staatswaterwerk aan enige persoon of liggaam vir uiteenlike doel dié by die Staat gratis of deur middel van sodanige Staatswaterwerk verskaf of be- skikbaar gestel word deur die Staat. Met dien verstande dat die vordering nie van toepassing is op enige sodanige water wat kragtens ’n toekennings van die Staat gratis of deur middel van sodanige Staatswaterwerk verskaf of be- skikbaar gestel word nie.

2. Die vordering word deur die Direkteur-generaal van Waterwese verhaal gelyktijdig met enige vordering wat ek kragtens artikel 66 van die genoemde Wet het op tippie van die verskaffing of beskikbaarstelling van sodanige water.

3. Op enigtydse vorderingen wat na die betaaldatum nog nie betaal is nie, word rente op die onbetaalde bedrag gehef ten dele na die rentekoers wat op daardie datum kragtens artikel 26 (1) van die Skatbrie- en Ouditwet, 1975 (Wet 66 van 1975), van toepassing is.

4. By die toepassing van hierdie kennisgewing is eine kubieke meter gelyk aan een kiloliter.

G. J. KOTZÉ, Minister van Waterwese.
(18 Maart 1988)

KENNISGEWING 167 VAN 1988
ADMINISTRASIE: VOLKSRaad
DEPARTEMENT VAN LANDBOU EN WATervoorsienING

KENNISGEWING VAN VERGADERING VAN SKULDIE-SERS KRAAGTENS ARTIKEL 22 (1) VAN DIE WET OP LANDBOUKREDIET, 1966

Hierby word ’n vergadering van ondernemende appli- kante en sy skuldie-sers op die plek en datum hieronder ge- noem, belê, met die doel om skuldie-sers in staat te stel om hul vorderings teen die deputant te bewys en ’n skikkings- voorstel van die Landboukredietraad te oorweg.

J. H. RADEMEYER, Direkteur: Direktonaat Finansiele Bystand, Departement van Landbou en Watervoorsiening.

Aanroep van/Application by || Plek van byeenkoms/Place of meeting || Datum en tyd/Date and time
--- || --- || ---
Pieter Frederik Salverus Viljoen, Postbus/P.O. Box 1470, Klerksdorp, 2570 | Kantoor van die Landdros/Magistrate’s Office, Klerks- dorp | 13 Mei/May 1988 om/At 9:00.

(18 Maart 1988)/(18 March 1988)
Floods will be worse, towns told

Northern Cape residents along the lower Orange River are bracing themselves for floods expected to be worse than those that hit the towns last month.

The peak of the flooded Orange River is expected to reach these areas early next week.

The Department of Water Affairs said that at Upington, the level of the river was expected to rise to 10 m on Monday, half a metre higher than it was last month. Downstream at Kakamas, the level of the Orange River has risen to 11.5 m and police have set up an emergency centre in the town. The Department of Water Affairs said the peaks of the floodwater in the Orange and Vaal rivers would not converge.

The peak of the floodwater from the P K le Roux dam on the Orange River passed through Douglas on Thursday afternoon. However, the peak of the floodwater in the Vaal River has not yet reached the town.

Farmers in the northern Kalahari have been isolated again, with the swollen Kuruman river reaching a peak at Askham on Thursday night.

However, upstream at Van Zylsrus the level of the river has begun to drop. After heavy rains subsides occurred in the tarred road between Kuruman and Dametshoek, about 25 km from Kuruman. The road has been closed to heavy traffic.

Although the level of the Vaal River has dropped, the bridge outside Delportshoop is still closed and there is no access from the town to Lime Acres, Postmasburg and Kuruman.

Police have warned the public that live powerlines are drifting in the Vaal River between Bloemhof and Christians, posing a danger to motorboats.

All main railway lines in the Free State have been reopened, but speed restrictions are still in force at many places. Many of the damaged branch lines have also been reopened.

The road to the Natal Parks Board's Loteni resort in the Drakensberg area, washed away by the recent rain, has been reopened. The Injasuti and Vergelen resorts will be opened only next week, once repair work has been done on bridges and roads.

At the Olivershoek Pass, where mud and rockslides caused severe damage, repair work is still underway.

The levels of virtually all the dams on the Orange and Vaal Rivers have begun dropping, but indications are that at some places the flooding will be worse than last month.

The Department of Water Affairs said the Hendrik Verwoerd Dam was at just over 120 percent of capacity yesterday morning and the P K le Roux dam was at nearly 119 percent.

Washed away

The Vaal Dam is at just over 114 percent and the Bloemhof Dam at nearly 115 percent.

At Prieska in the Northern Cape, the water-flow of the Orange River was stable yesterday morning, but at Upington and Kakamas, it had started increasing.

The road between southern Botswana and Kasane at the border posts with Zimbabwe, Zambia and SWA/Namibia has been washed away.

Heavy vehicles travelling from Malawi to Johannesburg are stranded at Pandumutenga on the border between Zimbabwe and Botswana. Food shortages in northern Botswana are possible, should supplies from Francistown not reach their destination.

It was reported from Cape Town yesterday that Britstown, Carnarvon, De Aar, Fraserburg, Hopetown, Kenhardt, Kuruman, Springbok, Philippstown, Postmasburg, Richmond, Victoria West and Vryburg had been declared disaster areas by the State President. ---Saga.
The Minister of Environment and Development

- 30 June 1978

- [Signature]

- [Official Seal]

[Date: Monday 2nd March 1988]

[Stamp: [Stamp] Official}

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Business urged to help boost flood relief fund

Michael Chester

The cost of the devastation by the recent floods could run to more than R1 billion, according to a survey by the Association of Chambers of Commerce and Industry (Asscom).

Yesterday it issued a special appeal to the business community to help boost the Flood Disaster Relief Fund to a target of R20 million.

A rough assessment of preliminary information showed that — even at a conservative estimate — the cost of covering damage in the Free State, western Transvaal, northern Cape and Ladysmith was likely to be about R850 million.

If the worst scenario proves correct, the cost will soar above R1 billion — in line with estimates made by the Institute of Civil Engineers.

A precise estimate of the cost of damage to private homes, businesses and agricultural land is still a problem because of a number of imponderables, but official figures are expected soon.

DISTRIBUTION

An Asscom statement said: "The impact of the floods on agricultural output ... and the distribution network appears to be considerable. Insured damage estimates are about R160 million, leaving approximately R690 million uninsured damage to be paid for by the public and private sectors.

"The Minister of Finance has already announced that an amount of nearly R300 million has been appropriated in the 1988/89 Budget for flood relief."

"Quite clearly, further amounts will have to be found at a later stage, depending on a more precise assessment of damage in the Free State and northern Cape."

"It is, however, unlikely that full compensation for losses can be met."

The business community has already shown a "positive response" in the Flood Relief Fund, which is now more than R11 million. But Asscom has appealed for more support.

Contributions should be sent to: The Disaster Relief Fund, Private Bag X83, Pretoria 0001.
Assocom puts flood bill at R1bn

Damage caused by the recent floods could cost SA more than R1bn, Assocom said yesterday.

Conservatively estimated, flood damage in the Free State, western Transvaal, northern Cape and Ladysmith was about R850m.

Most of the damage was not insured — an estimated R650m — while insured damage was about R160m. However, Assocom stressed that the figures were "estimates" — made on the best data available to the association.

The government would probably have to increase the R300m set aside for flood relief, depending on a more precise assessment of the damage in the Free State and the northern Cape.
Insurance market 'lacks innovation'

HELENA PATTEN 21.4.2

THE greater portion of insurance business being placed overseas by SA companies underlined the capacity problem and lack of innovation in the local market, outgoing South African Risk and Insurance Management Association (Sarima) chairman Rob Apps said yesterday.

Sarima represents corporate insurance consumers in SA. Apps said more business was being placed with Lloyd's in London and other overseas insurers, because these markets offered better rates and more capacity than local insurers.

He said although some SA insurers recognised the need to give the corporate consumer a fairer deal, others had recently complained about the foreign competition and were encouraging the authorities to clamp down.
Assocom puts flood bill at R1bn

DAMAGE caused by the recent floods could cost SA more than R1bn, Assocom said yesterday.

Conservatively estimated, flood damage in the Free State, western Transvaal, northern Cape and Ladysmith was about R850m.

Most of the damage was not insured — an estimated R690m — while insured damage was about R160m. However, Assocom stressed that the figures were "guesstimates" — made on the best data available to the association.

Government would probably have to increase the R300m set aside for flood relief, depending on a more precise assessment of the damage in the Free State and the northern Cape.
Estimates of flood cost up

PRETORIA — The extent of the devastation caused by drought and floods in the past eight months was only now becoming clear, the SA Agricultural Union economist, Mr Koos du Toit, said yesterday.

Estimates made by Assocom and the SA Institute of Civil Engineers that the ultimate cost of the disaster could reach R1 billion were probably close to the mark, but it would be some time before an accurate assessment could be made.

Mr Du Toit said questionnaires had gone out to hundreds of farmers in the Free State, the Northern Cape and other affected parts of the country asking them to quantify damage on their farms. — DBC
PROKLAMASIES
van die
Staatspresident van die Republiek van Suid-Afrika

No. 45, 1988

VERKLARING VAN DIE OORSTROMINGS IN DIE LANDDRDSDISTRIK HARTSWATER IN NOORD-KAAPLAND, TOT 'N RAMP

Kragtens die bevoegdheid my verleken by artikel 26 van die Wet op Fondinsienseling, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die landdrosdistrik Hartswater onlangs getref het vir die doeleindes van genoemde Wet tot 'n ramp.

Gegoe onder my Hand en die Seel van die Republiek van Suid-Afrika te Kaapstad, op hede die Nege-en-twintigste dag van Februarie Eenduisend Negehonderd Agt-en-tagig.

P. W. BOTHA,
Staatspresident.
Op las van die Staatspresident-in-Kabinet:
W. A. VAN NIEKERK,
Minister van die Kabinet.

No. 46, 1988

VERKLARING VAN DIE OORSTROMINGS IN DIE LANDDRDSDISTRIK HAY EN HERBERT IN NOORD-KAAPLAND, TOT 'N RAMP

Kragtens die bevoegdheid my verleken by artikel 26 van die Wet op Fondinsienseling, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die landdrosdistrik Hay en Herbert onlangs getref het vir die doeleindes van genoemde Wet tot 'n ramp.

Gegoe onder my Hand en die Seel van die Republiek van Suid-Afrika te Kaapstad, op hede die Vierde dag van Maart Eenduisend Negehonderd Agt-en-tagig.

P. W. BOTHA,
Staatspresident.
Op las van die Staatspresident-in-Kabinet:
W. A. VAN NIEKERK,
Minister van die Kabinet.
HOUSE OF DEPUTIES

14.

HOUSE OF ASSEMBLY

2.

THE MINISTER OF NATIONAL HEALTH

3.

THE MINISTER OF HOME AFFAIRS

4.

THE MINISTER OF EDUCATION AND CULTURE

5.

THE MINISTER OF DEFENCE AND PUBLIC ORDER

6.

THE MINISTER OF FOREIGN AFFAIRS

7.

THE MINISTER OF FINANCE

8.

THE MINISTER OF LABOUR, SOCIAL SECURITY AND HUMAN RIGHTS

9.

THE MINISTER OF PUBLIC WORKS AND COMMUNICATION

10.

THE MINISTER OF JUSTICE

11.

THE MINISTER OF EDUCATION AND CULTURE

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THE MINISTER OF DEFENCE AND PUBLIC ORDER

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THE MINISTER OF NATIONAL HEALTH

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THE MINISTER OF DEFENCE AND PUBLIC ORDER

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THE MINISTER OF NATIONAL HEALTH

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THE MINISTER OF HOME AFFAIRS

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THE MINISTER OF EDUCATION AND CULTURE

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THE MINISTER OF DEFENCE AND PUBLIC ORDER
The Ministry of Food, Agriculture, and Rural Development

The Minister of Food, Agriculture, and Rural Development hereby announces that the Food, Agriculture, and Rural Development Act, 1998, has been passed by the Parliament of the Federation of Nigeria.

(1) The Act is enacted to improve the quality and quantity of food available in the country.

(2) The Act also seeks to enhance the productivity of agricultural land and the efficiency of rural development programs.

(3) The Act provides for the establishment of a Food, Agriculture, and Rural Development Commission to oversee the implementation of the provisions of the Act.

(4) The Commission is empowered to regulate the production, processing, and distribution of food and agricultural products.

(5) The Act also seeks to promote the development of rural areas and the improvement of the living standards of the rural population.

(6) The Act further provides for the provision of financial assistance to farmers and rural communities.

(7) The Act also seeks to protect the environment and promote sustainable agricultural practices.

(8) The Act is expected to contribute significantly to the economic development of the country and the betterment of the lives of its citizens.

(9) The Act shall come into force on the date of its publication in the Official Gazette.

(10) Any person or organization who contravenes any provision of the Act shall be liable to a fine of N100,000 and three years imprisonment.

(11) Any person who is aggrieved by any decision of the Commission may appeal to the Federal High Court.
Aid for farmers hurt by drought welcomed

Additional assistance for drought-hit summer crop farmers announced on Monday was welcomed by the South African Agricultural Union (SAAU) as "a step that would enable farmers who face sequestration, to stay on their lands and curb the depopulation of the platteland".

Speaking in the House of Assembly during the own affairs agriculture vote debate Agricultural Minister Greyling Wentzel announced that the one-off subsidy payment to farmers in those summer crop areas that he termed "emergency drought areas" would be a maximum of R100 per hectare for up to 400 hectares under dryland crops.

INTEREST SUBSIDY

Mr Wentzel said an interest subsidy, equivalent to 10 percentage points of the Land Bank’s interest rate on cash credit loans to agricultural co-operatives in respect of farmers’ carry-over debts for the 1988/89 season, would be paid.

A subsidy of 5.5 percentage points would be effective on the same basis in respect of overdue production loans with the agricultural Credit Board.

The Minister also announced that production loans from the agricultural Credit Board to qualifying farmers would increase from R75 000 to R100 000.

NEW MEASURES

SAAU president, Mr Kobus Jooste, said the new measures would improve the position of farmers in emergency areas and maintain the infrastructure of the platteland.

"The scheme is an effort to improve the cash flow of summer crop farmers and to finance their next yield. It would also maintain the communities on the platteland who are dependent on agriculture," Mr Jooste said.
Most money to E Cape water schemes

Boost for Amatola

from CHRIS FREIMOND

CAPE TOWN — Another R21.85 million has been allocated this year towards the development of the Amatola Regional Water Supply scheme.

The amount is just over 10 per cent of the R216.8 million allocated to the development of government water schemes throughout the country this year and is the third highest single allocation after the R31.7 m for the Slang River scheme and the R22.3 m for the Umgeni River scheme, both of which are in Natal.

The total estimated completion cost of the Amatola scheme is now R265.5 m of which R31.337 m was due to have been spent by the end of this month, with the latest R21.85 m allocation which was provided for in this year's main budget.

The original estimated cost of the scheme in 1981 was R71 m. Government water schemes in the Eastern Cape region have been allocated R67.53 m in the coming year.

This is more than any of the other seven development regions in the country.

The next highest is R54 m for Natal.

Apart from the Amatola scheme, projects in the eastern Cape, which will cost an estimated R1.09 billion to complete, include the Mossel Bay regional water supply scheme and a number of projects within the Orange River development project.

In his annual report tabled in parliament this week, the Director-General of Water Affairs, Mr D. G. Claassen, said a "highlight" of the year was the award of the canal contract of the Amatola scheme.

It was a highlight "in the sense that it was the first time that the entire specification and contract documents for work of this nature were drawn up and the construction undertaken by the private sector for the department".

Mr Claassen explained that government water schemes were waterworks such as dams, canals, pipelines, tunnels, pumping stations, purification works and other related works constructed separately or in a combination at government expense, in the general public interest for the bulk supply of water.
Daily Dispatch Reporter
EAST LONDON — There was no available surface water in the Queenstown area for irrigation purposes, the manager of the Eastern Cape Agricultural Union (ECAU), Mr Rory O’Moore, said yesterday.

He was reacting to a statement by the superintendant-general of the Department of Agriculture and Water Supply, Dr A. J. Heys, in his annual report tabled in parliament on Monday, that underground water in Queenstown and Sterkstroom was being over-exploited.

Mr O’Moore said the ECAU was concerned about the water supply situation in other parts of the Eastern Cape.

“There are no dams or any other open body of water that can be used for irrigation purposes or for livestock, with the result that farmers have to use borehole water.”

The chairman of the ECAU water affairs committee, and of the Regional Advisory Development Committee for Region D, Mr Johan Erasmus, who is also a member of the South African Agricultural Union water affairs committee, said there was extreme concern about the underground water levels in the Eastern Cape, “especially where people draw water for domestic purposes in areas like Graaff-Reinet”.

“The underground water table in this area has dropped from 45 metres to 90 metres below the ground surface.”

“Tthe extensive stock farmer it is vitally important for the underground water levels to remain high.”

“We have identified the Eastern Cape region as a poor water area — we have to rely mainly on impounded water from the Orange River Project (ORP), which extends to Port Elizabeth, for water supplies.”

“In the Queenstown area there is a major water problem for irrigation purposes, which is why underground water is being over-utilised.”

“There are two schemes in the Kloassmit River and the Black Kei River areas that are receiving our urgent attention.”

“Once these schemes are operational, it will make water available on the surface, thereby stopping the use of underground water.”

“The Kloassmit River Scheme (KRS) is acceptable for the Queenstown area and discussions to this effect with the Queenstown municipality have proved positive, as water from the KRS can be gravity-fed to the Queenstown area without the additional cost of pumping machinery.”

“The Sterkstroom area is too high for gravitational feed and thus water may have to be pumped up to the required levels.”

“Unfortunately the imported water from the ORP is limited and thus we have addressed a new water importation scheme from Transkei, using the Umzimkulu river with a potential of 3 000 million cubic metres of water a year.”

“One of the proposed water importation routes from the Umzimkulu river will go via Queenstown.”

“With normal rainfall the underground water level will rise, but with over-utilisation, the underground water level will be seriously affected.”

“The department of water affairs is conducting a survey throughout South Africa to establish exactly what level the underground water supply is in the country,” Mr Erasmus said.

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Staff at Home give ultimatum to trustees

Daily Dispatch Reporter
EAST LONDON — The staff of Khayalethemba Children’s Home in Mdantsane gave the home’s trustees, Mfane, a three-day deadline to meet the outgoing board of directors.

In its statement, the staff accused the managing director of Mfane, the Reverend A. Cloete, of failing to arrange a promised meeting between Khicane, the outgoing management board and the Ciskei Minister of Social Welfare and Pensions.

According to the statement, Mr Cloete had promised, two weeks ago, to arrange the meeting within ten days.

“The ten days was over last Friday and Mr Cloete has failed to keep his promise.”

Instead he wanted to ‘pop in’ for a brief visit on the ninth day to talk about a constructive future for the children’s home and nothing else.

“Our decision now is to give Mr Cloete three days from today to arrange the meeting with the management board members who resigned two weeks ago.”

The outgoing management board members are: the Reverend D. H. Odendaal, the Reverend B. Pitt, the Reverend L. Fourie, Mrs Matiyase, Mr Hanl, Mr Nduna and Mrs G. H. Loresa.

The Mfane members are: the Reverend G. E. G. Louw; the Rev A. Cloete; Mr T. Bruunhoud; Mr L. Thune; the Ciskei Minister of Social Welfare and Pensions, Mr N. Tapa; the director-general, Mr Mle, and all the staff members at Khayalethemba Children’s Home.

“The meeting can take place at any time during the next three days. If it does not take place with all these people we will take further action.”

“However if anyone is missing from any of the parties involved in the discussions we are not prepared to talk.”

“We want to have a reconciliation with all parties concerned and hope that we can all sit down and talk as Christians.”

Mr Cloete said yesterday that he had not received any communication from the staff at Khayalethemba and, therefore, declined to comment.

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What’s an over Easter
SA looks at R1-bn bill in floods’ wake

By David Braun
Political Correspondent
CAPE TOWN — The recent floods in the Free State and northern Cape would cost South Africa about R555 million, National Health Minister Dr Willie van Niekerk announced yesterday.

Together with the R400 million last year’s Natal floods had cost, this meant an unexpected expenditure of almost R1 billion for the disaster, he told a press conference in Cape Town.

Dr van Niekerk, chairman of the Cabinet committee in charge of flood relief, said R452 million of the total bill would have to be met in the current financial year.

Of this amount, R55 million could be met by the various departments from within their normal budgets. The rest would have to come from the Treasury.

The total damage to roads and bridges was R182 million, he said.

Dr van Niekerk also announced that the Government had given the green light to a special job creation project in the flood regions. Labourers would earn R4 a day helping local authorities clear up the damage.

The Minister said the public had given generously to the national disaster fund, contributing R7.5 million between September last year and February 22 this year, and a further R13.5 million since February 22.

This amount was not enough — the fund had already paid out R25 million in Natal — and the Government would have to make good the eventual shortfall, he said.

Other points made at the press conference included:

- Damage to the N1 road between Cape Town and Johannesburg will cost close on R3 million to repair.
- Other road damage is estimated at R16 million in the Free State, R15 million in the Cape and R15 million in the Transvaal.
- The floods cost the agricultural sector R357 million — R242 million in damage to agricultural infrastructure and R115 million in personal losses to farmers.
- The Government is to compensate farmers for the loss of livestock on the basis of a formula which will enable farmers to acquire “core herds” from which they can again build up their operations.
- The damage to waterworks is estimated at R43 million.
- Positive aspects of the floods include the filling of the dams, and good prospects for the recovery of vast tracts of veld which were receding rapidly because of years of drought.
Flood damage repairs to cost R1bn — minister

Political Correspondent

CAPE TOWN — The floods in the past six months had caused destruction that would cost almost R1 billion to repair, the Minister of National Health and Welfare, Dr Willie van Niekerk, said yesterday.

While the government accepted certain responsibilities, not all damage costs could be met by the government or the Disaster Relief Fund.

However, Dr Van Niekerk had high praise for the public which had donated R21 million to the fund in the past few months.

He said the most recent floods in the northern Cape and Free State had caused an estimated R547 million damage, while the Natal flood debt was about R400 million.

The agricultural sector had suffered most in the recent floods — R357 million — R242 million of which was to agricultural infrastructure which the government would meet.

However R115 million in claims would have to be submitted to the Relief Fund for determination of ex gratia payments, which ultimately would have to be met by the government.

Government had had to move quickly to establish the extent of the damage.

Having done this it would have to inform the Minister of Finance, Mr Barend du Plessis, to see how repair work could be financed.

The deputy Minister of Transport, Mr Myburgh Streicher, said Sats had suffered heavy damages, R12.3 million in the Free State and R7.1m in the northern Cape.

The damage estimates did not include loss of earnings which ran into millions of rand.

However, just about all lines were operating normally again.

Dr Van Niekerk also said that the floods had driven people to the larger towns where they were out of work and the government had decided to employ them in clearing up operations at R4 a day.

"It is important to give them something to do and give them cash in the hand," he said.
Staatskoerant
Government Gazette

Vol. 273 Pretoria, 31 March 1988 No. 11239

PROKLAMASIES

van die

Staatspresident van die Republiek van Suid-Afrika

No. 36, 1988

VERKLARING VAN OORSTROMINGS IN SEKERE LANDDRODISTRIKTE IN DIE ORANJE-VRYSTAAT TOT 'N RAMP

Kragtens die bevoegdheid my verleen by artikel 26 van die Wet op Fondsinsamelings, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die landdrosdistrikte in die Bylae genoem onlangs getref het vir die doeleindes van genoemde Wet tot 'n ramp.

Gegee onder my hand en die Seel van die Republiek van Suid-Afrika te Kaapstad, op hede die Sestiende dag van Maart Eenduwend Negenderd Agri-en-Tagig.

P. W. BOTHA,
Staatspresident.

Op las van die Staatspresident-in-Kabinet:

W. A. VAN NIEKERK,
Minister van die Kabinet.

BYLAE


No. 64, 1988

VERKLARING VAN OORSTROMINGS IN DIE LANDDRODISTRIK WITZIESHOEK IN QWAQWA TOT 'N RAMP

Kragtens die bevoegdheid, my verleen by artikel 26 van die Wet op Fondsinsamelings, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstromings wat die landdrosdistrik Witzieshoek onlangs getref het vir die doeleindes van genoemde Wet tot 'n ramp.

801—A 11239—1

PROCLAMATIONS

by the

State President of the Republic of South Africa

No. 63, 1988

DECLARATION OF THE FLOODS IN CERTAIN MAGISTERIAL DISTRICTS IN THE ORANGE FREE STATE TO BE A DISASTER

Under the powers vested in me by section 26 of the Fundraising Act, 1978 (Act 107 of 1978), I hereby declare the floods which recently hit the magisterial districts mentioned in the Schedule to be a disaster for the purposes of the said Act.

Given under my hand and the Seal of the Republic of South Africa at Cape Town this Sixteenth day of March, One thousand Nine hundred and Eighty-eight.

P. W. BOTHA,
State President.

By Order of the State President-in-Cabinet:

W. A. VAN NIEKERK,
Minister of the Cabinet.

SCHEDULE


No. 64, 1988

DECLARATION OF THE FLOODS IN THE MAGISTERIAL DISTRICT OF WITZIESHOEK IN QWAQWA TO BE A DISASTER

Under the powers vested in me by section 26 of the Fundraising Act, 1978 (Act 107 of 1978), I hereby declare the floods which recently hit the Magisterial District of Witzieshoek to be a disaster for the purposes of the said Act.
ENVIRONMENT

APRIL - DECEMBER 1988
GRAHAMSTOWN — Trying for norms such as reticulated water, waterborne sewerage and waste disposal in the South African context would cost a tremendous amount of money, said a Grahamstown city councillor and representative on the Algoa Regional Services Council (ARSC), Dr Brian la Trobe.

“Every home in the Rini townships had waterborne sewerage it would cost R10 million for sewerage works to cope with the effluent,” Dr La Trobe said.

“Water from the R30 m Lower Fish River scheme would cost another R22 m to bring to the city.

“For this we should pay R3 a kilolitre. It will have to be subsidised and this money could come out of your pockets and mine,” he said.

“High cost of piped water, sewerage, for Rini underlined

“At the moment black residents are using about five litres of water a day,” Dr La Trobe said.

“Yet during recent water shortages whites have had difficulty trying to keep their consumption down to 12 kilolitres of water a month.

“The Eastern Cape has an endemic problem with droughts. The rivers flow periodically and the quality of underground water is dubious and springs dry up,” Dr La Trobe said.

Grahamstown now had 70 boreholes but not one borehole had potable water.

“So our water must be brought from outside. Hence the efforts to bring Orange River water down the Fish,” he said.

“This also presented problems because somewhere between Cradock and the Lower Fish water was picking up increasing amounts of salts.

“Bedford, with a population of 11 000, relied on three springs for its water supply. To upgrade these would cost R1.7 m.

“Adelaide was looking to a water scheme from the Koonsap River. Port Beaufort was looking for an increased water supply from the Kat River while the Albany Coast Water Board was supplying dune water to Bushman’s River and Kenton-on-Sea.

“Progress in these burgeoning coastal resorts will depend on an adequate water supply,” he said.

“A Bushman’s River scheme has been mooted as a new supply but this could cost twice as much as water from the Lower Fish.”

“The R6.5 m Sarel Hayward dam at Port Alfred had no catchment area and depended on water pumped from the Kowie River.

“This was subsidised by the Department of Water Affairs to an amount of R2 m, but Port Alfred ratepayers must find the money to service a R4.5 m loan or get the money from the government or the ARSC,” Dr La Trobe said.
Big boys move in on Highlands scheme

By Ian Smith

WORK for SA engineers and construction companies will begin to flow soon from the long-awaited Lesotho Highlands water scheme.

International contractors are establishing a presence in SA and at least two banks, Nedbank and First National, have linked up with foreign partners in bidding for the financial syndication of the project.

However, UK banks Morgan Grenfell & Partners and Standard Chartered Merchant Bank are said to be front-runners.

The Development Bank of Southern Africa signed agreements this week with the Lesotho Highlands Development Authority for three loans totalling R126.6-million for the construction of the Katse bridge and the southern and northern access roads.

Estimated cost for the three projects is R141.8-million, of which the Lesotho Government has contributed R6.9-million and the SA Government R4.8-million.

The first loan of R51.6-million will be used for the construction of Katse bridge, a key element in access to siteworks for Phase 1 of the project.

Two other loans of R19.5-million and R100-million will go to the cost of the access roads.

Chief executive of the Lesotho Highlands Development Authority, Masupha Sole, is confident that work on the northern access road will begin on schedule in June.

The loan agreement, he says, will help to remove doubts about the project. It represents strong evidence that the scheme will go ahead as planned.
Poisons could cost millions

TOXIC waste has serious implications for SA manufacturers.

If the problem is not handled properly, they could lose millions ofrand, Price Forbes Federale Volkskas (PFV) managing director, Adrian Leighton-Morris.

He says disasters such as the Bhopal gas and Texas oil refinery acid leaks have led to a reassessment of liability insurance for environmental pollution.

"The legal implications are potentially enormous and often the dangers themselves are not clear.

"Manufacturers must identify their toxic risks exposure because both the insurance and market capacity are limited. Premiums are expensive."

A risk management programme which monitors worldwide technological developments in combating toxic emissions and pollution must be implemented, says Mr Leighton-Morris.

A special cover called environmental impairment liability (EIL) is now available.

"One large liability claim for damage caused by acid rain has been filed in SA, and with environmental awareness and concern at increasingly high levels, it could be the first of many," says Mr Leighton-Morris.

Acid rain was recorded in game reserves in Natal last year, and resulted in the death of millions of fish.
World contenders for water scheme

JOHANNESBURG — The international civil engineering community is flocking to South Africa in an attempt to win multi-million rand sections of the R4.2 billion Lesotho Highlands Water Scheme contract.

Among the locally-based companies in the running are Alfred McAlpine, Basil Read, Concor Construction, Grinaker—Group, Five Roads and Murray & Roberts.

The strong international presence, here despite sanctions and disinvestment, includes representatives from the United States, the United Kingdom, West German and French companies.

Engineers, aware of international opinion, have been keeping a low profile both in South Africa and Lesotho.

"Governments may attempt to slap bans on sports teams coming out here but when it comes to the bottom line — cash — they tend to keep quiet."

"My government knows we are here. It knows we are working in close co-operation with South Africa and many of its engineers," said one representative who did not wish to be identified.

The Joint Permanent Technical Commission does not foresee any problems should political changes occur in either of the two countries.

A Lesotho Highlands Development Authority spokesman, Mr Moryane Moleleki, said: “We are confident that (the project) will be implemented, whatever happens on the political front.

Finance for the project as a whole has already been secured on the basis of the three-year feasibility study, completed in 1986.”

Investors include the two countries concerned, the World Bank and the Committee for the European Economic Community. — DDC
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CAPE TOWN — SA is increasingly having to import certain agricultural products which previously it used to obtain locally or even export.

Shortages are regularly occurring in respect of oil seeds, cotton, dairy products, meat and wheat.

Replies to questions put to him in Parliament, Agricultural Minister Greyling Wentzel noted that last year permits had to be granted for the importation of 11,513 tons of powdered milk, 4,664 tons of cheddar cheese and 976 tons of exotic cheese. Butter to the value of R4,5m was also imported.

Permits were also issued for the importation of 26,804 tons of beef, lamb, mutton and pork and 7,607 tons of wheat.

GERALD REILLY reports from Pretoria that agriculture authorities said the imports were valued at tens of millions of rand.

A spokesman for Wentzel said the only serious shortage this year would be red meat and substantial amounts would have to be imported.

However, SA would continue to import products in which it had never been self-sufficient.

These included coffee, tea, rice and cocoa beans.

An SAAU spokesman said last year's imports were “extraordinary” and resulted from shortages caused by severe drought.

In a normal year — and even in an abnormal year like last year — the agricultural industry was a net exporter.

Although there was a blackout on information on the value of farm exports in 1984 — the latest available figures — the value of processed products exported amounted to R1,05bn, and of non-processed products R786,6m.
Should the Locusts be Left Alone?
(b) Efforts are made continually to fill existing
vacancies by means of recruiting and
selection within the framework of available
funds. It is constantly endeavoured to
increase existing efficiency as measured to
accepted norms and special attention is
given to the retention of manpower.

Self-governing territories: amounts invested in
industrial sector

444. Mr P G SOAL asked the Minister of Educa-
tion and Development Aid:

<table>
<thead>
<tr>
<th>Investment in industrial sector</th>
<th>Total amount invested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) (i)</td>
</tr>
<tr>
<td>Gazankulu</td>
<td>Nil</td>
</tr>
<tr>
<td>KaNgwane</td>
<td>Nil</td>
</tr>
<tr>
<td>KwaNdebele</td>
<td>Nil</td>
</tr>
<tr>
<td>KwaZulu</td>
<td>1</td>
</tr>
<tr>
<td>Lebowa</td>
<td>R2 100 000</td>
</tr>
<tr>
<td>Qwaqwa</td>
<td>R29 870 000</td>
</tr>
</tbody>
</table>

1) No annualised figures for financial years are available. Accumulative figure is R40 million as at 31 March 1987.
2) No annualised figures for financial years are available. Accumulative figure is R363.6 million as at 31 March 1987.

Officials involved in resettlements

446. Mr P G SOAL asked the Minister of Educa-
tion and Development Aid:

Whether any officials attached to his Depart-
ment helped to resettle anyone in 1987; if so,
(a) on what dates, (b) from what specified
areas were persons moved, (c) in what speci-
fied areas were they resettled, (d) why was it
necessary to resettle them and (e) how many
persons were resettled in each case?

The MINISTER OF EDUCATION AND
DEVELOPMENT AID:

Yes.

(a) On a continuous basis except as indicated
in paragraph (b).

(b) (i) Moutse, KwaNdebele
(ii) Kwaggafontein, KwaNdebele
(iii) Inanda Dam Area, Nwedwe, KwaZulu
(iv) Frankfort, Ciskei
(v) Bethanie, Bophuthatswana (9-15 September 1987)
(vi) Driffontein, District Wakkerstroom
(vii) Ou-Kakie, District Brits
(viii) Varkfontein, District Benoni (3-13 November 1987).

(c) (i) Elandsdraai, District Potgieters-
rust
(ii) Verena, KwaNdebele
(iii) Ntuzuma Town, Inanda and
elsewhere in the tribal area, District
Nwedwe, Langefontein, District Pinetown and Rietval-
lei, District Camperdown
(iv) Stihope, Ciskei
(v) Onderstepoort, District Rusten-
burg
(vi) Roodekrans, District Wakker-
stroom
(vii) Letlabile, District Brits
(viii) Daveyton Town, District Ben-
oni.

(d) (i) On the request of the persons
themselves
(ii) On request of the KwaNdebele
Government
(iii) Because of the building of the
Inanda dam — the houses of the
people were situated within the
dam area.

(iv) On request of the Ciskei Gov-
ernment and the people con-
cerned
(v) On request of the splinter
group of the Magopa Community
(vi) The building of the Heshep-
ha dam — the houses of the
people were situated within the
dam area.

(vii) On request of the Department
Development Planning — the
facilities of the Department of
Development Aid were made
available
(viii) On request of the Provincial
Administration, Transvaal — the
facilities of the Department of
Development Aid were made
available.

(v) (i) 69 families
(ii) 121 families
(iii) 78 families, 93 families, 63 fami-
lies and 9 families
(iv) 468 families
(v) 178 families
(vi) 115 families
(vii) 208 families
(vii) 426 families

Upgrading of roads in Black areas: amount bud-
geted

506. Mr P G SOAL asked the Minister of Educa-
tion and Development Aid:

What total amount was budgeted for the up-
grading of roads in Black areas falling under his
Department for the 1987/88 financial year?

The MINISTER OF EDUCATION AND
DEVELOPMENT AID:

R105 655 000, which includes amounts bud-
geted for the construction or upgrading of
bridges.

Christmas cards sent out

596. Mr P G SOAL asked the Minister of Na-
tional Health and Population Development:

(1) Whether (a) he and/or (b) his Department
sent out Christmas cards in 1987; if so, (i)
what total number of cards was printed, (ii)
to whom they were sent, (iii) what was
the total cost of producing and distributing
these cards, and (iv) who was responsible
for printing them, in each case;

(2) whether postage stamps were used to send
out these Christmas cards; if not, how were
they distributed?

The MINISTER OF NATIONAL HEALTH
AND POPULATION DEVELOPMENT:

(1) (a) Yes:
(i) 2 000.
(ii) NP Members and members of
the other two Houses of Parlia-
ment, Provincial Administrators,
MEC's, Rectors and Chan-
cellors of Universities, Indepen-
dent States, Commissioners
General, SWA Cabinet Minis-
ters, Black City Councillors and
Mayors, Constitution, Minis-
terial Representatives, members
of the President's Council, SA
Medical and Dental Council, SA
Pharmaceutical Board, family
and friends.

(iii) R6 223.17 (printing), R130,40
(postage).
(iv) Government Printer

(b) Yes
(i) 250
(ii) State Departments, Associa-
tions, Organisations.

(iii) R127.00 (printing).
(iv) Government Printer.

Postage stamps were used to send out
Christmas cards to family, friends and
constituency, the rest were sent out under
the official stamp of the Department.

Natal Flood Relief Fund: amount allocated

644. Mr M J ELLIS asked the Minister of Na-
tional Health and Population Development:

(1) (a) What was the total amount allocated
to the Natal Flood Relief Fund in 1987, (b)
how many claims for such relief had been
received by his Department as at the latest
specified date for which information is
available, (c) what was the total value of
these claims, (d) what total amount had
been paid out from this fund as at that date
and (e) when is it anticipated that the final
claims will be settled;

(2) whether a percentage formula is being
used to calculate payments in respect of
these claims; if not, what formula is being used; if so, what is the percentage formula?

The MINISTER OF NATIONAL HEALTH AND POPULATION DEVELOPMENT:

(1) (a) There is no such fund as the Natal Flood Relief Fund. The fund established in terms of the Fund-raising Act, 1978, for victims of all declared disasters, is the Disaster Relief Fund. Attention is invited to Chapter II of the said Act.

(b) 54 000, as at 25 February 1988.

(c) No record is kept of the amounts applied for. Figure could only be furnished if all applications are scrutinised which is impossible.

(d) R17 000 000

(e) In respect of farmers where the closing date was 29 February 1988 it is hoped that payments would be finalised within three months. In respect of other cases it is anticipated that payments would be finalised within two months.

(2) No. Payments are made in accordance with guidelines and bases approved by the Board of the Disaster Relief Fund and within the limits of the available funds.

Five most junior posts: salary scales

700. Mr C J DERBY-LEWIS asked the Minister of National Health and Population Development:

(a) What are the salary scales attached to each of the five most junior posts in his Department,

(b) how many of these posts are filled by Whites, Coloureds, Indians and Blacks respectively, and (c) in respect of what date is this information furnished?

The MINISTER OF NATIONAL HEALTH AND POPULATION DEVELOPMENT:

(4) Grading of the five most junior post classes in the Department:

Housekeeper
    R5 049 x 348 - 6 789 x 381 - 7 932

Housemother
    R5 049 x 348 - 6 789 x 381 - 7 932

Linen Supervisor
    R5 049 x 348 - 6 789 x 381 - 7 932

Linen Assistant
    R5 049 x 348 - 6 789 x 381 - 7 932

Seamstress
    R5 049 x 348 - 6 789 x 381 - 7 932

(a) The present limit is R1 080 per person per annum for the maximum pension and R2 616 per person per annum for the minimum pension.

(b) (i) The new limit will be adjusted with the same amount of the increase in social pensions, if increases are granted.

(ii) The new limit will be implemented as from the same date on which social pensions are increased.

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Families trapped after heavy rains

BLOEMFONTEIN
Some 80 families on the Waterbron smallholdings, west of here, have been trapped following heavy rains.

Thirty three millimetres of rain have fallen in the area since yesterday morning, bringing the total rainfall figure for the month to 103 mm.

Several streets in the area, which have not been repaired since the floods, had to be closed to pedestrians late yesterday afternoon.

Water is also seeping into some houses on smallholdings at Bainsville close to Waterbron.

More reports of rain have been received from several places in the region. The highest rainfall figures in the Free State (35 mm) were recorded at Hertzogville and Bainsville.

A further 33 mm was measured at Boschkop yesterday, bringing the total rainfall figure to 65 mm.

In Bloemfontein 33 mm was recorded and Gersfontein had 28 mm.

Gosnold had 22 mm, Brandfort and Vryburg 10 mm, and Reivilo in the Northern Cape recorded 25 mm. — Sapa
Flooded farms given relief

BLOEMFONTEIN — A cheque for R75 000 and the loan of three front-end loaders valued at R750 000 was given to the Free State Agricultural Union by a large earthmoving equipment company to aid farmers who have suffered damage in the recent floods.

The cash is to be used to assist farmers and their labourers who "lost everything" to start again, while the front-end loaders will be loaned free of charge, excluding fuel, to farmers who need to rebuild dams, remove sludge and to fill washaways.

The loan of the machines will mean a tremendous saving to farmers who would otherwise have had to hire or purchase them.

Mr Barry Strydom, managing director of Case International, said when he made the presentation to Mr Isaac Cronje, president of the Free State Agricultural Union, that his company was in partnership with the farmer.

"We have been doing business with the farmers in the Free State for many years.

"Although the tractor market is also under strain at present we see it as our duty to assist farmers in this disaster.

"There are many farmers and labourers who have lost everything and we know that farmers who suffered heavy losses would like to do something for their people. We trust that the R75 000 will bring some relief," Mr Strydom said.

— Sapa
Connection fees rise

EAST LONDON — The fees payable for sewer connections here will be increased with effect from July.

Council approved last night that 100 mm sewer connection fees would increase from R94 to R130 and from R125 to R185 for 150 mm sewer connections.

Council also heard that the proposed amendment to the drainage by-law for the increase was simply to keep abreast "with escalating costs". — DDR
Randburg holds down water rate

Although Rand Water Board has increased water tariffs by an average of 12 percent, Randburg Town Council is raising its tariffs by only 3.2 percent.

A council spokesman said the new tariffs would only be reflected in the June accounts.

"Randburg has attempted to persuade the Rand Water Board to increase the water tariffs of all municipalities by the same amount.

"It's encouraging to see that the board has to a large degree followed this policy."

The spokesman added that unless things changed drastically during the current financial year the tariffs would not be increased again.
Struggling to be born in SA, Environmental Law is still

Proposals for the proposed new Environmental Conservation Act were surveyed by legal officer DR DENIS COWEN in his keynote address at South Africa's first Environmental Law conference last weekend. Some exceptions were noted.

Although it's often said that:

"The common law of South Africa, like the common law of England, is still

More concerned about substantive law - which aims to define the nature of things - than about procedural law - which is concerned with the process of defining the nature of things. The substantive law is the content of the law; the procedural law is the process by which it is applied. In present-day society, there is an increasing emphasis on the procedural aspects of the law, particularly in the areas of environmental law and human rights. This is reflected in the increasing use of judicial review and other forms of legal challenge to government actions, as well as in the greater emphasis on community participation in the decision-making process.

The position of the environmental lawyer is an important one, as they must be able to balance the interests of the environment with the rights of individuals and communities. This requires a deep understanding of the law, as well as a commitment to promoting sustainable development.

The proposals for the new Environmental Conservation Act highlight the need for a more comprehensive approach to environmental protection. This includes the need for better enforcement of existing laws, as well as the development of new laws to address emerging issues. The proposals also emphasize the importance of public participation in the decision-making process, as well as the need to ensure that the rights of individuals are protected.

The proposals also reflect the growing awareness of the need for a more holistic approach to environmental protection, which takes into account the social, economic, and cultural dimensions of environmental problems. This includes the need for a more integrated approach to environmental, social, and economic planning, as well as the need to address the root causes of environmental degradation.

In conclusion, the proposals for the new Environmental Conservation Act are a welcome step forward in the development of environmental law in South Africa. They reflect a growing awareness of the need for a more comprehensive and integrated approach to environmental protection, and they provide a strong foundation for future developments in this area.
Workers stole flood victims' aid

By CHRIS STEYN

SEVENTY-THREE municipal employees stole a "truck-load full" of emergency supplies — including food and blankets — which were intended for flood victims at Upington.

This was confirmed to the Cape Times yesterday by Upington's district commandant, Major Bertie Viviers, who disclosed details of the police investigation which resulted in the arrest of 74 municipal officials.

Seventy-three of those arrested were found guilty in the local Magistrate's Court this week of unlawfully appropriating emergency supplies intended for flood victims. They all pleaded guilty, and the court imputed fines — ranging between R100 and R200 each — to be paid to the Disaster Relief Fund.

A 74th accused who also admitted guilt will appear in court again on May 25.

The police investigation was started when the municipality received information that one employee had appropriated some flood relief supplies.

Major Viviers said police initially questioned only one suspect. However, he informed on a couple of accomplices, who in turn gave detectives the names of dozens of other people involved in the theft.

Major Viviers said "quite a lot" of supplies were stolen. It was difficult to estimate the exact value of the goods, but police recovered at least a "truck-load full" of supplies. These included food, blankets, sleeping mats and clothing.

The acting town clerk of Upington, Mr Gerhard Coetsee, told the Cape Times yesterday that the town council was considering disciplinary steps against the convicted employees. A council meeting to decide their future is expected to be held soon.

Describing the incident as "very unfortunate", Mr Coetsee said the guilty employees were not people with "a reputation for dishonesty." "They did not try to enrich themselves. Many of them were just negligent," he said.

Mr Coetsee said the thefts occurred when employees were moving flood relief supplies from a full store to a much bigger store.

Though he praised the police for their "good work", Mr Coetsee said the municipality had not expected so many arrests.

3 killed 2

Baby costs health
Transvaal drought is broken at last

Farmers in north smile at the water

Transvaal farmers are relieved at recent rains and it seems as if the drought has finally been broken, the Transvaal Agricultural Union said in a statement yesterday.

Western Transvaal farmers have high hopes of good farming now. Most dams are full and large crops are expected, the statement said. Northern and central Transvaal farmers have also benefited.

The TAU said: “Things are looking up in the northern Transvaal, although it will take a couple of years before grazing is re-established. Livestock remains a problem through lack of funds and availability.”

Dams on average have more water than last year, though in some parts of the northern Transvaal there has been no rain and there farmers are still struggling.

The Department of Environmental Affairs also confirmed that the drought in the far northern Transvaal has been broken.

In the Letaba district there is excitement as the level of the Fanie Botha Dam at Tzaneen continues to rise.

There have been stringent irrigation restrictions in force in the area for five years. The dam reached a low 25 percent level in 1987. But it has risen dramatically to 80 percent since mid-February.

FARMERS ARE REJOICING

The picturesque Ebenezer Dam near Haenertsburg, which provides Pietersburg with 30 percent of its water is full — so is the Naude Dam, Pietersburg's main source.

While many parts of South Africa have been lashed by floods, the far north has had good rains without much damage. Farmers, industrialists and conservationists are rejoicing.

Even the normally arid Messina district in the extreme north is boasting its best grazing conditions in a decade. — Sapa and Northern Transvaal Bureau.
Draft Bill a letdown for planners

By James Clarke

One of the biggest disappointments in the draft Environment Conservation Bill, as far as the planning professions are concerned, is the way it ignores urban areas.

It is explicit on nature reserves, practically defining the birds and the bees, but it is dismissive of city environments where most South Africans live.

At a panel discussion of the Transvaal Institute of Architects in Johannesburg a few days ago, architect Mr. Bannie Britz was critical of the Bill's omission and of its failure to get down to grass roots level.

Many planners and architects feel, as Mr. Britz does, that local authorities are not handling urban environments at all well and need direction. Johannesburg, for instance, is losing more and more open space to ad hoc planning moves — and still has no clear idea of the type of city it is trying to achieve.

Mr. Britz advocates breaking big cities up into smaller local authorities — that way each could field a good team of essentially local councillors who would be jealous of their own area's integrity and quality.

"Look at Munich," Mr. Britz said — Munich, the relaxed and attractive Bavarian city which planners throughout the world tend to hold aloft as a shining example of innovative and humanistic urban planning.

"In Munich", said Mr. Britz, "is broken up into small districts in which two people — one appointed and one elected — examine every piece of legislation which might affect that district."

"In Munich municipal approval is needed to chop down a tree — even in your own garden."

He suggested that the South African tends more to discourage town and cities in achieving an integrated design. He gave an interesting example: if the German government wants to erect a post office, say, it has to ask the local authority where it can be sited. By contrast, the South African Government, as well as the province which nowadays is absolutely unanswerable for its actions, is not obliged to even discuss the matter with the local authority or to take any notice of local building by-laws.

"The town of George", said Mr. Britz, "was once a beautiful place but now has an ugly post office tower in the centre of it."

"The draft Bill may be full of good intentions but participation at grass roots level has been left out."
Move to control vehicles on beaches welcomed

Daily Dispatch Reporter

EAST LONDON — Conservationists and local administrators have welcomed an announcement by the administrator of the Cape, Mr. Gene Louw, that the government is considering a national system to control vehicles on the country's beaches.

Mr. Louw said the move followed an intensive investigation by the Department of Environment Affairs, together with the four provincial administrations.

The director of the Wildlife Society, Mr. Keith Cooper, has been pushing for control measures for eight years.

"Obviously we are very happy that something is being done at last," he said.

"There are many legitimate users of the beach, but the root of the problem lies in the country's rapidly increasing population."

Beaches on both sides of East London under the jurisdiction of the Divisional Council of Kafraria are already closed to vehicular traffic.

A council spokesman said Mr. Louw's announcement would reinforce the council's decision to control the use of vehicles, which was taken three years ago and applied then to the eastern beaches.

He said officials had had difficulty enforcing the ban because the council only had jurisdiction over the area between the high water mark and a line 200 m below the low water mark.

The land above the high water mark is controlled by the Department of Water Affairs.

The divisional council, which controls all beaches to the east of the city from the Quinnena River mouth to Morgan's Bay, excluding the Gonubie municipal area, is in the process of enforcing a similar ban on beaches between Leeches Bay and the Chulumna River.

The spokesman said the council had resolved that it would consider applications from the Border Rock and Surf Club to allow a controlled number of vehicles to operate on the beaches during fishing competitions.

However, he said no permits would be issued following private applications.
HOUSE OF ASSEMBLY

1. Mr P G SOAL asked the Minister of Environment Affairs:

(1) What is the attitude of the South African Government to ozone depletion;
(2) whether any steps are being taken by the State to control the (a) consumption and (b) production of chemicals and/or products which cause ozone depletion; if so, what steps;
(3) whether any steps are being taken by the State to increase public awareness of ozone depletion; if not, why not; if so, what steps?

The MINISTER OF ENVIRONMENT AFFAIRS:

(1) The South African Government is concerned about the allegations that certain man-made substances may be depleting the protective ozone layer. The latest scientific evidence is continuously being examined in order to assess whether and to what extent such depletion is occurring and whether it represents a threat to the environment.

(2) (a) and (b) No. Should scientific evidence indicate that certain man-made substances may be depleting the ozone layer to the detriment of the environment, the Government would consider according to the Vienna Convention for the Protection of the Ozone Layer and adopting the Montreal Protocol on Chlorofluorocarbons. This Protocol calls for a phased reduction in the production and use of these substances. In order to adequately substantiate a decision on according to the Convention and adopting the Protocol, evidence is presently being collected to assess the economic and strategic implications of such a phased reduction and the local availability of alternative substances.

(3) No. As considerable uncertainties still exist regarding depletion of the ozone layer and the role of certain man-made substances in this process, it is considered not to be in public interest to take steps which could turn out to be premature due to inadequate substantiation.

2. Mr S S VAN DER MERWE asked the Minister of Defence:

(1) Whether the South African Defence Force has any information on a certain organization, the name of which has been furnished to the Defence Force for the purpose of the Minister’s reply; if so, (a) what is the name of the organization concerned;
(2) whether the Defence Force is in any way involved in rendering (a) financial, and (b) any other forms of assistance to this organization; if so, (i) what was the amount of this financial assistance during the latest specified period of 12 months for which information is available and (ii) what are the particulars of the other forms of assistance so rendered?

The DEPUTY MINISTER OF DEFENCE:

(1) and (2) I have fully explained the attitude of the SA Defence Force and myself with regard to the countering of subversion and propaganda actions against the Republic and the Security Forces on numerous occasions in this House. I therefore find it most unfortunate that the hon. member is apparently determined to question and cast suspicion on any organization or publication which seemingly supports such counter actions. I am not prepared to support him in this. He can, however, rest assured that the SA Defence Force cannot spend a single cent without it being audited by the Auditor-General. If he suspects or wishes to imply that any money has been spent in an improper manner he is welcome to refer the matter to the Advocate-General.

3. Mr M J ELLIS asked the Minister of Education and Development Aid:

Recreational resorts/out-of-school sports facilities planned
(2) whether he will make a statement on the
efficacy of this control?

The MINISTER OF AGRICULTURE:
(1) R5 132 000 for the 12 months ending
(2) No, but I may mention that the control is
done effectively in cases where the pres-
ence of locusts is reported timely by the
land users.

Area of Suurbekom agricultural holdings: Police
investigation

*10. Mr S C JACOBS asked the Minister of Law
and Order:
(1) Whether a Police investigation took place
in the area of the Suurbekom agricultural
holdings on or about 27 March 1988; if so,
(2) whether, as a result of this investigation, it
was found that any of these agricultural
holdings were occupied by Blacks (a) as
landowners, (b) as tenants and (c) in any
other specified capacities; if so, (i) what
are the relevant details, (ii) how many of
these agricultural holdings are occupied in
this way and (iii)(aa) for which population
group has the area concerned been pro-
claimed and (bb) in terms of what statu-
atory provisions may these Blacks live there;
(3) whether the result of the Police
investigation was made known to the (a) town
council and (b) public prosecutor in
Westonaria; if so, in each case;
(4) whether a docket on the matter was (a)
opened and (b) brought to the attention of
the Attorney-General, if so, when, in each
case;
(5) whether any steps are being considered
against the persons concerned; if not, why
not; if so, (a) what steps and (b) when;
(6) whether he will make a statement on the
matter?

†The MINISTER OF LAW AND ORDER:
(1) Yes.
(2) to (5) The Town Council of Westonaria
requested the South African Police to
investigate alleged contraventions of the
Group Areas Act, 1950 (Act 36 of 1950) in
the Suurbekom agricultural holdings. This
investigation is at present being conducted
by the Group Areas Branch of Johannes-
burg. After completion of the investiga-
tion the case docket will be submitted to
the Attorney-General for his decision.
The requested information is therefore
not furnished because it could prejudice
the investigation and anticipate the judi-
cial process.
(6) No.

Thousand Hills Drive, Drummond: provincial
road

*11. Mr P C CRONJE asked the Minister of
Constitutional Development and Planning:
(1) Whether the Administrator of Natal
has been requested to authorize the Natal
Provincial Administration to (a) declare
Thousand Hills Drive, Drummond, to be
a provincial road and (b) bear the full cost
of the expropriation;
(2) whether such authorization has been
granted; if so, when; if not, (a) why not and
(b) when is a decision in this connec-
tion expected to be taken?

†The MINISTER OF CONSTITUTIONAL
DEVELOPMENT AND PLANNING:
This information was furnished by the Natal
Provincial Government:
(1) and (2)
Yes. On the 24 January 1988 the Administra-
tor-in-Executive Committee granted authority
for the Administration to declare 1000 Hills
Drive, Drummond, a provincial road and for
the Administration to pay the full cost of
expropriating land to widen the road reserve
to 30 metres.

Everton ramp of deploscalated national road
between Durban/Pietermaritzburg: construction
work

*12. Mr P C CRONJE asked the Minister of
Constitutional Development and Planning:
Whether any construction work is being car-
rried out at present at the Everton ramp of
the deploscalated national road between Durban
and Pietermaritzburg; if so, (a) for what pur-
pose and (b) what is the cost involved?

†The MINISTER OF CONSTITUTIONAL
DEVELOPMENT AND PLANNING:
This information was furnished by the Natal
Provincial Government:
(1) Yes. A request for assistance was received
from the Botha Hill Health Committee with
regard to repairs within the first half
kilometre from the old main road end.
(2) Yes. A decision was taken on 23 Novem-
ber 1987 to grant a total amount of
R82 035 to the Health Committee for the
repair of Assagai Road as well as other
minor flood damage repairs.

(1) Whether the Council for the Environment
submitted a report on the development of
Arnscor's missile testing range at De
Hoop in 1986, 1987 and 1988, respec-
tively; if so, (a) on what dates and (b)
where copies of these reports were ob-
ained; if not, why not, in each case;
(2) with reference to the reply of the Minister
of Defence to Question No 21 on
29 March 1988, what attempts are being
made to ensure that the said range is being
developed in accordance with the rec-
ommendations made in the Hey Committee
Report?

†The MINISTER OF ENVIRONMENT AFFAIRS:
(1) Yes.
(a) The activities of the Overberg Com-
mittee of the Council for the Environ-
ment were reported on in the annual
reports of the Council for 1984/85
(PR 25/1986); 1985/86 (PR 36/1987); and
1986/87 (PR 29/1988), which re-
ports were respectively tabled in Par-
liament on 9 April 1986, 8 June 1987
and 2 March 1988. The relevant com-
mittee was, however, dissolved on
8 October 1987.
(b) Copies of the annual reports of the
Council for the Environment are
obtainable from the Government
Printer, Bosman Street, Private Bag
X85, Pretoria, 0001.

(2) Progress in the field of nature and envi-
ronmental conservation in terms of the rec-
ommendations in the report of the Hey
Committee, is being monitored by the
Overberg Review Committee under the
chairmanship of Dr D Hey and on which
members of the Cape Provincial Admin-
istration, the SA Defence Force and
Arnscor serve. As the Cape Provincial Ad-
ministration is the responsible institution
with regard to all environmental matters
Water-tariff increases for 1988 are repealed

Political Staff
The Government has repealed its 1988 water-tariff increases, bringing tariffs back to last year's levels.

Mr Gert Kotze, Minister of Water Affairs, announced this yesterday and appealed to municipalities and the private sector to pass the reduction on to the consumer.

He also appealed to other water suppliers to keep their tariffs down. He said the Government provided only about half of the country's water supply.

Mr Kotze said the water tariffs which came into effect on April 1 this year had been worked out last year.

However, in keeping with President Botha's stated commitment to help fight inflation by keeping Government tariffs down, it had been decided to repeal the increase.

He urged consumers to complain to their water authorities if the reduction was not passed on to them.

Mr Kotze appealed to other water suppliers not to increase tariffs.

Homeland conditions 'worsening'

By Paula Fray

Standards of living in the homelands had gradually deteriorated, despite an improvement in the infrastructure, the national adviser on development for the National Council of Women (NCW), Mrs Cathie Schneider, said yesterday.

Mrs Schneider, who works in Giyani, Gazankulu, was speaking in Johannesburg at an NCW conference on women and rural development.

FACILITIES

She said that clinics, the water supply and other facilities had improved in the homelands over the past 30 years.

However, forced relocations, a shortage of land and the collapse of subsistence farming had led to a deterioration in the quality of life.

"In one village, 10 percent of the families have no income. There are 21000 jobs for 600000 people," she said.

Most of the jobs in government services were held by husband and wife teams, Mrs Schneider said.

Family life was also affected and the extended family had disappeared. "Migrant labour means the family is a one-parent family," she said.

Mrs Schneider said 76 children in every 1000 born in the homelands died in infancy.

Worsening conditions had given rise to depression, drug and alcohol abuse and an increase in crime.

Gluar sniffing had already been reported in rural primary schools.

Mrs Schneider said there was a desperate need for resource centres in the rural areas. Other needs included water and health facilities.

Delegates at the NCW meeting were told that development was needed rather than relief.

It was also vital that communities were consulted on their needs.
Fire: police probe charges

CAPE TOWN Police yesterday began investigating possible charges under the Forestry Act against the Simon's Town municipality as over a dozen homeless, angry victims of Monday’s fire began counting losses estimated at hundreds of thousands of rands.

The mayor of Simon’s Town, Mrs Nicki Holderness, declined to discuss the causes of the blaze.

She said her council had decided to appoint a special municipal committee of inquiry. The committee would “probably” be constituted early next week, she said.

However, it was reliably learnt that the runaway blaze began at about 2.30 pm above Murdock Valley when a “sudden gust” of wind lifted burning vegetation in a fire-break and blew it into dense vegetation nearby.

It was said that nine Simon’s Town municipal labourers and their supervisor had “actually stopped burning” and were “damping down” along the municipality’s border with Regional Services Council land when the gust struck.

The devastation—the area’s worst in 27 years—spreads over 1 800 hectares, from Murdock Valley just south of Simon’s Town through Millers Point, Castle Rock and Partridge Point to the Spitskop above Smitswinkel Bay.

Five houses and three caravans were gutted and another five houses were extensively damaged along with several storage sheds and out-houses.
Municipalities will pay for water hike

By Paula Fray

Many PWV municipalities will still pay a 9.7 percent increase for bulk water from the Rand Water Board — in spite of the Government's announcement this week that it had dropped its 1988 water tariff increases, bringing them back to last year's levels.

Recently the RWB announced an average 12 percent increase in the price of water sold to bulk consumers, but yesterday the board said it would pass on the entire State tariff reduction to its consumers, mainly municipalities and the gold mining industry.

"As expenditure on raw water is one of the important elements of the board's cost structure, this will effectively reduce the average tariff increase from 12 percent to 6.55 percent," RWB spokesman Ms Louise Fourie said.

LOCAL AUTHORITIES

However, the amalgamation of the former tariffs applicable to foundation and other local authorities means the effective increase will be 9.7 percent for the larger municipalities, while other local authorities will have no increase.

Ms Fourie said the initial 15.5 percent increase for foundation local authorities — Johannesburg, Krugersdorp, Germiston, Boksburg, Roodepoort, Springs, Benoni, Randfontein, Brakpan, Nigel, Pretoria, and Vereeniging — was now reduced to 9.7 percent.

The 5.3 percent tariff increase for other local authorities would be removed.

A spokesman for the Johannesburg municipality, Mr Stan Verrier said the municipality had not yet considered whether or not they would pass on the reduction to consumers.

"We are waiting to be advised by the RWB."
Damming SA's lack of dams

A problem in South Africa is that when there is too much water for immediate needs, there is little opportunity to make use of it for the future. Mr Les Abrahams (LP Diamant) said in the House of Representatives yesterday.

MORE RESEARCH
Speaking in the debate on the water affairs budget, he said this underlined the tremendous work for the better use and distribution of surface and underground water. More research was needed to open up resources.

Mr Abrahams said there was nothing more frustrating when one tried to improve the socio-economic conditions of an area that lacked basic water.

Replying, Deputy Minister of Water and Land Affairs Japie van Wyk said the problem with providing new water schemes was that the users in the particular area had to pay the costs. Only if the Government decided that it was in the national interest, for example in a growth point area, would a subsidy be given.

But if a lack of water directly endangered the existence of certain platteland towns, the department would look again at specific cases.

Mr van Wyk said underground water should be reserved for crises.

REGULAR FLOW
During the recent floods, 14 000 million cubic metres of water — enough to fill two Hendrik Verwoerd dams — flowed past Upington.

The problem with building new dams was that this flow did not happen often enough.
SA strikes R100m oil

SOUTH AFRICA'S first payable oil strike has been made off the coast of Mossel Bay.

Initial tests show that the well could produce between 6 000 and 7 000 barrels of crude oil a day which would be worth about R100-million a year.

By international standards, this makes it a medium-grade, paying well.

Geologists believe they are close to making further payable strikes.

The recent find has been a closely-guarded secret, but already excitement is building up in Government circles.

Payable domestic oil production will make a dramatic impact on the South African economy and on the international sanctions drive.

Pure

The well is understood to be more than 100km from the gas wells that will support the fuel-from-gas project now under construction at Mossel Bay.

Oil industry sources said the strike consists of high quality crude and condensates associated with gas.

There is also a substantial gas deposit.

Combined with Sasol's existing oil-from-coal technology and the Mossgas oil-from-gas project, the discovery of recoverable crude in significant quantities could make South Africa independent of overseas supplies.

The Mossgas project will cost an estimated R5 200-million by the time it starts producing fuel in the early 1990s.

Offshore oil exploration is undertaken by Soekor, which last year brought a fourth deep sea rig into the search, and has spent about R800-million so far.

One hundred fifty holes – most of them dry – have been drilled by Soekor in the past 20 years.

[Signature]
Oil discovered off West Coast says Soekor

Political Correspondent

CAPE TOWN — Oil has been discovered off the Cape West Coast at Hondelklip Bay, Soekor announced yesterday.

"However, the oil well, which yields about 200 barrels of crude oil a day, is not yet economic.

More holes will have to be drilled in the area before it can be established whether it is commercially viable.

Soekor described the find as an "encouraging sign of oil off the West Coast".

The oil was encountered by the French-owned rig, Nymphes, in Borehole A-J1, 25 kms south-south west of Hondelklip Bay.

"Although this production tempo is uneconomic, it indicates that possible economic oil discoveries may be made off the West Coast."

Soekor's liaison officer, Mr Mike Leibbrandt, said last night that Soekor had been drilling off the West Coast for the last year or so.

"This is the first time we got oil out, in contrast to dry gas."

The discovery of the oil off Hondelklip was "indeed very recent" and was totally unrelated to the Kudu field off the Namibian coast.

Soekor would be drilling further and a drilling programme had been drawn up.

The drilling programme could not be stepped up but it "will be pursued most strongly. We are hoping there is more oil off the West Coast."

The Hondelklip Bay hole could not be compared to the Mossel Bay fields, but it was significant that oil had been discovered there.

Editorial opinion page 10
Oil strike on West Coast

Political Staff

Oil has been discovered off the West Coast at Hondeklip Bay, Soekor, announced yesterday.

But the oil well, which yields about 200 barrels of crude oil a day, is not yet economic and more holes will have to be drilled in the area before it can be estimated whether its commercially viable.

However, Soekor said the find showed "encouraging signs of oil off the West Coast".

The oil was encountered by the French-owned rig Nymphaea in Borehole A-31, 26 km south-south west of Hondeklip Bay.

"Although this production tempo is uneconomic, it indicates that possible economic oil discoveries may be made off the West Coast," Soekor said in his statement.

Soekor's Halsey officer, Mr. Mike Liebrrandt, said last night it had drilled off the West Coast for the last year or so.

"This is the first time we got oil out, in contrast to dry gas."

Hoping for more

The discovery of the oil off Hondeklip was "indeed very recent" and was totally unrelated to the Kudu field off the Namibian coast.

He said a drilling programme had been drawn up which could not be stepped up but it "will be pursued with most strongly. We are hoping there is more oil off the West Coast".

The Hondeklip Bay hole could not be compared to the Mossel Bay fields but it was significant that oil had been discovered there.

"The 200 barrels a day is nowhere near economic. Although we will be drilling as fast as possible we will have to do a lot more exploring," Mr. Liebrandt said.

After the first gas was discovered at Mossel Bay, it took about four years of drilling before it became economic to develop it.

"It takes a long time — three or four months — to drill a well.

"There have been other wells drilled off the West Coast but until very recently only dry gas was discovered."

The announcement about Hondeklip Bay comes within a day of Soekor's announcement that it had struck oil at a second borehole south-southwest of Mossel Bay.
New pact to save nature

A ceremony heralding a new era in co-operation in nature conservation took place yesterday between the mining industry and private and government conservation organisations at the Abe Bailey Nature Reserve near Carletonville in the Western Transvaal.

In terms of a lease signed by the Administrator of the Transvaal, Mr Willem Cruywagen, and the chairman of the West Rand Dolomite Water Association, Mr B. Rooyen, the TPA will administer a 4200 ha property as a nature reserve and education centre. The lease will cost the TPA R1 only a year.

The president of the Wildlife Society of Southern Africa, Dr Nolly Zandvliet, signed a sub-lease with the TPA for 370 ha surrounding the environmental education centre on the reserve.

A spokesman for the society said they had renovated the original farm buildings, which once belonged to mining magnate Sir Abe Bailey.
Conservationists warned at launch of guide to coast

Daily Dispatch Reporter
GRAHAMSTOWN - The term "conservationist" was at risk - it could get a social label. Mr Patrick Niven warned here this week.

Mr Niven, a conservationist, was here to speak at the launch of the Field Guide of the East Cape Coast.

This is a monumental 334-page work, which has been published by the Grahamstown Centre of the Wild Life Society of Southern Africa.

"We must be humble and acknowledge that the need for conservation has been brought about by people."

However, conservation was also for people.

"We won't win unless we make sure of this."

"To succeed in our mission everybody must be brought in."

There had been a dramatic increase in the awareness for the need for conservation.

This would not have been necessary except for earlier depredations.

"People are the most important influence in the environment."

People acknowledged what had happened, and that damage had been caused to the soil, estuaries and other sensitive areas.

Most South Africans were not whites. Unless the conservation ethic could be put across to all people, and the purpose of conservation conveyed to all groups within the country, conservation would become irrelevant.

"I am optimistic. Let's tackle this problem, take it by the scruff of the neck and we'll get somewhere. Let's not be depressed."

Mr Niven is a member of the South African Nature Foundation, the 1001 Club, a founder member and member of the Board of the Control of the Sir Percy Fitzpatrick Institute for African Ornithology, member of the Wild Life Society and serves on the committees of several local nature reserves.

He is a grandson of the late Sir Percy Fitzpatrick, author of "Jock of the Bushveld."
Engineers to focus on the environment

By James Clarke

Two conferences are being organised by engineers over the next few weeks — each searching for ways to bridge the gap between engineers, the public and decision-makers.

The first marks World Environment Day and the controversial archaeologist, Professor Revil Mason of Wits University — the man who wants to cover up a recently excavated 1,600-year-old Iron Age village because “South Africans don’t care” — has been invited to speak.

SETTLEMENTS

The Federation of Societies of Professional Engineers is holding this conference on June 2 at 5 pm at the Mintek auditorium in Randburg.

Others speakers will deal with a broad range of subjects calculated to interest the public, including the future of Mossel Bay now that it has struck oil as well as the impact of human settlements on riverine environments.

It is open to the public (R35 entrance fee includes finger supper). Details are obtainable from Mrs Helen Coetzee at (011) 832-2177.

A second and even larger conference — 1,000 engineers and planners are expected — begins at Pretoria University on July 4. This is the quinquennial convention of the South African Institution of Civil Engineers which, this year, is being coupled with the annual transportation convention.

Some top speakers will discuss highway engineering, and new methods of assessing and avoiding potential environmental damage from engineering developments.

Inquiries can be directed to Ms Bailey at (012) 241-3576.
Environmental study
by leading ecologists

Own Correspondent

DURBAN — Anglo American has commissioned top ecologists to produce an environmental “High Road” scenario.

Heading the project is Mr. Clem Sunter, an Anglo director and architect of the highly successful roadshow, book and video, “The World and South Africa in the 1990s”.

Among the topics to be dealt with are the country's expected population explosion and the mining houses' potential minefield of “environmental degradation” caused by the search for raw materials.

The project is expected to take nine months, then “the team and Anglo will take a decision whether the material is worth taking further”.

If they get the go-ahead they could do a similar presentation of the High and Low Roads ecology scenarios to wider audiences.

“I think one of the crucial factors is population growth. People talk of 45 million by the turn of the century and 60 million to 80 million by 2020 or 2025, Mr. Sunter says.

“My view is that one cannot use coercion to restrain population growth. Instead, it has to be done by giving everyone access to material prosperity.”
Flood relief thefts: Workers keep jobs

SEVENTY-THREE municipal employees convicted of stealing emergency supplies intended for flood victims at Upington are to stay in their jobs.

This was confirmed to the Cape Times yesterday by Upington's deputy town clerk Mr C P Schutte, who said the town council decided on Monday night that the workers had been "punished enough".

Seventy-three of the 74 municipal officials arrested by police were found guilty in the local magistrate's court last month of unlawfully appropriating emergency supplies intended for flood victims. They all pleaded guilty and the court imposed fines ranging between R100 and R200 each — to be paid to the Disaster Relief Fund.

The remaining accused will appear in court today.

Mr Schutte said the town council decided that the punishment by the court had been sufficient. "All the stolen goods were recovered and the workers paid the fines imposed by the court."

"The council gave the workers a final warning. But it was decided not to take any further action," he said.

Upington's district police commander, Major Bertie Viviers, said the police investigation was started when the municipality received information that one employee had appropriated some flood relief supplies — including food and blankets.

The suspect, however, informed on a couple of accomplices, who in turn gave detectives the names of dozens of other people involved in the theft.

Major Viviers told the Cape Times that "about a truck-load full" of supplies were stolen. These included food, blankets, sleeping mats and clothing.
Drought areas 'unlisted' — aid to farmers goes on

The Argus Correspondent

PRETORIA. — Recent good rains have meant that all drought-listed areas are to be "unlisted" on June 1 this year — although aid to farmers is to continue for a further two months.

In a statement issued by the Department of Agriculture and Water Supply, the director of agricultural information says that "through the drought assistance schemes, the full benefits will remain in force for an additional two months under the livestock grazing scheme, after which the payment of an incentive on reduced stock numbers could provide cash benefits to farmers optionally for another four months."

The good rains of the last few months have resulted in a "general recovery of the veld" in drought stricken areas, the director said. The availability of water has also improved, and the condition of stock is better.

However, farmers are to be encouraged to keep their stock numbers low, to allow the natural pastures to recover from the drought.

A condition of the livestock grazing scheme is that participants undertook to follow the same livestock grazing practices for two months after the areas were unlisted. Participants also have to maintain the same stocking rate that applied immediately before the area was "unlisted".

Farmers may also apply for a further four months of grazing assistance in the form of an incentive for reduced stock numbers.

The department will be "patrolling" the land of all participants by helicopter to ensure that stock numbers are being kept low, and any farmer found with excess stock will have to repay all the financial aid — including interest — given to them.
SA is now dumping ground for poison

The Star's Foreign News Service

ROTTERDAM — The shipping of chemical waste to Africa has become big business.

It is claimed that hundreds of tons of poisonous chemical wastes are being exported to South Africa and other African countries from Holland, which is faced with an unprecedented stockpile of waste chemicals from its 165,000 industries.

This has been revealed by the Algemeen Dagblad, Holland's largest daily newspaper.

The new business, says the paper, has developed over the past few months. Many European countries and municipalities have stopped issuing dumping permits because of mounting protests from environmentalists, who are increasingly alarmed about the high number of chemical waste dumps.

LETHAL 'COCKTAILS'

The legitimate chemical waste processing companies are increasingly turning to what the newspaper calls the "poison chemicals Mafia" to solve the problem.

These, in turn, find many African countries, such as Guinea Bissau, Benin and South Africa, increasingly eager to accept the often lethal chemical cocktails.

European MP Francois Roelant de Vivier, an avid environmentalist, told the newspaper that he wanted to stop this lucrative form of "development aid" to the Third World.

Nigeria, increasingly concerned about the possible harm the chemicals could do to the already fragile African environment, has protested about the shipments.

A conglomerate of British companies wants to send 3 million tons of waste to Guinea Bissau every year.
How planners can get public’s views

By James Clarke

He suggested the following steps:

- Tell the public the precise nature of the problem and the pros and cons of the most obvious solutions. Brochures, plans and documents might be made available at public libraries and shopping complexes where citizens can consider the evidence in a non-threatening situation.

- Professor Fuggle told of how he wanted to build, had gone to his local civic centre to look at documents that were supposedly available to the public and was sent to some obscure and unfriendly office where he waited until “a two-inch thick” document was dumped in front of him. He had to study it there. “I was so thoroughly intimidated and there was no way I could study it. I went home without reading it,” he said.

- This step “might involve active solicitation of the views and reactions of a cross section of established community groups. Formal presentations could be made to these groups.”

- Active consultation with special interest groups. Groups established to either promote a certain option or oppose one must be properly informed and given the chance to respond formally and in writing.

- Organise workshops to which representatives of all interest groups are invited.

- Use public opinion poll methods — this tool is useful but is not a substitute for involving the public in discussion.

Professor Fuggle gave an example of how the public’s negative reaction is sometimes right. After the Laingsburg flood disaster, the Railways decided not to rebuild a certain bridge. This would save R30 million. Instead lorries were used and the tiny town of Montagu immediately objected, offering all sorts of excuses (children’s and pets’ safety, noise, etc).

ROAD DAMAGE

A study showed none of these fears was well grounded. But the entire town was worried even though it could not articulate its concern in technical planning terms. The passage of 30 large lorries, four times a day — that is 120 movements a day — would obviously alter the whole ambience of Montagu.

In fact that is what happened. It not only depressed the town but it soon smashed the road surface. In the end the damage amounted to more than the R30 million the Government was trying to save.

Had the planners talked it over with the people they might have avoided the sad and expensive affair.
given assurance
Church Leaders

After the government

Europe's official aids to
South Africa and
South African leaders
are meeting.

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THURSDAY, 2 JUNE 1988

HOUSE OF REPRESENTATIVES

Indicates translated version.

For written reply:

General Affairs:

16. Mr T R George asked the Minister of Justice:

How many (a) prosecutions were instituted and (b) convictions were obtained in respect of cases of (i) murder, (ii) culpable homicide, (iii) assault with intent to do grievous bodily harm, (iv) common assault, (v) rape, (vi) burglary and housebreaking with intent to steal and theft, (vii) robbery, (viii) theft of (a) motor vehicles and (b) bicycles, (ix) malicious damage to property, (x) illegal possession of fire-arms and (xi) possession of drugs investigated at police stations serving the Riviera and Riviera Extensions 1 and 2 areas in Johannesburg in the 1987 calendar year?

The MINISTER OF JUSTICE:

The required information is not readily available. To obtain all court records pertaining to the crimes concerned will have to be scrutinised.

Own Affairs

Marramridge: financial allocations

Mr C J Kippen asked the Minister of Local Government, Housing and Agriculture:

(1) Whether his Department made any financial allocations for the development and improvement of living conditions in Marramridge Phase 1 in 1984, 1985, 1986 and 1987, respectively; if not, why not; if so, what total amount was so allocated in each of these years;

(2) whether he or his Department was at any stage requested to appoint a planning or development committee for this area; if so, (a) on what date and (b) by whom;

(3) whether this request has been acceded to; if so, what are the relevant details; if not, why not?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Whether, during or subsequent to floods in 1987, his Department provided the tenants of a block of flats in Marramridge Phase 1 with approximately four structures or shelters for use in the event of heavy rains; if so, what is the (a) nature of and (b) present state of repair of these structures or shelters;

(2) whether he will make a statement on the matter.

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.

(a) Converted South African Transport Services passenger coaches which were in effect core houses.

(b) Good.

(2) No.

Marramridge: land slides

9. Mr C J Kippen asked the Minister of Local Government, Housing and Agriculture:

(1) Whether his Department conducted any investigations into land slides and/or subsidences which allegedly occurred in the Mercury Crescent area of Marramridge Phase 1 prior to the 1987 floods; if not, why not; if so;

(2) whether these conditions affected a (a) house and (b) block of flats in this area before or after the said floods; if so, (i) when, (ii) why, and (iii) to what extent, in each case;

(3) whether any steps have been taken in this regard; if not, why not; if so, (a) what steps, (b) by whom, (c) when and (d) with what result?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Investigations were conducted into cases of subsidence which occurred during August 1985.

(2) (a) Yes

(b) Yes

(i) August 1985

(ii) As a result of water seeping under the foundations

(iii) Foundations were undermined
THURSDAY, 2 JUNE 1988

HOUSE OF DELEGATES

Indicates translated version.

For written reply:

General Affairs:

Chatsworth: new police district

33. Mr K CHETTY asked the Minister of Law and Order:

(1) Whether a new police district was established in Chatsworth recently; if so, (a) when, (b) why and (c) how many persons of each race group are employed in this district and (ii) in what ranks are they so employed;

(2) whether any new vehicles have been purchased for this district, if not, why not; if so, (a) how many and (b) at what total cost;

(3) whether he will make a statement on the matter?

The MINISTER OF LAW AND ORDER:

(1) to (3).

The necessity for a new police district in this area was identified as a result of the rapid industrial expansion in Chatsworth and vicinity and the increased demands that were gradually made on the South African Police.

A new police district has functioned in the area from 1 February 1988. Sufficient members of various race groups serve under the command of the District Commandant with the rank of lieutenant-colonel. However, for security reasons I am not prepared to reveal the numerical strength of the district concerned, but should the honourable member approach me, I am prepared to furnish the information to him on a personal and confidential basis.

Sufficient vehicles, including a number of new vehicles, were supplied to satisfy the immediate needs of the district.

Offences: prosecutions and convictions

50. Mr M RAJAB asked the Minister of Justice:

How many (a) prosecutions were instituted and (b) convictions were obtained in respect of the cases of (i) murder, (ii) culpable homicide, (iii) assault with intent to do grievous bodily harm, (iv) common assault, (v) rape, (vi) burglary and housebreaking, (vii) robbery, (viii) theft of vehicles, (ix) damage to property and (x) possession of drugs investigated by the Greenwood Park, Maryville, Sydenham, Mount Edgecombe, Stanger, Tongaat, Verulam, Chatsworth, Isipingo and Wentworth police stations, respectively, in the 1987 calendar year?

The MINISTER OF JUSTICE:

The information is not readily available. To obtain it all court records pertaining to the crimes concerned will have to be scrutinised.

Fire-arm licences

51. Mr M RAJAB asked the Minister of Law and Order:

(a) How many applications for licences to possess fire-arms have been (i) received and (ii) granted since 1 January 1988 and (b) in respect of what date is the information furnished?

The MINISTER OF LAW AND ORDER:

(a) (i) 32 202.

(ii) 30 290.

(b) 31 March 1988.

Indian magistrates: Transvaal

64. Mr K CHETTY asked the Minister of Justice:

(1) Whether there are any Indian magistrates in the Transvaal, if so, how many; if not,

(2) whether he intends appointing Indian magistrates in the Transvaal; if so, (a) when and (b) where, if not, why not;

(3) whether he will make a statement on the matter?

The MINISTER OF JUSTICE:

(1) No

(2) and (3) Magistrates are appointed when vacancies occur from amongst the available candidates on the principles of efficacy and merit and not on a racial basis. I am convinced that as more and more Indians join the Department of Justice, more of them will become magistrates in the normal course of events.

Marianridge: provision of housing

10. Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

(1) Whether his Department is responsible for the provision of housing in Marianridge Phase 1; if so, to what extent;

(2) whether any houses originally provided in this area by his Department are for sale at present; if so, (a) how many and (b) in respect of what date is this information furnished;

(3) whether the State intends to guarantee the safety of these housing units after the date of sale; if not, why not, if so, for what period?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) No.

The Department is only responsible for the administration of the housing in Marianridge Phase 1 which was provided by a former Department.

(2) (a) Although the Department did not erect these dwellings, there are 604 units for sale in Marianridge Phase 1.

(b) 15 April 1988.

(3) No, all housing units are sold "voetstoots" and the State does not provide guarantees for safety against natural disasters.
HOUSE OF REPRESENTATIVES

For written reply:

General Affairs:

16. Mr T R GEORGE asked the Minister of Justice:

How many: (a) prosecutions were instituted and (b) convictions were obtained in respect of cases of (i) murder, (ii) culpable homicide, (iii) assault with intent to do grievous bodily harm, (iv) common assault, (v) rape, (vi) burglary and housebreaking with intent to steal and theft, (vii) robbery, (viii) theft of (a) motor vehicles and (b) bicycles, (ix) malicious damage to property, (x) illegal possession of firearms and (xi) possession of drugs investigated at police stations serving the Riverlea and Riverlea Extensions 1 and 2 areas in Johannesburg in the 1987 calendar year?

The MINISTER OF JUSTICE:

The required information is not readily available. To obtain all court records pertaining to the crimes concerned will have to be scrutinised.

Own Affairs:

Marianridge: financial allocations

Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

(1) Whether his Department has any financial allocations for the development and improvement of living conditions in Marianridge Phase 1 in 1984, 1985, 1986 and 1987, respectively; if not, why not, if so, what total amount was so allocated in each of these years;

(2) whether he or his Department was at any stage requested to appoint a planning or development committee for this area; if so: (a) on what date and (b) by whom;

(3) whether this request has been acceded to; if so, (a) by whom and (b) what are the relevant details; if not, why not?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Since the dwellings were occupied only how many have been or are to be rehoused; if so, (i) how many (a) have been and (b) are to be rehoused, (ii) what are the particulars of the accommodation provided or to be provided to them and (iii) in respect of what date is this information furnished;

(3) whether a document relating to assurance of safety in the event of a recurrence was distributed amongst flood victims; if so, (a) when, (b) on whose authority and (c) what was the nature of this assurance?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.

(a) Converted South African Transport Services passenger coaches which were in effect core houses.

(2) Good.

(3) No.

Marianridge: storm-water drainage system

6. Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

(1) Whether there is a storm-water drainage system in Marianridge Phase 1; if so,

(2) whether this system meets the standard requirements; if not, (a) why not and (b) what steps have been or are to be taken to remedy the position?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.

(2) Yes.

(a) falls away.

(b) falls away.

Marianridge: flood damage

7. Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

(1) What is estimated was the cost to the State of flood damage in Marianridge Phase 1 in 1987;

(2) whether all flood victims who were left homeless in this area have been or are to be rehoused; if not: (a) why not and (b) how many have been or are to be rehoused; if so, (i) how many (a) have been and (b) are to be rehoused, (ii) what are the particulars of the accommodation provided or to be provided to them and (iii) in respect of what date is this information furnished;

(3) whether a document relating to assurance of safety in the event of a recurrence was distributed amongst flood victims; if so, (a) when, (b) on whose authority and (c) what was the nature of this assurance?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Whether, during or subsequent to floods in 1987, his Department provided the tenants of a block of flats in Marianridge Phase 1 with approximately four structures or shelters for use in the event of heavy rains; if so, what is the (a) nature of and (b) present state of repair of these structures or shelters.

(2) whether he will make a statement on the matter?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.

(a) Converted South African Transport Services passenger coaches which were in effect core houses.

(b) Good.

(3) No.

9. Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

(1) Whether his Department conducted any investigations into landslides and or subsidence which allegedly occurred in the Mercury Crescent area of Marianridge Phase 1 prior to the 1987 floods, if not, why not, if so.

(2) whether these conditions affected a (a) house and (b) block of flats in this area before or after the said floods; if so, (a) when, (b) why, and (c) to what extent, in each case;

(3) whether any steps have been taken in this regard, if not, why not, if so, (a) what steps, (b) by whom, (c) when and (d) with what result?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Investigations were conducted into cases of subsidence which occurred during August 1985.

(2) (a) Yes.

(b) Yes.

(i) August 1985.

(ii) As a result of water seeping under the foundations.

(iii) Foundations were undermined.
HOUSE OF REPRESENTATIVES

THURSDAY, 2 JUNE 1988

1669

Mr T R GEORGE asked the Minister of Justice:

16. How many (a) prosecutions were instituted and (b) convictions obtained in respect of: (i) murder, (ii) culpable homicide, (iii) assault with intent to do grievous bodily harm, (iv) common assault, (v) rape, (vi) burglary and housebreaking with intent to steal and theft, (vii) robbery, (viii) theft of (a) motor vehicles and (bb) bicycles, (ix) malicious damage to property, (x) illegal possession of fire-arms and (xi) possession of drugs investigated at police stations serving the Riverlea and Riverlea Extensions 1 and 2 areas in Johannesburg in the 1987 calendar year?

The MINISTER OF JUSTICE:

The required information is not readily available. To obtain all court records pertaining to the crimes concerned will have to be scrutinised.

Own Affairs:

Marianridge financial allocations

Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

6. Whether his Department made any financial allocations for the development and improvement of living conditions in Marianridge Phase 1 in 1984, 1985, 1986 and 1987, respectively; if not, why not; if so, what total amount was so allocated in each of these years;

(Marianridge: storm-water drainage system)

Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

7. Whether there is a storm-water drainage system in Marianridge Phase 1; if so, (a) why not and (b) what steps have been taken or are to be taken to remedy the position?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.
(2) Yes.
(a) N a.
(b) Marianridge: flood damage

Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

8. Whether all flood victims who were left homeless in this area have been or are to be rehoused; if not, (a) why not and (b) (Marianridge: shelters)

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) No.
(2) Yes.
(a) August 1985.
(b) As a result of water seeping under the foundations.

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

1669

The estimated cost to the State of flood damage in Marianridge Phase 1 in 1987 is calculated at R500 000.00.

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Yes.
(a) Converted South African Transport Services passenger coaches which were in effect core houses.
(b) Good.
(2) No.

Marianridge: land slides

Mr C J KIPPEN asked the Minister of Local Government, Housing and Agriculture:

9. Whether his Department conducted any investigations into land slides and or subsidesences which allegedly occurred in the Mercury Crescent area of Marianridge Phase 1 prior to the 1987 floods, if not, why not; if so.

(2) Whether these conditions affected a (i) house and (b) block of flats in this area before or after the said floods; if so, (i) when, (ii) by whom, and (iii) to what extent in each case;

(3) Whether any steps have been taken in this regard; if not, why not; if so, (a) what steps, (b) by whom, (c) when and (d) with what result.

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND AGRICULTURE:

(1) Investigations were conducted into cases of subsidence which occurred during August 1985.
(2) Yes.
(a) Yes.
(i) August 1985.
(ii) As a result of water seeping under the foundations.
(iii) Foundations were undermined.
Civilisation has 100 years to go unless...

By James Clarke

One of the world's most quoted scientists, and a founder of the environmental movement of the 70s, Professor Paul Ehrlich, is in Johannesburg.

The professor believes that unless population growth is dramatically curbed civilisation has only 100 years to go.

Professor Ehrlich, a CSIR visiting research fellow from Stanford University (California), became world famous after his book, "The Population Bomb", was published in 1968. Its cover bore the words: "While you are reading this sentence four people will have starved to death. Most of them children."

He still believes the human population is growing too fast for the world to be able to maintain civilised standards. He estimates that its present 5 000 million people will double in 35 years.

He said: "The time has come to look at the interaction between resource depletion, environmental deterioration and population growth.

"Solutions have to be found to avert the destruction of our means for survival and our wildlife and other resources."

The professor is to deliver a public address in Johannesburg tomorrow. Later in the month he delivers the keynote address on "The process of rapidly increasing rates of extinction in animals and plants" to the National Conference on Conserving the Biotic Diversity in Southern Africa.

The conference is sponsored by the CSIR's ecosystems research department in collaboration with the Johannesburg-based Endangered Wildlife Trust, the National Botanic Gardens and the Wildlife Society.

The three-day conference will assess southern Africa's biological richness in depth and will later publish a comprehensive source-book for use by students, administrators and the public.

Professor Ehrlich's Johannesburg talk will be at 8 pm at the Protea Gardens Hotel, Berea. Tickets can be booked through Computicket.
A group that works for better township life

From small beginnings in Soweto in 1976, the National Environmental Awareness Campaign (Neac) has become a huge organisation well known in the townships.

The moving force behind it is a former Morris Isaacson schoolteacher, Mr Japtha Lekgetho, popularly known in Soweto as "Mr Clean".

Mr Lekgetho, according to Neac public relations officer Ms Laura Pollecott, is "a man with a vision and a sense of direction".

Blacks, Neac says, have always "had to live in an environment that was neither beautiful nor clean. We have not had proper housing, roads or services because the authorities would not accept that we were a permanent part of the city scene. Conditions were at their worst before, and just after, the 1976 riots and this was where the community itself came in."

Neac was created because Soweto residents were "sick and tired of having to live under terrible conditions which affect the human dignity of our people."

The intention, Mr Lekgetho said, was to encourage people "to learn to love nature (and) beautify their gardens and pavements, and help in organising better parks and recreational clubs, so as to upgrade our quality of life."

Today, Neac has four soccer teams (one plays in the second division of the NSF), a netball team which plays in the Soweto Netball Association League, a softball team, modern dance, music, body-building and beauty contest groups.

IMPROVED ENVIRONMENT

The organisation also has a library and a nursery which keeps "looking greener and greener".

A five-year plan commits the organisation to fight for:
- An improved environment for all South Africans.
- Better living conditions and an improvement in the quality of life for the underprivileged.
- The elimination of apartheid practice in deciding what the land will be used for and who will use that land.
- The gaining of recreational facilities (on a par with those of white urban areas) for both existing and new townships.

However, Neac is more committed to fighting the Group Areas Act and the Land Act. "The organisation is heavily committed to the removal of laws which affect our environment. The problems of over-crowding and those created by the congestion in our residential areas will always remain a problem as long as the Group Areas Act and the Land Act continue to be applied," says Neac in its latest newsletter.
Black townships will continue to be scenes of protests and unrest as long as laws such as the Group Areas Act and the Land Act remain in the statute book, Mr Japtha Lekgatho, president of the Soweto-based National Environmental Awareness Campaign (Neac), said yesterday.

Speaking at the Neac head office in Dobsonville, Mr Lekgatho said black people had nothing to celebrate yesterday, an international environmental awareness day.

"It is apartheid which makes our townships dirty. We have never had, and we certainly do not have now, equal services. Anything, including services, provided to our communities is of a lower standard, because those who do the planning and the budgeting believe that these lower standards are acceptable when they are considering another race group," Mr Lekgatho said.

Mr Lekgatho, together with about 50 children who are members of Neac, carried placards in the organisation’s premises saying: "Provide housing for the poor and the homeless", "Protect our environment by removing the Group Areas Act and the Land Act" and "Protect our environment by providing equal community services, recreational facilities and proper town planning".

A placard saying "Apartheid makes our townships dirty" was hoisted above a heap of garbage. "We want to show that apartheid is rubbish," Mr Lekgatho said.

Township clean-up campaigns organised by whites were welcome, but these "do not solve the real problem: they only perpetuate it. These people should call for the abolition of the Group Areas Act which is the root cause of the problem," said Mr Lekgatho.
The Dried Fruit Board celebrates its 50th anniversary this year.

To mark the occasion, the board was hoping for a record crop of 48,000 tons of dried fruit, but the Orange River floods earlier this year caused substantial damage to grape crops, putting the record target out of reach.

Mr. C.C. Viljoen, general manager of the Dried Fruit Board, says raisin and sultana production has been affected by the floods in terms of both quantity and quality.

When the floods came, we had harvested 25 percent of the crop. We then had to salvage what we could of the rest, and these were not of the best quality. We will have a lot more sub-standard raisins and sultanas this year than in previous years.

Mr. Viljoen assures consumers there will be no shortage of first-grade dried grape products on the domestic market. The board reserves adequate supplies of good quality fruit for the local market before making export allocations.

The sub-standard grades will not be wasted. Those that cannot be sold to consumers will be used for brewing or in animal feeds.

The Dried Fruit Board was established 50 years ago to stabilise the dried fruit industry which, at that stage, was destroying itself because of fierce competition between a large number of packers.

Its other functions were to control the importation of dried fruit, curb periodic over-production and administer quality control.

Today, the board's main function is the promotion of stability in the production and marketing of fruit produced for drying. The board also administers single-channel pool schemes for currants, sultanas, raisins and prunes.

Producers usually dry the fruit themselves on their farms and deliver it to receiving depots of the board's agent, the South African Dried Fruit Co-operative (SAD), where it is processed further, packaged and marketed. Selling prices are not controlled.

Mr. J. Coetzee, public relations officer of the board, says there is often criticism that dried fruit is too expensive, but the board feels this criticism is unjustified.
Uproar over list of fish banned for Cape import

EAST LONDON — The possibility of an import ban affecting almost 400 "undesirable" foreign fish species — including common goldfish and edible river game fish — has caused an uproar among fishermen and tropical aquarium owners.

The action, which is to be debated by representatives of the four provinces and leading ichthyologists in September, was proposed by conservationists to prevent the introduction of alien fish, parasites and diseases into South African rivers.

FATUOUS

A research officer with the JLB Smith Institute of ichthyology in Grahamstown, Mr N James, said the reasons given for the proposed ban "were simply fatuous and represent an unfortunate trend in the department (of Cape Nature Conservation) which can best be described as a mania against exotics".

He questioned the inclusion of tropical species, which he said were unlikely to be able to survive in South African rivers.

LIST

A provisional list of fish species considered "undesirable imports into the Cape Province", compiled by the Directorate of Plant and Seed Control of the Department of Agriculture, Economics and Marketing, was distributed to aquarist societies, pet shop owners and importers earlier this month by the Cape Department of Nature and Environmental Conservation.

An accompanying letter said the majority of the species on the list "could survive in the rivers of the Cape and therefore would constitute a further threat to our 38 indigenous species, either by competing for food and space or predating (sic) on them".
CHILDREN hold posters protesting against the dirty environment in the township during the World Environment Day celebration in Dobsonville this week.

Sowetan 16/6/85

"Apartheid to blame".

APARTHEID has received a knock from the Soweto-based National Environment Awareness Council.

Its director, Mr Jafsa Lekgeto, blamed apartheid for many of the township's ills.

He said last week in Dobsonville during the annual World Environment Day: "It is apartheid which makes our townships dirty. We have never had and we certainly do not have now, equal services."
Pollution hits water resources

Some of South Africa's surface water resources used for drinking water are deteriorating, according to the Water Research Commission's (WRC) latest annual report released in Pretoria.

The report says this has been brought about by pollution, repeated re-use of water with accompanying build-up of pollutants, as well as the increasing number of chemicals appearing on the market with the risk of some of them ending up in the water environment.

"In view of this, the WRC has recently developed various research programmes such as an investigation into the incidence and concentration of certain contaminants in drinking water, water treatment technologies and monitoring strategies for water quality," the report says. — Sapa.
SELECTION OF STUDENTS FOR TRANSVAAL COLLEGE

TRANSVAAL STUDENTS

Minimum admission requirements as per Handbook for Principals.

Merit list of Transvaal students with a cut-off point of 25 and above.

Natal Students

Minimum admission requirements as per Handbook for Principals.

Merit list of Springfield College, University of Durban-Westville and Natal students who applied to Transvaal College with a cut-off point of 26 and above.

The admission of all students recommended by the Selection Committees is subject to the approval of the Chief Executive Director.

(2) Yes.
(a) and (b) Fail away.

(3) No.
(a) and (b) Fail away.

(4) Yes.
31 October for all applications except UHDE students. 31 December for UHDE students.

(5) Yes.
In the Transvaal, 8 late applications were processed on the day of the interview. The students indicated that in view of the uncertainty concerning Transvaal College's future, they had not made the necessary applications in October.

In Natal, 25 applications were accepted after the closing date. This was as a result of principals of schools submitting these forms after the closing date.

The Minister of National Health and Population Development:

No.

The demographic objective of the Government's Population Development Programme is the same for all population groups - Whites included, namely a TFR (Total Fertility Rate) of 2.1 children per woman during her childbearing years. The Government does not have a differentiated population policy for the various population groups.

The TFR for Whites in South Africa is presently 2.0, indicating a declining trend, which is in accordance with what is happening in the developed countries of the world. Examples are the USA 1.8, the United Kingdom 1.8, Western Germany 1.3, France 1.5, the Netherlands 1.5 and Italy 1.4.

Several developed countries have already tried to reverse the declining trend in TFR by means of pro-natalist steps but nowhere in the world had it been successful. A higher quality of life for humans clearly results in a diminishing population growth with nothing to stem it.

To the Government it is, however, important to concentrate on improving the quality of family life and it has therefore approved of a National Family Programme with its main object the improvement of the quality of family life for all population groups including that of Whites.
Sappi recognised as a company that cares

As one of South Africa's biggest employers, Sappi has long recognised its responsibility to the community.

Last year, it proved this commitment by providing assistance to flood victims in the affected areas of Natal and KwaZulu, where the company has several large operations. A donation of R500 000 was provided in the form of building materials for emergency shelters and water supplies and, in some cases, food and clothing to assist the victims of the flood.

Its contributions run far deeper than mere donations of money or corporate sponsorships, however. The company believes it has an inherent duty to support all those engaged in production and so it makes a substantial re-investment in communities where Sappi plants are situated and those from which employees and customers are drawn.

Traditionally, papermakers are large consumers of water and Sappi continues to invest considerable resources in developing methods of reducing its water consumption. By developing and implementing the SapoXal process, for instance, the company has been able to reduce its water consumption per ton of paper produced to less than 25 percent of that required by most pulp and paper manufacturers in other countries.

Sappi has also devised a method of reusing treated effluent water and at Ngodwana Mill waste water is piped to a farming area where it irrigates pastures to support cattle.

Forests are the birthright of every South African and Sappi has made its contribution in protecting them. It invests and maintains picnic spots such as those in the Karkloof Falls area in Natal and the public hiking trail in the Elandshoogte area in the Eastern Transvaal.

In 1983, the company sponsored the highly sought after "Sappi Collection", an illuminating study of South Africa's wildlife heritage. The proceeds were given to the SA Nature Foundation to be used in the preservation of the natural environment.

Education is another of its priorities. The company provides many ongoing training facilities for its staff and an extensive bursary programme for students at universities and other tertiary level educational institutions.

To celebrate its 50th anniversary in 1986, it expanded its community involvement by donating 50 000 indigenous and exotic trees to various municipalities. It also sponsored a rescue vessel for the National Sea Rescue Institute in support of coastal communities and the extension of its support to the universities and other tertiary education institutes.

A project to provide smaller farmers with saplings and constructive advice on the growing of these trees has, since 1983 when it was launched, cost almost R1 million.
Drought cost nation R468-m

By Claire Robertson,
Pretoria Bureau

The two years of water restrictions during the 1983-85 drought period cost the country R468 million, according to recently released figures.

South Africa weathered another 27 months of water restrictions until they were lifted in September last year, but figures from this period have not yet been released.

A Water Research Commission investigation into the socio-economic effects of the water restrictions revealed that the cost to the domestic sector was R282 million for the two-year period.

"However, 78 percent of this amount is the result of expenses which are permanent improvement to properties, such as boreholes, paving (when gardens could no longer be maintained) and the installation of more effective irrigation systems," a spokesman for the commission said.

The cost to Government institutions, mining agriculture and electricity supply was more than R205 million, according to the commission's investigation.

Electricity supply alone saw costs rise by almost R72 million in this period.

The huge costs at the beginning of the water restrictions could mainly be traced to the 1983 transfer of millions of litres of water from Drakensberg dams to the Eastern Transvaal, where power stations supply the bulk of the country's electricity.

Eskom imported huge pumps from Sweden and also spent a considerable amount converting some power stations from the water-cooling system to the dry cooled system. Water use was more efficient, but the cost of electricity rose.
SA will not become a 'dumping ground for toxic waste'

South Africa will not become the nuclear dumping ground of the world.

That is the assurance from Mr Nic Ligthelm, public relations manager for the Atomic Energy Corporation of South Africa.

Speaking in the wake of reports that various parts of Africa had been selected by foreign countries as secret dumping sites for dangerous industrial and nuclear waste, he said there was no way that South Africa would allow itself to be exploited.

"Although there is a lot of money involved in storing nuclear waste, we won't be exploited. South Africa's storage grounds are for the country's own personal use."

The Progressive Federal Party's spokesman on economic and mineral affairs, Mr Roger Hulley, said the storage of waste was a major problem for those countries producing it.

"There are not that many places left where nuclear waste can be stored. I would not like South Africa to be a dumping ground for the rest of the world."

The problem of disposal created a storm in the European Parliament in Brussels and led to a resolution demanding a ban on the "frightening" amounts of toxic waste being exported to the Third World.

Stricter implementation of regulations was also demanded.

The going rate for the disposal of nuclear waste is more than R2 000 a ton.

However, two of Africa's poorest countries are accepting waste at well below the normal rate. Guinea Bissau is admitting waste for about R100 a ton. Benin's contract provides for an acceptance rate of just over R5 a ton.

OPEN SPACES

It is believed that South Africa, with its dry climate and wide open and sparsely populated regions, could be a suitable nuclear dumping ground. This suggestion has been rejected by Mr Ligthelm.

He said the situation was "very safe" and there was little chance of a Chernobyl-like disaster.

"We took the most careful precautions before selecting the site, and we are very careful with the storage of waste. We do not do reprocessing in South Africa, so the threat of nuclear disaster is very slim."

Resins and other intermediate level waste would be placed in concrete containers and metal drums and transported by road.

"As the radio-activity of the waste is low, road transportation constitutes no health hazard," he said.

Spent fuel elements (high-level waste) would be stored under water in Koeberg for five to 10 years to allow it to cool.
The Poisoning of Africa
Vaal air pollution must be controlled

Verechiging Bureau

The Vaal Triangle’s air pollution problem must be dealt with “seriously and without delay”, says a pollution control expert.

But although the “unacceptably high pollution levels” have caused public concern, the figures have not exceeded internationally accepted health levels, Mr Martin Loyd, chief official of air pollution control, Department of National Health and Population Development, said yesterday.

Mr Loyd was addressing a seminar on air pollution in the Vaal Triangle, organised by the local branch of the National Association for Clean Air.

He said that although industries in the Vaal region were making efforts to combat air pollution, levels were still unacceptably, but not alarmingly, high in the area, where, from a visual point of view, the problem was particularly noticeable in the winter.

Mr Loyd stressed that local industries could, however, not be blamed entirely for the high level of air pollution, saying that at the eastern Transvaal, for example, was putting out far more pollutants than was the case in the Vaal Triangle.

He said that to prevent the situation from deteriorating, it was essential that every source of pollution, no matter how small or big, be identified and tackled.
Perpetrators Get Execution Threat

Enrages Africa

Toxic Waste Row

By Charles Moore
Musicians get together to aid disaster fund

Local musicians and record companies have got together to produce two long-playing albums to raise funds for the flood disaster fund.

A spokesman for The Bread and Butter Company, which produced the records, said all involved had given their services free.

"This ensures that all the money collected from the record sales will go to the people who have suffered during the recent floods," the spokesman said.

"Nobody will benefit from the sales except the flood victims themselves."

The albums, called "Calm after the Storm" and "Sonskyn na die Reen", are also available on cassettes.
HOUSE OF ASSEMBLY

THE DEPARTMENT OF EDUCATION

1. The Education Department was established in 1956 as a result of Section 2 of the 1955 Education Act. The Department is responsible for the planning, development, and implementation of education policies and programmes in the territory. It is also responsible for the management of all schools and educational institutions.

2. The Department is headed by the Minister of Education, who is appointed by the Governor in Council. The Minister is responsible for policy formulation and the overall direction of the Department.

3. The Department is composed of several sections, each with its own responsibilities. These include the sections for Planning, Curriculum, Finance, and Administration.

4. The Department is responsible for ensuring that all schools in the territory meet the standards set by the Education Act. It also provides support to schools in the form of teacher training and professional development.

5. The Department is committed to providing quality education to all students in the territory. It strives to ensure that all students have equal access to education and that they are provided with the tools necessary to succeed in life.

6. The Department is also responsible for the development of educational resources and programmes that are appropriate to the needs of the territory's students. It works closely with other government departments, as well as with educational institutions and organizations, to achieve its goals.

7. The Department is committed to continuously improving its services and programmes in order to meet the changing needs of students and society. It welcomes feedback and suggestions from all stakeholders and is always open to new ideas and approaches.
(b) Huguenot and/or (c) Great Trek festivals; if so, (i) in what way, (ii) when, (iii) why, and (iv) at what cost, in each case.

(2) whether any outside organizations or agencies were allocated funds by his Department in respect of these festivals; if so, (a) which organizations or agencies and (b) (i) what amount was allocated, and (ii) why, in each case.

The MINISTER OF AGRICULTURE:
(1) No.
(2) No.

Diaz/Huguenot/Great Trek festivals

1370. Mr K M ANDREW asked the Minister of Economic Affairs and Technology:
(1) whether the Department of Mineral and Energy Affairs has contributed or intends to contribute to the (a) Diaz, (b) Huguenot and/or (c) Great Trek festivals; if so, (i) in what way, (ii) when, (iii) why, and (iv) at what cost, in each case;
(2) whether any outside organizations or agencies were allocated funds by this Department in respect of these festivals; if so, (a) which organizations or agencies and (b) (i) what amount was allocated, and (ii) why, in each case?

The MINISTER OF ECONOMIC AFFAIRS AND TECHNOLOGY:
(1) No.
(2) No.

Diaz/Huguenot/Great Trek festivals

1381. Mr K M ANDREW asked the Minister of Manpower:
(1) whether his Department has contributed or intends to contribute to the (a) Diaz, (b) Huguenot and/or (c) Great Trek festivals; if so, (i) in what way, (ii) when, (iii) why, and (iv) at what cost, in each case;
(2) whether any outside organizations or agencies were allocated funds by his Department in respect of these festivals; if so, (a) which organizations or agencies and (b) (i) what amount was allocated, and (ii) why, in each case?

The MINISTER OF MANPOWER:
(1) (a), (b) and (c) No.
(a) (i), (ii), (iii) and (iv) Fail away
(b) (i), (ii), (iii) and (iv) Fail away.
(c) (i), (ii), (iii) and (iv) Fail away.
(2) No.
(a) Falls away,
(b) (i) and (ii) Fail away.

Diaz/Huguenot/Great Trek festivals

1386. Mr K M ANDREW asked the Minister of Transport Affairs:
(1) whether the Department of Transport has contributed or intends to contribute to the (a) Diaz, (b) Huguenot and/or (c) Great Trek festivals; if so, (i) in what way, (ii) when, (iii) why, and (iv) at what cost, in each case;
(2) whether any outside organizations or agencies were allocated funds by this Department in respect of these festivals; if so, (a) which organizations or agencies and (b) (i) what amount was allocated, and (ii) why, in each case?

The MINISTER OF TRANSPORT AFFAIRS:
(1) (a) Yes.
(i) An officer of the Department of Transport has been seconded to serve on the Diaz 88-committee and to act as master of the Caravel.
(ii) Since December 1984:
(iii) As a result of the Department's involvement in shipping;
(iv) The normal salary of the officer.
(b) No; and
(c) No.
(2) No.
(a) and (b) Fail away.

Own Affairs

Zonnebloem area: Town-planning scheme

1372. Mr C J DERBY-LEWIS asked the Minister of Local Government and Housing:
(1) whether the finalization of the town-planning scheme for the Zonnebloem area in Cape Town has been delayed by unforeseen and other problems; if so, (a) by what problems, (b) what steps have been taken to solve these problems and (c) when it is anticipated that the matter will be finalized;
(2) (a) on what date was this town-planning scheme initiated, (b) what area of land is involved in the scheme, (c) what was the value of the land at the date of the initiation of the scheme and (d) what is the estimated current value of this land and (ii) in respect of what date is this information furnished?

The MINISTER OF LOCAL GOVERNMENT AND HOUSING:
(1) Yes:
(a) Problems were experienced as a result of requirements regarding the size and use of certain land. The identification of various land components which was only completed during the replanning process with a view to the acquisition and consolidation thereof; further contributed to the delay
(b) The problems were continually addressed by way of negotiations.
(c) With the exception of Phase 8, which is not finalized yet, the Zoning Schemes were approved as follows:
   Phase 1 2 Jul 1977
   Phase 2 14 November 1984
   Phase 3 23 October 1985
   Phase 4 24 June 1983
   Phase 5 24 June 1983
   Phase 6 24 June 1983
   Phase 7 23 October 1985
(2) (a) During 1986
(b) 101 ha.
(c) The details are not available.
(d) (i) Business properties: Approximately R100 000
(ii) Residential properties: Approximately R80 000

Residential properties — April 1988

Zonnebloem: Meravian Church

163. Mr C J DERBY-LEWIS asked the Minister of Local Government and Housing:
Whether an agreement was entered into with the Cape Technikon in respect of the restoration of the Moravian Church in Zonnebloem, Cape Town; if so, (a) when, (b) by whom, (c) why, (d) what were the terms of this agreement, (e) what was the estimated cost of the restoration project at the time of the agreement being entered into and (f) (i) what funds have been spent on this project to date, (ii) what is the latest estimate of the final cost and (iii) in respect of what date is this information furnished?

The MINISTER OF LOCAL GOVERNMENT AND HOUSING:

Yes:
(a) August 1984;
(b) The former Department of Community Development and the Technikon Board. The agreement was signed on 16 February 1984 between the Department of Local Government, Housing and Works, and the Technikon Board.
(c) and (d) The Technikon Board initially wanted the church complex to be demolished in order to obtain a vacant property for development. During the preparation of the complex at the time, the undertaking was given that the church would be conserved. I was then advised that the Technikon Board would restore the complex and that completion of the work would be undertaken by the Technikon Board who would be responsible for further maintenance.
(e) R30 000.00
(f) (i) R50 000.00
(ii) June 1988

Demoina flood damage

164. Mr R W HARDINGHAM asked the Minister of Agriculture and Water Supply:
What amounts were paid by the State in the form of Demoina flood damage compensation

HOUSE OF ASSEMBLY
in respect of each of the (a) economic and (b) uneconomic farming units referred to in his reply to Question No 118 on 9 June 1988?

The MINISTER OF AGRICULTURE AND WATER SUPPLY:

The portions of land referred to in the reply to Question No 118, are compounded from various portions of land which were originally part of the flood damaged farms. These farms were expropriated in its entirety by the state at the request of the owners.

Owing to necessary division and grouping thereafter into economical and uneconomical units of the land still suitable for sugar-cane production it is not possible at this stage to determine the compensation paid originally for the land concerned.

Natal: créches

167 Mr C J DERBY-LEWIS asked the Minister of Health Services and Welfare:

What is the limit in regard to students from each specified non-White race group wishing to enrol at universities for Whites in South Africa?

(2) how many (a) White, (b) Coloured, (c) Indian and (d) Black students who enlisted at such universities in 1987 were from (i) the Republic, (ii) each self-governing territory, (iii) each independent Black state and (iv) each other specified country?

The MINISTER OF EDUCATION AND CULTURE:

(1) This matter is vested in the Council of the University concerned.

(2) the information will be available during 1989.

Teachers: starting salary

169 Mr M J ELLIS asked the Minister of Education and Culture:

What is the starting salary of a (a) male and (b) female primary and (c) secondary school teacher with an appropriate four-year degree?

The MINISTER OF EDUCATION AND CULTURE:

(a) (i) and (ii) R15 666.

(b) (i) and (ii) R13 473.

Universities and technikons: amount subsidized

172 Mr A GERBER asked the Minister of Education and Culture:

What was the total amount provided for (a) universities and (b) technikons totalling 326 million in 1986 to 405 (including 360 non-white children) The registration of a multi-racial créche is considered subject to the acquisition of a permit in terms of section 21 of the Group Areas Act, 1950?

The MINISTER OF EDUCATION AND CULTURE:

(a) R744 793 000.

(b) R152 370 000

For the 1986-88 financial year and does not include interest and capital redemption.

HOUSE OF REPRESENTATIVES

1977 20.50
1978 23.75
1979 27.50
1980 33.00
1981 40.00
1982 49.00
1983 57.00
1984 65.00
1985 79.00
1986 97.00
1987 117.00

House of Representatives

For written reply:

General Affairs:

Black social and military pensions

11. Mr P A CHENDRICKSE asked the Minister of Constitutional Development and Planning:

(1) (a) what was the amount paid per month to Black (i) social and (ii) military pensioners (a) in 1961 up to and including 1987 and (b) in 1988 as in the latest specified date for which figures are available, (b) what was the percentage increase in each such year and (c) (i) in which years were bonuses paid to such pensioners and (ii) what was the amount of the bonuses paid out in each of these years?

(2) how many social pensioners were registered with the Department in each of the above years?

The MINISTER OF CONSTITUTIONAL DEVELOPMENT AND PLANNING:

This function rests in the different Provincial Administrators but the information was furnished by the Transvaal Provincial Government who acted as co-ordinator.

(b) R218.00

(b) R48.00
Making Africa an atomic wastebin

THE discovery that more than 3,000 tons of Italian waste, including radioactive material, has been unloaded in Nigeria – apparently without government knowledge – has sparked an outcry against the increasing use of African countries as dumping grounds for industrial waste. Companies under pressure from environmental groups in Europe and North America are turning to countries with less stringent regulations to get rid of toxic chemicals and dangerous waste.

African leaders at the recent Organisation of African Unity (OAU) conference in Addis Ababa agreed to step up measures against dumpers. Consumer groups from African countries met in Nairobi in June and called for help from international agencies in policing waste disposal.

Nigeria has been one of the most prominent opponents of dumping. News that it was a victim of illegal waste disposal was revealed in the Lagos-based Guardian newspaper. It had been alerted by concerned Nigerian students living in Pisa, from which the wastes were transported.

The student sent copies of Italian newspaper reports that Italian businessmen, collaborating with Nigerian front men, had been dumping toxic wastes at the southern port of Koko after failing to get rid of the material in Rumania, Bulgaria and Venezuela.

A long-established Italian resident of Nigeria reportedly obtained approval from the Nigerian authorities to import eight items of non-explosive, non-radioactive and non-self-combusting chemicals, but later substituted a forged list of 20 items containing dangerous toxins and radioactive wastes.

He is also said to have obtained other documents, including a forged pre-shipment report of findings, to aid entry of lethal cargo. With the help of a Nigerian clearing and shipping agent and other officials, five consignments of material arrived between August 1987 and May 1988, bypassing normal port procedures such as a physical inspection by the health ministry.

The information ministry's Prince Tony Momoh said the government viewed the affair "as a deliberate act calculated to embarrass Nigeria and endanger the lives of its people". Many officials in the government of President Ibrahim Babangida believe the Italian authorities knew of the shipments. Nigeria has urged the United Nations general assembly to send a clear message to multinational corporations to stop using Africa as a dumping ground for their industrial wastes.

Lagos recalled its envoy in Italy and asked the Italian government to recall its chargé d'affaires. The government also demanded that the Italian government remove the waste. Nigeria lacks the facilities to dispose of the waste. The Italian ship which delivered it was seized and Lagos says it may take the matter to the International Court of Justice in the Hague, although legal action would be a protracted process.

Meanwhile, much of the packing containing the toxic waste is damaged and exposed. Some material has spilled, raising fears of a long-term environmental damage.
Govt acts on pollution off Hout Bay

Political Staff
ACTION was being taken to stop the “unacceptable” pollution of the sea off Hout Bay and pressure had been brought on the Western Cape Regional Services Council to discharge effluent in a suitable manner, the Minister of Water Affairs, Mr Gert Kotzé, said yesterday.

Earlier this year the Cape Times did an expose of sewage-polluted stormwater being discharged on the beach. The RSC then rectified this.

Mr Kotzé also said the existing sewage outfall pipeline at Hout Bay was “unsatisfactory”.

The planning and intended establishment of a new pipeline, to be operated by the Western Cape RSC, had been “rigorously controlled” by the Department of Water Affairs, he said. Funds had been budgeted for the new pipeline.

Mr Kotzé was questioned in Parliament yesterday by the MP for Sea Point, Mr Colin Eglin, about steps his department intended taking about pollution of the sea in Hout Bay.

Pressure had been brought on the Western Cape RSC to discharge effluent from the existing sea outfall pipeline off Hout Bay “in a suitable manner”.

Discharges were monitored regularly and his department “will not hesitate to prosecute persons or bodies who deliberately or negligently cause pollution. Any complaint in this regard will be followed up immediately”.

Peter Denneh, reports that RSC officials, who may not officially be quoted, said partly treated sewage from septic tanks was discharged on the rocks beside the water at Badtambor, at the foot of the Sentinel.

However, the new outfall — designed with the CSIR — would take the effluent a kilometre out to sea, also from Badtambor, and should solve the problem. It is expected to be built next year.

Opting for major interim solutions before then would be a waste of money, the official felt, but the Department of Water Affairs did have the power to prosecute where the standards it laid down were not met.

Mr Len Pothier, “President of the Republic of Hout Bay”, said only two of the six harbour area septic tanks were operative at present, and the other four needed to be unblocked.

This was a relatively cheap and urgently required interim measure which would alleviate the “extremely poor quality” of effluent discharged at Badtambor at present.

“Sometimes the effluent backs up and flows through the manholes into the streets in the township,” Mr Pothier said.
R26.5-m for disaster

Money raised by the Disaster Relief Fund since October last year will be used to assist only those people living in places which have been declared disaster areas, according to Mr Japie Visser, chairman of the fund.

Mr Visser said the fund could not afford to assist any person simply because he sustained losses during the floods. The whole area must have been declared a disaster area, Mr Visser said.

The fund has now raised R26.5 million, he said.

Natal and kwaZulu, both of which were declared disaster areas, have produced 140,000 applicants for financial assistance and 130,000 of these applications have already been finalised and payments made, said Mr Visser.

Between 4000 and 5000 applications were expected from flood victims from the Orange Free State and the northern Cape. About 800 applications had been approved and payments made, he said.

Mr Visser said included with the Free State were Botshabelo and Wittebosch (QwaQwa) where between 700 and 800 flood victims were to receive financial help.
Robben Island to be opened to public
Flood aid ‘not to mum who lost home’

By Kaizer Nyatumba

A Bophuthatswana mother of three, who lives in an area described as one of the worst hit by floods earlier in the year, cannot benefit from the Disaster Relief Fund established to help victims.

Ms Emmah Bhool, of Taung near Kimberley, said a Bophuthatswana chief had told her and many other residents they were not eligible for assistance “because we were not South Africans”.

Only South African citizens could benefit from the fund, Ms Bhool was allegedly told.

Ms Bhool said her three-room hut was one of the many destroyed by floods in the area, which World Vision South Africa described as one of the worst hit by floods.

She was working in Johannesburg when the disaster occurred and it was only when she returned home that she discovered her house had been destroyed, her furniture badly damaged and her children aged two, four and eight were living with neighbours.

Mrs Linda Baverley of Weltevrede Park, for whom Ms Bhool works, said it was “ridiculous” that certain disaster-stricken people could not benefit from the fund.

“Many people who have donated to the fund were not aware that their money would be made available to certain people and not to others,”

She said she had phoned Mr Gore at the Department of National Health in Pretoria on Ms Bhool’s behalf, and he confirmed that Ms Bhool could not be assisted because she was not a South African national.

When The Star contacted Mr Gore, he said he could not speak to the press, and directed questions to the Disaster Relief Fund.

Mr Japie Visser, chairman of the fund, said he was not aware of any requests for help from people in Bophuthatswana.

“We certainly did not receive any request for help from that area; that is a fact. I know this inside out because all the requests come to me,” Mr Visser said.
Conservation costs are causing conflict

Reports by Melanie Gosling

The costs of conservation were invariably higher than the cash returns, and this created a constant conflict between environmental protection and development, Dr Piet Claassen said yesterday.

Dr Claassen, of the town and regional planning department at the University of Stellenbosch, said one of the reasons why so much damage was still being done to the environment in spite of 20 years of environmental awareness, was the lack of control over Government projects.

Another was the lack of clear policy on who should bear the costs of environmental protection.

He said the problem was further aggravated by the existence of First and Third World people in South Africa. The majority of South Africans, who often lived near or below the breadline, had little time to worry about the remote aspects of environmental protection.

"There will always be clashes between development and conservation and it will never be easy to resolve the dichotomy," Dr Claassen said.

Environmental protection should therefore always strike a wise balance between development and protection and a fair division of costs.

"Education and propaganda are still the most important weapons to fight environmental degradation," he said.

Consequences of motorways

The construction of a motorway through an urban area has grave social consequences, including movement of people elsewhere, noise pollution and loss of income from investments along the route, Mr DJ Hulley said yesterday.

Mr Hulley said development came with a cost in environmental problems which affected people physically and socially.

He outlined examples of the negative impacts which could occur if the Pretoria Freeway Plan 67 were implemented. These would include noise and air pollution, changes to community activities and changes to land use.

"These costs should be assessed at an early stage of planning and mitigating measures should become an integral part of the plan," Mr Hulley said.

‘Degradation of the environment’

Civil engineers have sometimes been accused of being the main culprits of environmental degradation because of the "obvious evidence which surrounds us", Mr A A Friel, retired assistant chief civil engineer of SAR, said yesterday.

Mr Friel said controversial designs which had involved railway engineers included:
- Railway installations at the Swartkops River.
- A shooting line along East London's west bank.
- Some aspects of railways at Richards Bay.

Other architectural and engineering constructions which matched the railway controversies were:
- The Unisa buildings in the southern hills of Pretoria.
- The "pepper pots" at the foot of Table Mountain.
- A sewage disposal works which has cut off the supply of sand to Port Elizabeth's southern beaches.
- The Beacon Isle Hotel at Plettenberg Bay.

Letaba River is under pressure

By the year 2010 there will not be enough water for people living in the catchment area of the Letaba River if the present rate of development continues, experts predict.

Environmental scientist Miss Bryony Walsmey said today that research had shown the situation in the Letaba River in the north-eastern Transvaal to be more serious than originally thought.

She said as the population increased and technology developed, the demand for water increased. It was estimated that in parts of the Letaba River catchment, supplies would be insufficient to meet domestic needs, let alone those of agriculture and industry.

"One of the reasons for this critical point having been reached is that water has been regarded as a resource for human benefit only, with little regard for the ecological system it supports," she said.

Until the 1960s the Letaba ran all year. Now it runs only in summer and even then its flow is lower than before.

WORKSHOPS

Two workshops were held to tackle the problem with specialists from a range of disciplines, she said.

"The major objective was the determination of the water needed for ecology so that rivers can continue to function as viable ecosystems," Miss Walsmey said.

Generally, there was a conflict between the water demands of development and those of ecology. To minimise this conflict, the Department of Water Affairs had adopted a holistic approach to planning.

"The aim of this approach is to manage water resources to yield the greatest benefit to all users, while maintaining the quality of life for future generations," Miss Walsmey said.

Miss Walsmey said the department's holistic approach was an "admirable example" of multi-disciplinary, integrated environmental management.
Flood-hit towns, farms mopping up

Devastated areas get back to normal

By Helen Grange and Sue Olsawng

Towns in the Free State, western Transvaal and northern Cape which were flooded this year have almost completed repairs. And farmers of land hit by the floods are preparing for the next season's crops.

Some homeowners in the worst-hit areas in the Free State and western Transvaal are waiting for the summer season to complete repairs, according to municipal spokesmen.

However, with the assistance of government's flood relief programme, roads, dam walls, bridges, sewage pipes, electricity and water supply in most affected towns and villages had been repaired.

About R55 million was budgeted by the Government in March for repairs, and a special job creation project in the flood regions was instituted. Labourers were paid R4 a day for helping local authorities clear up initial damage from the February floods.

Farmers in the northern Cape in and around Upington and Prieska are hard at work re-installing water pumps from the Orange river for irrigation.

"It will take another six months before everything is as it was in Upington. The Upington municipality has already spent R3 million on damages to municipal buildings. Private property owners have relied on government subsidies and insurance for repairs, and most homes are re-occupied," the town clerk, Mr Kollovan Wyk, said.

In Prieska, Jacobsdal and surrounding areas many owners of homes in low-lying areas have lived in rented homes for the duration of winter and are expected to start returning to their homes from next week.

"Some of these homes are still quite wet from recent rains," Mr Dick Viljoen, the Prieska town clerk, said.

Douglas, one of the worse-hit towns, launched a road repair programme last week to complete repairs already started.

"We have fixed almost everything else in a remarkably short time," Mr Louis De Jager, Douglas town clerk said.

Schweizer-Reneke, also badly damaged by floods, now has only a few roads needing attention.

The town clerk at Brandfort, in the Free State, Mr Christiaan Venster, said the town was extremely lucky to suffer little damage.

Insurance awaited

Mr Pieter Grobler, the Dewetsdorp, Free State, town clerk, He added that some residential homes were still in need of repair but most residents were waiting for insurance claims to be processed.

A spokesman for the Edonburg municipality, Mr Nick Coetzee, said the town was still busy with repairs but had already fixed a small bridge as well as sewage and water pipes and electrical damage.

Mr Brinley Pricharid for the Phillipolis municipality in the Free State reported: "About 19 houses in a nearby black township were evacuated and those people are staying in tents until their homes are rebuilt. They have been reimbursed through the government flood relief programme but will have to wait about 18 months for new homes because we are having difficulties getting building supplies in over unmanageable roads and we've experienced a shortage of bricks."

The Reddersburg town clerk, Mr Dieplof Pieterse, municipality said the town had completed about 80 percent of its repairs.

"We've spent about R55 000 so far on municipal repairs and repaired 15 homes in a nearby black township."

A Kimberley spokesman, Mr Riaan Piemar, said, "Some roads need resurfacing but the bulk of work has already been done. Two pleasure resorts on the Vaal River need about R50 000 worth of repairs and we are in the process of repainting and rebuilding at the two sites."

The assistant town clerk at De Aar, also in the northern Cape, Mr Gerhard Engelbrecht, reported: "Our roads were covered in mud but everything was quickly back to normal."

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FAMILY ANNOUNCEMENTS

Deaths

MILLER

Harold Millar passed away peacefully in Nieuwoudtville on the 14th March 1988. He was born in the province of the Orange Free State on 31st October 1899. He was the beloved husband of Lillie and survived by his loving mother, Elizabeth, and seven children. He was the beloved son of the late Mr and Mrs P. C. Millar. He is survived by his beloved wife, Lillie, their son, Charles, and three daughters. He leaves behind 10 grandchildren, 12 great-grandchildren, and numerous nieces and nephews. He will be sorely missed by his family and friends.

MUNICHTH

Jansen

Huntly and Uitkyk also widely known as the "Old Eleven" passed away on the 7th of January 1988. He was a well-known farmer and was deeply respected by all who knew him. He leaves behind his beloved wife, Elsie, and their children. He was a true friend to many and will be sorely missed by his family and friends.

MUNICHTH

My dear sister was called to her heavenly home on the 1st of January 1988. She leaves behind her beloved husband, Thomas, and their children. She will be sorely missed by her family and friends.

Funeral Notices

PROVINS

The funeral of Mrs Annie Pretorius, who passed away on the 20th of January 1988, will be held at the Nieuwoudtville Church on the 23rd of January 1988. The service will begin at 10:00 AM and will be followed by the interment at the Nieuwoudtville Cemetery.

HAYES

Carolyn Hayes, a well-known and respected businesswoman, passed away on the 15th of January 1988. She was a true friend to many and will be sorely missed. A memorial service will be held at the Nieuwoudtville Memorial Hall on the 20th of January 1988 at 2:00 PM. Donations in her memory can be made to the Nieuwoudtville Memorial Hall Association.

Owen


GEOGHE

To Cherie and Linda (nee Price) a daughter Baby Lily, from your loving parents. On the 10th of January 1988. Thanks to Denys and Bobby for their kind assistance. A true friend to many and will be sorely missed.}

O'BRIEN

To Cherie and Linda (nee Price) a daughter, Baby Lily, from your loving parents. On the 10th of January 1988. Thanks to Denys and Bobby for their kind assistance. A true friend to many and will be sorely missed.}

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The Star Monday July 11 1988
Thousands cut off by snowstorm

IN Cape Town it will get warmer today as a high pressure system moves in over the Peninsula and Boland. A moderate north-wester is expected to veer to the south-west with the minimum temperature 8°C and the maximum 17°C.

Graham Richardson — are believed to have only three sleeping bags and a space blanket between them.

“We are most concerned about this group as they had food for only two days,” said NPB spokesman Mr Jeff Gaisford.

There was also concern for the safety of a group of seven hikers believed to be trapped in the Cobham area of the Drakensberg. They have been named as Durbanites Tony Carr, Dave Johnson, Paul Ebbeling, Sheryl Deane, Jenny Robinson and two women identified only as Odette and Elise.

Three hikers — Mr Dave Boden, Mr Errol Brocklehurst, deputy principal of Northlands Boys' High School, and Mr Alan Leishman, all of Durban — who had been stranded in the same area made their way down to safety yesterday.

Two NPB resorts, Coleford — where about 30 visitors are stranded — and Vergelegen were still cut off from the outside world late yesterday. Two groups of people were snowed in at Vergelegen.

But the road to the Loteni reserve, where 57 visitors — including a 15-month-old baby and 10 children — had been stranded since Sunday, was opened late yesterday afternoon.
SA ‘imported mercury waste from US firm’

The Star's Foreign News Service

UTRECHT — South Africa has imported mercury wastes from American Cyanamid of the United States, according to the latest Greenpeace report.

The report minutely detailed the secretive, worldwide and very lucrative trade in toxic waste, often from Western industrialised countries to underdeveloped countries.

Greenpeace warned that its studies had shown that all the most common waste disposal options released contaminants into the environment.

"Each shipment of waste from one country to another is a threat to the public health and environmental integrity of the transited and receiving countries," the report said.

Greenpeace said the United Nations Environment Programme working group, modelled after the regulatory systems of North America and Europe, had done nothing to stem the flow of waste.

"Further, bureaucratic systems designed to monitor the flow of wastes from industrialised nations appear to be incapable of stopping the proliferation of "sham recycling."

Greenpeace said it would co-operate with the United Nations, interested governments and organisations to adopt a convention which would prevent the international trade in wastes.

The Greenpeace report said that in 1986 the Natal trading firm, Thor Chemicals of Cato Ridge, contracted to receive two annual 60-drum shipments of mercury-laced sludge wastes from American Cyanamid of Bound Brook, New Jersey. The shipments were to continue after 1986.

According to the Greenpeace report, Thor Chemical would undertake to reclaim and recycle the mercury wastes in South Africa.

The report noted that two shipments were made in 1986, but that it was unclear whether South Africa had since then agreed to take more shipments.

South Africa had also received wastes generated by the American exporters Diamond Shamrock, Quanex and Arbuckle Machinery Company.
‘Rotten foundations’ to Sandton report

Sandton Town Council has become the first body in South Africa to carry out an “environmental impact assessment” (EIA) on a big engineering project.

A Cape Town team was employed to investigate the best route for a R160 million, 4-lane, east-west arterial road.

The team (the University of Cape Town’s Environmental Evaluation Unit) is under the guidance of the country’s top expert on EIAs, Professor Richard Fuggle.

An EIA report is supposed to recommend the best course for a proposed development, but only after listening to the public. It must list all the anticipated good and bad effects.

The team has until September to report.

Some critics claim the EIA is superfluous because the public has not yet agreed on the need for a new highway.

The council claims it has, as a committee of six residents’ leaders agreed there was a need. But it has since become apparent that only traffic engineers’ ideas were fed to the committee.

Jomag, the big federation of ratepayers’ associations, is unhappy.

A spokesman, Mr Conrad Berge, says unless the team looks holistically at Sandton’s needs, as well as at the highway Randburg intends slotting into Sandton’s proposed highway, it cannot make a valid judgment.

The two highways form a single corridor right across Greater Johannesburg, offering freeway (outer ring) traffic a petrol-saving short cut.

Mr Berge told me: “Jomag has no quarrel with the UCT team, but its work rests on rotten foundations.”

He said Jomag has “extensive hard evidence” that information is being withheld; that there has been an undue influence by engineers; and that there has been misrepresentation of facts and manipulation of interests.

Footnote: the public must respond by Friday (081-6213).
Junkyard, South Africa

Evidence increases that chemicals used in the notorious Vlplaak defoliants 'Agent Orange' are being dumped in South Africa, one of the few countries which has not yet banned the substances. Research reveals that the chemicals are more widely used than previously believed. Rain samples show poisons traces 10,000 times over the 'safe' level. By EDWARD J. COCK.


tought stocks of 245-T were bought up in South Africa about five years ago, before the chemical was banned. The only company in the world that purchased the defoliant 245-T's Bataan was located in New Zealand and jointly owned by Dow Chemicals of the United States and the Australian company that sold Agent Orange to the US army, the Aucklands brand of J.J. Fox & Sons. The firm closed down at the end of last year but may have sold off old stocks.

Pesticides spraying is banned in South Africa, but old stocks of the chemical were being used up in the country. One of the firms was using up 245-T in South Africa, refusing to follow the Weekly Mail's advice.

"Farm Ag director, Mr. Richard Wilson, said: We are not using up old stocks of the defoliant, but we need to use them up before they expire." The director of Agriculture's register for fertilizers, Mr. Max Oostra, had full details of all supplied products, but "Farm Ag has no information on the use of 245-T in South Africa." The Weekly Mail was told that "Farm Ag had bought the chemical from Dow in New Zealand." No evidence was found that Farm Ag had used 245-T in South Africa.

One of the pesticides, known as Tordon 223, contains 245-T and carry the Dow logo on its label. But Dow's chief executive of marketing services, Mr. Anderson, said this version of Tordon was no longer produced by the company.

Loyd, manager of I.C. Chemicals agricultural division, confirmed that his firm's supplies were sold with 245-T. Dow's chief executive, Tordon 245-T, was banned by the government, but it was possible that Farm Ag had bought the chemical from Dow in New Zealand. There was no evidence that Farm Ag had used 245-T in South Africa.

The Weekly Mail was told that "Farm Ag had bought the chemical from Dow in New Zealand." No evidence was found that Farm Ag had used 245-T in South Africa.

A government committee responsible for pesticide control has issued a statement on the use of Agent Orange that "quickly to be man and beast of these products in perspective." The Interdepartmental Advisory Committee on the Use of Herbicides, established by the Minister of Agriculture, has identified the dangers of the Agent Orange problem, the "inherently hazardous nature of this herbicide" and has called for "a highly toxic substance produced during the manufacturing process." The weekly found that the herbicide contains less than half the amount of the substance found in the "dangerous" herbicide.

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Staff Reporter

SOUTH AFRICA has turned down large sums of money offered by Italian and American companies looking for cheap sites to dump toxic waste, the Department of Water Affairs in Pretoria has revealed.

"We flatly refused," a spokesman said.
The foreign companies had used intermediaries to "sound out" the South African authorities and to offer money as an inducement.

Hundreds of rands

The spokesman said: "We have been approached in the past by Italians and Americans and asked whether we would accept toxic wastes. We were offered hundreds of rands per ton and were even told the waste was not harmful. We did not believe that."

He said he did not know the names of the companies.

"You don't know who you are dealing with," the spokesman said. "They probably don't want you to know who they really are."

The spokesman was commenting after a Greenpeace report in Holland highlighted the dangers inherent in the secret, but lucrative trade in toxic wastes. American and European companies, it said, had exported dangerous waste to the Third World because regulations at home made safe disposal costly.

Instead, companies had been found to have induced poor countries — some in Africa — to accept toxic wastes as a source of income.

South Africa, the Department of Water Affairs says, would never accept such offers.

The Department of the Environment echoes this view. A spokesman said: "As far as I know, we have never had solid waste imports. We are not in favour of it at all."

Also mentioned in the Greenpeace report is a South African company, Thor Chemicals of Natal, singled out for accepting mercury-laced waste from an American company. Thor Chemicals says its operation is above-board.

A spokesman said the waste was the left-over of a product it sold to America, and Thor Chemicals believed it was responsible for disposing of it safely. He added that the disposal operation was approved by South Africa's Department of Environment and the US Environmental Protection Agency.

Government spokesmen in Pretoria were not aware of any other companies in South Africa with a similar arrangement for treating or disposing of waste from abroad.

Waste disposal in South Africa, however, is not yet, by departmental admission, sufficiently regulated. That is soon to change.

A new Environmental Conservation Act, if it becomes law, will provide government inspectors with the tool to monitor, regulate and, where necessary, clamp down on the waste trade.

The Department of Water Affairs will be responsible for the regulation of solid wastes.

Very concerned

The Water Affairs spokesman said: "We have never had waste disposal legislation."

"But we are very concerned, from a water point of view, about pollution, and the new regulations will clarify how wastes should be treated and what requirements must be met. If they aren't, the government will be able to take action."

In fact, the new regulations have no provisions governing the import of wastes.

The spokesman said: "We did not address that issue. The department is clear... it will never be allowed."
SA will never be dumping ground for toxic wastes

Staff Reporter
CAPE TOWN — South Africa has turned down large sums offered by Italian and American companies looking for cheap sites to dump toxic waste, the Department of Water Affairs in Pretoria has revealed.

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The foreign companies had used intermediaries to sound out the South African authorities and offered money as an inducement.

The spokesman said: "We have been approached in the past by Italians and Americans and asked whether we would accept toxic wastes. We were offered hundreds of rands per ton and were even told the waste was not harmful. We did not believe that, though."

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DISPOSAL COSTLY
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He added that the disposal operation was approved by South Africa's Department of Environment and the US Environmental Protection Agency.
This ratepayer opposes a highway for Sandton

Usually I write about other people’s environmental problems. A few days ago, as a ratepayer in Sandton’s manure belt, I was invited to tell an inquiry about my own. The Environmental Evaluation Unit of the University of Cape Town asked why I oppose the building of a new arterial road across Sandton.

The unit is, on behalf of the council, reappraising a plan for an east-west arterial to ease cross-town congestion.

I told them I opposed the plan because:

● I believe Sandton has reached the point where new highways can no longer solve its traffic problems — they can only enlarge them.
● I have lived in Sandton and worked in Johannesburg for more than 25 years and have never been in a traffic jam. If I make the mistake of getting caught in morning peak traffic I blame myself — I do not demand a R40 million highway.
● Nearly everybody who sits daily in heavy traffic is a volunteer.
● Traffic congestion is something we have to learn to accept in urban areas. It is self-limiting. When it gets really bad people will demand public transport.
● London, with the best underground train system and taxi system in the world, and an excellent bus service, and having sacrificed hectares to motorways and ring roads, now boasts an average traffic speed of 12 km/h. In New York, Calcutta, Brisbane and Athens it’s 15, Paris 16 and Lagos, where the traffic cops use whips, it’s 12. I can get across Sandton at 40 km/h except for about 90 minutes in every 24 hours.
● No serious attempt has been made to seek alternative ways of commuting — apart from putting on desperately uncomfortable buses mounted on truck chassis and operated for the benefit of the operator rather than the passenger. They take you along a route you don’t want to go and drop you off where you don’t want to be.
● The priority for Sandton should be people, not vehicles. It is already difficult to find a quiet suburb not laced with fast arterials, why wreck more?
Relief to flood victims in Natal was almost concluded but it was expected that calls for help from victims in Free State, northern Cape and western Transvaal would continue, the Minister of National Health and Population Development, Dr Willie van Niekerk, said yesterday.

Speaking at a function in Pretoria where the University of South Africa donated R50,000 to the emergency relief fund, he said donations to the fund now amounted to R27.2 million.

He said that in Natal and kwazulu R51,145,285 had been used to answer 132,677 calls for aid. In the Free State, northern Cape and western Transvaal 1,047 applications for aid had been handled at the cost of R1,501,313.

Figures for Ladysmith, which Dr van Niekerk excluded from those given for Natal, apparently because the town was declared a flood disaster area twice, amounted to R560,000 for 1,047 applications for aid.

Dr van Niekerk said that the postage stamp campaign had provided R1.1 million. — Saps.
Waste disposal becomes costly

South African industrialists and home-owners will soon face sharp increases in the cost of waste disposal, says Mr Geoff Wood, managing director of a waste management firm.

For years, he says, waste disposal costs in the Republic have been well below those charged in other countries, but an imminent explosion in landfill costs threatens to change that.

"The problem arises from people's unwillingness to be responsible for the waste they produce. All of a sudden, it is not their waste once it is handed over to a disposal firm — and the last place they want to see it is anywhere close to home," Mr Wood says.

South Africa has not felt the full impact of this yet because there have been adequate landfill sites away from housing estates and industrial areas.

SITES TO FIND

With continuing urbanisation, however, landfill sites which have to meet certain criteria such as the right soil conditions will have to be found further and further away. Transport costs alone will be greatly increased.

Mr Wood says owners of potential sites have become aware of their enhanced value and are asking much higher prices.

He calls for frank discussions between disposal firms and local authorities.

An alternative "is for municipalities to explore with waste disposal firms how they can co-operate to mutual benefit so that proper use is made of existing landfills". — Sapa.
DURBAN — Thor Chemicals, in the centre of an international row over the indiscriminate dumping of toxic wastes, has been given the all clear by the Department of Water Affairs and the Department of Health.

Investigations by these departments and other authorities came after an accusation by Greenpeace that Thor's plant in Cato Ridge was part of a secret and lucrative worldwide trade in toxic wastes.

But Thor chief executive, Mr. John Dyer, said the waste was recycled, not dumped.

The company sells mercury compounds, which are used as catalysts by various plastics and paint makers. The compounds are sold locally and overseas.

Because there is often waste containing mercury left over at the end of the process, the company offers a facility to customers to return this waste, said Mr. Dyer.

"We feel that it is far better to take back all the waste ourselves. As a company, we are very environmentally aware, and so we have developed a mercury reclamation plant where all waste containing mercury is recycled."

The regional director of the Department of Water Affairs, Mr. Joe Hansmann, said his department had been monitoring Thor Chemicals closely for signs of pollution. It was satisfied there was no leakage.
Helping to preserve metal species

By MEL BROOKS

THE old man slowly picked his way along the road. His cart was piled high with empty bottles, pieces of scrap metal and old newspapers. It was piled so high that the cart could not actually be seen.

Looking at him one feels a twinge of guilt. Surely he must have literally collected tons every year to eke out a living...

reprocessed in some way that will enable them to be re-used to make new products. Resource recovery has become an important part of every nation's economy.

For many years metal merchants have played an important role in the recycling of copper, brass and steel among other metals. Had it not been for the identification of this as a business opportunity by entrepreneurs, our countryside would be littered with scrap.

Were it not for these businesses, which range from one-man collectors to large scrap processing firms, the burden of collection would be on the authorities. We as individuals would have to pay for this in the form of additional taxes.

Mention the word conservation and people conjure up visions of game rangers stalking through the bush in pursuit of some other endangered species.

Your metal merchant is also a conservationist. He is helping to preserve what could be a disappearing metal species.

The world is running out of many key raw materials and creating several environmental problems by its growing demand for others.

Recycling is recognised increasingly as an important means of reducing dependence on the finite deposits of minerals in the earth's crust.

The pressure on other natural resources such as water is also eased — less water is used in the processing of scrap into new paper.

In such ways the recycling industry became established. Today it is a worldwide industry responsible for collecting, sorting, processing and marketing of a vast range of materials that have been discarded by industry and the public.

In South Africa the people, that have been in the recycling industry the longest, are the metal merchants. Now the industry also consists of wastepaper merchants and glass and plastic recycling firms.

Thousands of people are employed in what are generally smaller firms. In fact the very nature of the industry lends itself to the entrepreneurial type of operation.

So consider the old man again. He is in the resource recovery business. Apart from amiring his living he is making our world a better place to live in.
'Imperative that anti-pollution steps be revised'

 Pretoria Correspondent

 Substantial amounts of pollutants were being released into the eastern Transvaal highveld (ETH) atmosphere, according to an authoritative Council for Scientific and Industrial Research (CSIR) report released yesterday.

 "We are looking at a problem which could become acute if left to develop. As it is, we may expect negative signs of corrosion," co-author Dr Wynand Louw said.

 In addition, exposed children of school-going age had displayed "increasing frequencies" of certain respiratory symptoms such as wheezing and coughing and illnesses such as asthma.

 These findings were not, however, supported by lung function tests.

 "It would therefore appear that control measures have succeeded in maintaining pollution levels below the level of risk to human health," Dr Louw said.

 Indications of "probable pollution" by "acid rain" had already been noted in the far eastern Transvaal forestry areas, notably in the Sabie district.

 "Symptoms of foliage damage apparently consistent with atmospheric pollution effects were diagnosed only recently. A close evaluation of the situation regarding forest decay is needed urgently," Dr Louw said.

 The ETH atmosphere was "highly unfavourable" for the dispersal of atmospheric pollutants.

 Most of the pollution in the area, he pointed out, resulted from power stations, though substantial contributions arose from various smaller industries, smouldering discards, coal dumps, domestic combustion and motor vehicles.

 "It is imperative that present anti-pollution measures be revised."
Eskom 'not to blame' for pollution

By Lloyd Coutts

Eskom power stations in the eastern Transvaal highveld meet all requirements laid down by the Government to prevent pollution in the area, a spokesman said yesterday.

Mr Jacques Messerschmidt, assistant general manager (generation), said Eskom had spent about R500 million on anti-pollution devices in the past 30 years.

He was commenting on a report by the Council for Scientific and Industrial Research that most of the pollution in the area resulted from power stations.

Anti-pollution requirements were increased from time to time, and new measures had to be taken with each new station built, Mr Messerschmidt said.

Dust-prevention devices were expensive, but these costs were added to construction expenses.

"Because the eastern Transvaal highveld is a major industrial area, of course you'll get some pollution," he said.

"The question is, what level of pollution is tolerable or even affordable? We do not lay down the standards."
PUBLIC’S GOODWILL NEEDED

DURBAN — The ideal situation was to gain the goodwill of every person in South Africa towards the environment and its conservation, the Minister of Environment and of Water Affairs, Mr Gert Kotze, told a conference on catchment conservation in Umgungo yesterday.

The Minister said there were a number of Acts of Parliament that addressed the problems of environmental conservation. These Acts had “to punish those who had no respect for the environment and, through that, their fellow-South Africans”.

Mr Kotze said it was preferable not to have to apply the Acts. A better way was to gain the goodwill of the people. “What is needed is a change of attitude which would ensure goodwill towards every aspect of the natural and even the man-made environment. Only then will the effort to conserve this country’s natural resources bear the fruit it should.”

Farmers, who controlled about 85 percent of the land, held a very big responsibility in conserving the environment.
Feeling the draft

The final draft of the Environmental Conservation Bill, granting the Minister of Environmental Affairs sweeping powers over business activity, has been modified after consultation with the packaging industry. However, the industry is still unhappy with aspects of the Bill, which is intended to counter SA’s litter problem, particularly from packaging materials.

Consol Group MD and Packaging Council spokesman Piet Neethling says a major concern of the industry, even after the Bill’s modification, is that it gives the minister power to demand compulsory deposits on packages — as a means of encouraging consumers not to throw them away.

“This kind of legislation is focused on cans and bottles but they account for only a proportion of litter,” says Neethling. “Nothing is done to address the problem of cigarette boxes, sweet-wrappers and even Newspapers.”

The cost of deposit legislation can be considerable. A study of the effects of such legislation in nine US states and South Australia found it increased costs by 35%, he claims.

The major concession in the latest draft is that any decision taken by the minister may be challenged in the courts; previously, the only appeal was to the minister himself. But he still has wide powers: he may intervene in areas as diverse as agriculture, transport, recreation and manufacturing.

Neethling comments: “Because the Minister of Environmental Affairs is responsible for conservation, he may not take enough account of the vital need for economic development in the country.

“I don’t believe the market should be left to do what it wants. There must be safeguards against pollution and other negative impacts on the environment. But there is a danger that economic development will be retarded because of a lengthy bureaucratic process involving an environmental assessment study on the desirability of a factory, which could take up to two years.”

Kohler chairman Ian Willis adds that the Bill doesn’t recognise voluntary action by the industry. Last year, 617 500 t of material was recycled — or 23% of total packaging material produced.

But Boet du Preez, CE of the conservation body, the Habitat Council, says the Bill lacks bite and doesn’t specify how the minister’s power will be applied.

“Industry has done a great deal for conservation but there is a need for statutory actions,” he says.
Disaster feared from waterworks sludge

Vereeniging Town Council agreed last night to lodge an objection to a Rand Water Board proposal to dump waterworks sludge down the Springfield Colliery workings, from which a number of local farmers and plot dwellers pump water to irrigate crops.

It is feared that the dumping could lead to "a national disaster" as the sludge will not only pollute a vast underground reservoir of water, but could also calcify in time and stop the flow of water throughout the area.

There is also a strong possibility that these areas could be in danger of becoming sinkhole areas.

The areas affected include Sonlandpark, Helensrus, Harmonia and Van der Merwekroon, Unitas Park Smallholdings, Dreamlands and Lenteland.

— Vereeniging Bureau.
Rain with
the kiss of death

JAMES CLARKE

"If it falleth as the gentle rain from heaven ..."

Acid rain and dry acid fallout caused by airborne sulphur and nitrogen gases which come from burning coal, oil and petrol. In the Transvaal around 30 million tons of coal a year are burned — releasing 600,000 tons of sulphur alone each day.

In Europe and the US it is killing off forests, aquatic life and, lately, even the more resilient coastal ecosystems. It is also eating agriculture millions of dollars a year in crop damage and chemicals to counteract the acid.

The phenomenon has badly frightened people in Europe, North America and the Far East and has reached the "world war" of the 1960s between environmentalists and industrialists.

That war erupted when a concerned public, often jeered for being alarmist, demanded that industrialists and complacent officials do something about smog. Most industrial cities were shrouded in pollution and thousands of people were dying from ailments directly attributable to air pollution.

The public won widespread reforms and a remarkable cleanup of dirty industrial areas followed. But the public had not won a war — it had merely won a battle. Industry continued pumping millions of tons of pollutants into the air — but the pollutants now were invisible gases.

The effects of these gases are now becoming very visible in the Transvaal industrialists are bracing themselves for a public outcry. But so far the public has been silent.

Few South Africans realize how bad things are. The World Health Organisation recently confirmed that acid fallout in the Transvaal is higher than in Western Europe or Britain. Most of Western Europe’s sulphates on Scandinavia having been carried there by the prevailing winds.

Apart from its barely understood effects on human health, acid rain has been turning the world’s statues and its architectural heritage into Alka-Seltzer tablets — SO₂ (sulphuric acid from the air) react with CaCO₃ (calcium carbonate) in the fabrics of statues, monuments and buildings.

The treasures of Rome and Athens, thousands of years old, are suddenly rotting. The Taj Mahal is badly damaged by moist acidic winds. The Statue of Liberty needed millions of dollars to repair recently. Egypt’s 5000-year-old Sphinx this year lost a chunk of crumbling stonework. Venice is rotting, the Greeks are talking of coating the Pantheon with plastic, most city buildings — including in Johannesburg and Pretoria — are showing increasing signs of decay.

Even the Rand’s motorways are showing signs of spalling (concrete rot).

West Germany has just announced it is to spend the equivalent of R10 billion on the problem Britain too is preparing to spend billions of pounds.

Industry and governments throughout Europe, particularly the power generating companies, have bowed to public pressure to clean their gases. Car manufacturers too are under pressure to cut nitrogen oxides from exhaust gases.

But in the Transvaal industry may be less co-operative. There’s not much Government pressure on it for a start, and some firms are indicating they’re not interested.

Escom was asked to build the world’s biggest coal-fired power station — 3000 tons of sulphur a day into the atmosphere and last week a CSIR report revealed that Transvaal forests were showing signs that might indicate acid rain damage.

LOCAL POLLUTION: In the Transvaal, which is climatically one of the least suitable regions on earth for coal-fired power stations. Escom has been asked to build the world’s biggest coal-fired power station without sulphur extraction units. Industries in the province pump 3000 tons of sulphur a day into the atmosphere and last week a CSIR report revealed that Transvaal forests were showing signs that might indicate acid rain damage.

DISASTROUS DAMAGE: A quarter of West Germany’s trees have been killed and two thirds of the Black Forest is dead or dying from acid rain. Elsewhere in Europe and the US, lakes are biologically dead, aquatic life has been destroyed and coastal ecosystems have been affected.

COUNTER-ACTIONS: A West German forest has to be sprayed with lime to counteract the high acidity of the soil caused by acid rain. Government there is to spend the equivalent of R10 billion to reduce fallout.

ONE OF WORST RECORDS: The PWV one of highest rates of ear cure. The World Health Organisation.
Acid fallout in the Transvaal is damaging huge areas of the maize and timber belt.

In the event, Eskom, even in the uphill economic boom, has never failed to meet the demand. But if it all might work out to be a pay-off scheme — at least 1 million tons a year goes into the environment of just the southern half of the Transvaal — it is enough to change the chemical composition of South Africa’s maize belt and timber growing region.

And then there’s Sasol. At Secunda, in the Eastern Transvaal, it runs the biggest synthetic fuel plant in the world. Again, the advantages seemed irresistible.

Sasol is an oil refinery, but one of the three biggest coal-using plants on earth.

It is a much smaller giant, such as AECI at Modderfontein, in just one of its processes (making ammonia), consumes 2 000 tons of coal.

Some scientists claim the Transvaal’s air long ago reached saturation point when coal and smoke were given electricity when they were built) and by fuel fires.

Due to the Transvaal’s severe temperature inversion in winter when cold air slugs to the ground and upper warm air seals it, pollutants tend not to disperse. The long winter months are usually the worst time for coal smoke — gives the people of the PWV one of the highest rates of ear, nose and throat complaints in the world.

The most remarkable aspect of all may be the public’s complacency. At a conference at Eskom’s headquarters in November 1985, an Eskom spokesman said that research had yet to spot any damage from the Transvaal’s acid rain. He argued that farmers should welcome acid rain because it saved them on fertiliser. This has not been borne out in Europe and the United States where agriculture is suffering enormous damage from acid build up in the soil.

At that same 1985 meeting in Johannesburg, a medical officer of health, Dr. Bernard Richard, said “I am of the opinion that so-called acid rain has never been shown to have adverse effects.”

Although Europe, with its many forests and lakes, has had acid rain for more than 150 years, it seems evident that the Transvaal’s acid rain is so heavy and whose soils are naturally quite acidic, would soon begin showing damaging signs.

This week the CSIR in Pretoria sounded the warning: in a cautious and seemingly placatory report on air pollution it revealed that Transvaal forests are showing signs which might indicate acid rain damage. North-eastern Transvaal forests are showing tell-tale signs of- colouring the soil, and fields were said to have been “burnt” by acid rain.

Although Europe, with its many forests and lakes, has had acid rain for more than 150 years, it seems evident that the Transvaal’s acid rain is so heavy and whose soils are naturally quite acidic, would soon begin showing damaging signs.

In Europe the damage is already disastrous. West Germany a quarter of its trees have been killed and two thirds of the Black Forest is killed. The German government is to spend the equivalent of R10 000 million to reduce fallout from power stations and other sources by two thirds.

Sweden: 4 000 lakes are biologically dead or dying.

Poland: 800 000 ha of forests are dead with 25 million expected to die by 1989.

Czechoslovakia: Some 37 per cent of its forests have been killed by acid rain.

Switzerland: half its trees are dead or dying.

Canada: the fish have died off in 15 000 lakes and thousands more lakes are threatened.

ONE OF THE WORST RECORDS: The long winter smog — it's technically a photochemical smog — gives the people of the PWV one of the highest rates of ear, nose and throat complaints in the world. The World Health Organization recently confirmed that acid fallout in the Transvaal was higher than in West Germany or Britain — yet the public's complacency continues.
SA’s waste situation is ‘totally unacceptable’

GERALD HEILLY
PRETORIA — The threat of mountains of waste generated by SA’s fast growing population was stressed at a school on waste management at the CSIR yesterday.

Johannesburg City Council’s S.J Verrier said the situation in many parts of the country was totally unacceptable and would result in serious long-term health hazards.

The new urban areas, which would have to accommodate 19-million new urban dwellers by 2000, were cause for real concern.

There was a real need for meaningful and urgent collaboration between the state, the RSCs, local government and the private sector if the service needs of developing communities were to be satisfied.

The situation of non-co-operation and even conflict between certain key players had no place in the SA situation and had to be eliminated.
Greenhouse Effect sends the first torrid warnings

By Garner Thomson, The Star Bureau

Temperatures have risen sharply since the Ice Age with serious consequences for the world. Droughts will get worse, islands could vanish, and man is the chief culprit.

LONDON — Africa's continent-wide drought is just one of the first warnings that the "Greenhouse Effect" is already taking hold of the planet. Others have been quick to follow.

The drought in America's great, plains has torn a sizable chunk out of the country's food reserves, and dust-storms have been stripping up to 15 tons per acre from around the desiccated roots of the wheat field.

In some parts of China, crops are failing and thousands face starvation and elsewhere in that country more than 700 people have died in unanticipated floods.

Worldwide, the first five months of this year have been warmer than for more than a century.

A scientist with the National Aeronautics and Space Administration (NASA) in the United States, Mr. James Hansen, warns: "It's time to cut the waffle. The greenhouse effect is already upon us."

Now two leading British experts have joined the growing clamour of top international scientists who are calling on policy-makers throughout the world to take immediate steps to evade what some climatologists believe is humanity's greatest threat in 100,000 years.

Dr. Jacqueline Karas and Dr. P. Kelly, of the climatic research unit at the University of East Anglia, have just completed a major report on what they believe is a global change which could bring more rain to wet areas, more-drought to dry — and throw "the whole future of the world" back into the evolutionary melting pot.

The Karas-Kelly report, due to be published in full at the end of this month, concludes that a large-scale change in the climate is underway.

"The magnitude of the change and the details are not fully clear," says Dr. Karas, "but best-guess estimates are that the global average temperature could rise between 1.5 and 4.5 degrees C by the mid-21st century."

"To put that into perspective, in the 10,000 years since the last Ice Age, temperatures have risen by three or four degrees. Even at the lowest end of the projection, it only took a 0.5 degree C cooling of the atmosphere in Europe to create the Little Ice Age of the 16th and 17th centuries, when in Britain skating on the Thames was primarily remembered."

Such an increase could bring even more devastating drought to Africa's Sahel and further south. Sea levels will rise between 20 cm and 140 cm, bringing death and devastation to the Nile delta, the Ganges, the Mekong, the Yangtze and the Mississippi.

The Maldives, and a number of islands will disappear. Beaches around the world will be dramatically eroded. Venice will finally sink beneath the waves.

Chief culprit in this disaster scenario are man-made gases and pollution, in particular the notorious chlorofluorocarbons (CFCs), which power thousands of everyday household devices, from deodorant cans to fridges and freezers.

Unless immediate and substantial action is taken, these pollutants will increase by 50 percent in the next 40 or 50 years.

A recent international conference in Toronto was equally concerned. Scientists spoke with a single voice, warning of growing crop failure, starvation and death by the millions. Nor were they able to put an end to the devastation if nothing was done.

Said Dr. George Woodwell, director of the Woods Hole Research Centre: "The effects on the Earth are well beyond the limits of prediction."
Palmiet hydro-electric scheme gets top award

Staff Reporter

THE new Palmiet River hydro-electric and water scheme yesterday received the SA Institution of Civil Engineers annual Outstanding Achievement award at a function in Johannesburg.

The R300-million project, started in 1961 and completed this year, will add 400MW capacity to Eskom's national power grid and will augment the water supply to the Cape Town metropolitan area by 140 million cubic metres annually.

The two dams incorporated in the project were designed by the Department of Water Affairs while the mechanical and electrical portions were designed by Eskom.

The engineering companies involved were Ninham Shand, Van Niekerk Kleyn & Edwards, Electrowatt Engineering Services, Clifford Harris-Marti Tunnelling and Phillip Holzmann.

The Institute of Landscape Architects gave environmental consultants Ekonosult a Merit Award for Excellence in 1988 for their care in minimizing disturbance to the sensitive fynbos ecosystem of the area.

The main purpose of the hydro-electric scheme is to supplement the supply of electricity during peak hours by storing surplus energy available during times of low demand.

This is achieved by pumping water from a lower to an upper reservoir during the night and weekends, and drawing on the water thus stored to generate power for peak hours.

Other purposes of the scheme are to act as an emergency electricity supply and to help regulate voltage and frequency.

These functions are particularly important in view of the great length of the transmission lines from Eskom's major power stations in the Transvaal.

The two dams are Kogelberg on the Palmiet River immediately to the south of Grabouw and Rockview on the watershed between the Palmiet and the Steenbras rivers.

The scheme also comprises a surge tank believed to be the biggest of its type in the world. The tank is required to moderate sudden water pressure changes when the generators are switched on and off.
Invisible death stalks Highveld

PAT DEVEREAUX

MOTHERS in the Vaal triangle and on the Witwatersrand have voiced extreme concern about the effects of air pollution on their children's health.

And according to local experts they have reason to panic because certain areas on the Reef have concentrations of noxious gases far above world health levels.

In fact, the levels of air pollution reached are so bad they can affect the health of the aged, infants and infants, says one local expert who has asked not to be named because of his position.

Mrs Carol Smith says she and other mothers in the Vaal Triangle are so worried about their children's prevalent bronchial complaints, which they believe are caused by air pollution, that they recently formed the Anti-Pollution Appeal Committee (Apac).

In June Mrs P Zahleten, of Benoni, wrote to the local health department complaining about "fallout" from the sponge iron plant at Dunsawt Iron Steel Foundry.

"I am simply sick of the black muck I have to clean away every day. Recently I spent an hour cleaning my car before I could venture out. I was filthy from head to toe. My clothes were extremely dirty and the swimming pool was disgusting," she wrote in a letter to the department.

Replying to her complaint in a letter, the Benoni town secretary, Mr C H Boshoff, admitted that an investigation at the plant revealed that "a problem was being experienced with the filter bags of the sponge iron plant and that dust is being emitted, probably at levels above the permitted levels.

The Council for Scientific and Industrial Research recently admitted that acid rain was a growing problem. But it did not say that sulphur dioxide concentrations, which cause acid rain, can also dissolve in the mucous membranes of human respiratory passages — leading to corrosion of the tissue.

A CIR report completed in 1986 and conducted by the faculties of science and medicine at the University of the Witwatersrand and the National Centre for Occupational Health showed that although children in the southern Transvaal revealed respiratory disorders attributable to air pollution, their lung functions still appeared normal.

In 1983 the American Lung Association called for the reduction of sulphur oxide emissions on the grounds that it caused increased sickness and mortality, especially among the elderly and persons with respiratory and cardiovascular disease.

The World Health Organisation has warned of the suspected link between air pollution and lung cancer.

This week the chief official of air pollution control, Department of National Health and Population Development, Mr Martin Lloyd, admitted the Vaal Triangle's air pollution problem was probably the worst in the country.

He said that although the unacceptably high pollution levels had caused public concern, the figures had not exceeded internationally accepted health levels.

But Mr Lloyd's claims do not tally with the World Health Organisation's recent confirmation that acid fallout is higher than in West Germany or Britain.

If this is so then South Africa must be pumping more sulphur and nitrogen gases — the cause of acid rain — into the atmosphere than these countries.

The Vaal Triangle today is a major industrial area with almost 60 per cent of the country's major factories. The area is also one of the largest labour basins in the country.

Mr Lloyd said the area formed a natural basin for pollutants.

South Africa also has a high occurrence of severe atmospheric temperature inversions, especially in winter, which have the effect of keeping pollution, including smoke, sulphuric fumes and unhealthy toxic substances, trapped near the earth for long periods.

According to Mr Lloyd, all the major factories, including Sasol and Union Steel Corporation, have been offered an extensive programme of pollution control.

Mr Lloyd said, however, that he did not believe industry was the main contributing factor because it was monitored.

"The cause of the problem is township smoke and vehicle emissions," he said.

However, Mr John Ashton, a member of the National Association for Clean Air (Naca) said: "Industrialists are not yet facing their responsibilities to the public."

Overseas experts on the subject argue that visible pollution such as smoke is not the main problem. Clean-ups tend to be cosmetic and mainly visible air pollution is filtered — but invisible gases pose the greatest threat.

"We have through public apathy and our own mismanagement ruined the atmosphere despite the warnings sounded in other countries," said the chairman of the Air Pollution Technical Services Company, Mr D Gilles, a researcher on the subject for the past 30 years.

Human battery hens say high-rise architects have laid a rotten egg

LONDON — After purple 'Fin comes the latest high-tech disease — sick building syndrome.

And more than half of the workers in today's modern high-rise offices are suffering the symptoms: dry throat, stuffy nose, headache, itchy eyes and breathing problems, says a new report.

According to Britain's Health Promotion Trust, which has just completed a survey of more than 4 000 workers in 46 offices, sick building syndrome development, Mr Martin Lloyd, admitted the Vaal Triangle's air pollution problem was probably the worst in the country.

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**SATURDAY STAR FOREIGN NEWS SERVICE**

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A remarkably high number of workers reported similar ailments; some complained of being treated "like battery hens" in their tinted glass-clad, air-conditioned eyries.

And the powerful British bank workers' union, Bifh, based in the City of London, has come to the trust's support.

Senior organiser Mr David Evans said: "The majority of staff are not lethargic because of their motivation but because of the conditions they are now forced to work in.

We have buildings in the city that resemble air-conditioned office blocks with blacked-out windows. These buildings look fine to the architects but they are miserable places to work in."

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Pik's 'nuclear bomb' remarks

take Washington by surprise

The Argus Foreign Service

WASHINGTON. — South Africa's admission for the first time at the highest level that it has the ability to produce nuclear weapons has taken the United States government by surprise.

US officials cannot understand why Foreign Minister Pik Botha has decided to reveal South Africa's nuclear capability now, and the revelation is likely to increase congressional pressure to impose all-out sanctions on South Africa.

South Africa is believed to have been able to build a nuclear bomb for almost a decade and a senior Pentagon official remarked: "Anybody who has nuclear reactors can build a nuclear bomb.'

Mr Botha's comments were made in Vienna after meetings with American, Soviet and British officials on the possibility of Pretoria signing the 1968 Nuclear Non-Proliferation Treaty.

REPORT BACK

Mr Botha did not say whether South Africa would sign. However, he said today he would report back to the government this week on the Vienna discussions, the Argus Political Correspondent reports.

Asked at the Vienna Press conference whether South Africa had a nuclear bomb, Mr Botha said: "We have the capability to make one ... We have the capability to do so should we want to."

Pressed on whether South Africa already had the bomb, he said: "I'm not going to enlarge on that statement."

ACKNOWLEDGEMENT

That was seen by some Western commentators as an acknowledgement that South Africa has already used its capability to stockpile nuclear weapons.

Mr Botha's statement was also the clearest indication yet of the extent of South Africa's nuclear programme after years of semi-official allusions.

On Thursday the House of Representatives voted by 244 to 132 to ban all trade with South Africa, apart from US imports of strategic minerals, and Mr Botha's revelation is likely to increase US pressure to impose all-out sanctions.

American researchers reckon that South Africa now has between nine and 23 weapons. Pretoria has always refused to sign the Nuclear Non-Proliferation Treaty.

But last year the Nigerians, backed by East European countries, threatened to expel South Africa from the International Atomic Energy Agency (IAEA) because of its failure to sign. Russia and the US said they would support this move if Pretoria did not sign.

In Vienna the head of the IAEA yesterday welcomed the possibility of South Africa signing the treaty.

Director-general Dr Hans Blix was responding to comments by Mr Botha, who said he believed Dr Blix "doesn't want us to be part of the agency."

However, Dr Blix quickly responded by saying: "I would welcome a South African adherence to the treaty ... The agency would administer the safeguards in South Africa in the same way as in other countries."

South Africa already allows safeguard inspection on two plants with French and US technology.

However, it does not allow the agency's inspectors access to the Pelindaba uranium enrichment plant which can make materials for nuclear weapons.
Radiation levels to be controlled

PRETORIA — Regulations were proposed yesterday which will oblige product suppliers to maintain prescribed safety requirements regarding the radiation levels of household and other goods.

In terms of a proposed amendment to the Hazardous Substances Act, gazetted yesterday, manufacturers of products that produce non-ionising radiation will have to conform to safety requirements before being issued with a licence to sell.

Household goods such as microwave ovens, sunlamps and video terminals in particular are a target of the proposed regulations, said National Health and Health Services Deputy Minister Dr M H Friedman. — Sapa.
Govt spells out stand on nuclear treaty

By BARRY STREEK
Political Staff

SOUTH AFRICA will only sign the Nuclear Non-Proliferation Treaty if it has full participation in the accord, including the right to trade in uranium and the exchange of nuclear technology.

Unless South Africa is given these guarantees, it will be difficult to be a signatory to the agreement.

This was confirmed last night by the Department of Foreign Affairs after reports yesterday about South Africa's stand at the talks last week in Vienna, between a South African delegation and representatives of the major nuclear powers, the United States, the Soviet Union and Britain.

Full participation would include South Africa's right to exchange nuclear technology internationally, no discrimination against it in the buying and selling of uranium, of which South Africa is one of the major producers, and access to nuclear plants world-wide.

South Africa would then have to undertake not to produce nuclear weapons, open its nuclear facilities to international inspection and exchange its own research and technology in the field.

The government's approach to the Nuclear Non-Proliferation Treaty was welcomed yesterday by the Progressive Federal Party.

The PFP spokesman Mr Roger Hulley, MP, said South Africa should do everything possible to participate in the international scientific community.

"Our long delay in not being a signatory has jeopardized our position and cast suspicion on our activities and motives in the past," he said.

The National Democratic Movement leader, Mr Wynand Malan, also said South Africa should sign the international agreements.
Valley of Vines under siege

City's population is threatening Constantia farms

Plans are in the pipeline to cut up another old Constantia farm for housing, raising the question whether the remaining Valley of the Vines farms can survive in a city with a burgeoning population hungry for land.

Staff Reporter MICHAEL MORRIS investigates. WILLIE de KLERK took the pictures.

ShARP-eyed steppe buzzards from Russia circle over the Constantia vineyards every summer, frightening off packs of eagles and other small birds nesting to peck among the vines.

These northern species have probably swirled over the vineyards since Simon van der Stel planted the first ones and made Constantia wines famous.

However, today's Constantia farmer faces buzzards like Van der Stel could hardly have imagined. And there is no natural panacea as effective as a migratory buzzard.

Soon after the turn of the century the city has encroached steadily on the Constantia Valley has acquired a status as one of the country's most desirable "names" and keeps growing.

But Constantia is not quite a suburb. Between the houses and the mountains are the farms... those left after subdivision and development.

Walber, Domineland, Morgenland, Hauwstel, Noordhoek, and Heidelberg have gone Wengelee and Ulus and remain as the home of equestrian activities, but their future is by no means certain.

Drewsborg, Sommerland and Alpen are on the real call of farms compressed or hemmed in by a creeping city.

Plans to cut up Silverhurst for houses have again aroused fears that the valley's rural character is imperilled — although the Regional Services Council has yet to approve the subdivision. Silverhurst was sliced from Great Constantia in 1712.

In the 1970s town planners allowed houses to encroach on the farm and complaints from residents helped to end pig and poultry farming.

Other farmers in the valley say Silverhurst was literally "seeded" as a farm by the city corporation and has the most important factor.

In some cases, properties have become too small to run economically as farms and the owners have had to sell off development.

"It is not the property in worth, say, R3-million, but because of the housing and public pressure the owner is not able to sell, he is having to bear the cost of the policy of keeping Constantia green."

"The farms must be allowed to be run efficiently — if the owner cannot substitute — he should be compensated if he wishes to cease farming, or if farming becomes uneconomic."

Consensus of the trials they face living close to the bustling city.

The four Great Constantia farms are threatened with subdivision. There are whispers that some development could happen in the area.

"We have kept going because we have employed farming consultants to advise us..."

The 156ha Great Constantia is a national monument run by a government board.

General manager David Apley says subdivision is on the horizon, but it is very difficult to run a farm surrounded by residential areas. It seems that people want to live in a rural environment, but do not want to be affected by farming.

At the 168ha Klein Constantia, owner Duggie Jones, whose family has owned the liquor business Constable and Taylor since the last century, is no farmer, but he loves the valley.

He bought Klein Constantia eight years ago. "I know nothing about farming, but I know who to talk to, he says."

But Mr. Reiss is assured of retaining the vineyards and producing good wines.

Among those who turned to for help were viticulturist Ernst le Roux, general manager of the estate, and winemaker Peter Govier. Mr. Reiss does not doubt the persistence of Klein Constantia and believes conditions in the valley are special.

The third big wine-producing estate in the 100ha Buitenverwachting, left in trust by the late computer expert Richard Muller and, like Klein Constantia, in remembrance.

Farm manager Andre Badenhorst grew up in the valley his father, Japie, was manager of Great Constantia.

He says the economic reality of Constantia farming is sobering.

"It's not financially viable only in the short term. The capital costs of establishing vineyards is running into something like R1.5 million, and the market is very competitive. Running a wine farm is like running a big business."

Mr. Badenhorst also worries about the view that what sets Constantia apart from other wine-producing areas are the constraints imposed by the public and the difficulties these create for farmers.

But they hope the newly formed Constantia Wine Route will generate wider public support for the preservation of rural Constantia.
PROKLAMASIES
van die
Staatspresident van die Republiek van Suid-Afrika
No. R. 130, 1988

VERKLARING VAN DIE OORSTROMINGS IN DIE LANDDRRODISTRIKTE BLOEMHOF EN SOUTPANSBERG IN TRANSVAAL TOT 'N RAMP

Kragtens die bevoegdheid my verleen by artikel 26 van die Wet op Fondsinvestigings, 1978 (Wet 107 van 1978), verklaar ek hierby die oorstroom wat die landdrosstrikte Bloemhof en Soutpansberg onlangs getref het vir die doeleindes van genoemde Wet tot 'n ramp.

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Kaapstad, op hede die Tweede dag van Mei Eenduisend Negehonderd Agt-en-tagig.

P. W. BOTHA,
Staatspresident.
Op las van die Staatspresident-in-Kabinet:
W. A. VAN NIEKERK,
Minister van die Kabinet.

No. R. 131, 1988

WYSIGING VAN PROKLAMASIE R. 225 VAN 1971 TEN EINDE DIE GEBIED WAARVOOR DIE WETGEMEENDE VERGADERING VAN QWAQWA INGESTEL IS, TE WYSIG

Kragtens die bevoegdheid my verleen by artikel 1 (2) van die Grondwet van die Nationale State, 1971 (Wet 21 van 1971), wysig ek hierby met ingang van die datum van publikaasie hiervan, die gebied vermeld in die Bylae van Proklamasie R. 225 van 1971 deur na paragraaf (c) van gemelde Bylae, paragraaf (d) soos omskryf in die Bylae hiervan in te voeg:

Gegee onder my Hand en die Seël van die Republiek van Suid-Afrika te Pretoria, op hede die Vierde dag van Augustus Eenduisend Negehonderd Agt-en-tagig.

P. W. BOTHA,
Staatspresident.
Op las van die Staatspresident-in-Kabinet:
J. C. HEUNIS,
Minister van die Kabinet.

968—A

PROCLAMATIONS
by the
State President of the Republic of South Africa

No. R. 130, 1988

DECLARATION OF THE FLOODS IN THE MAGISTERIAL DISTRICTS OF BLOEMFONTEIN AND SOUTPANSBERG IN TRANSVAAL TO BE A DISASTER

Under the powers vested in me by section 26 of the Fundraising Act, 1978 (Act 107 of 1978), I hereby declare the floods which recently hit the magisterial districts of Bloemhof and Soutpansberg to be a disaster for the purposes of the said Act.

Given under my Hand and the Seal of the Republic of South Africa at Cape Town this Second day of May. One thousand Nine hundred and Eighty-eight.

P. W. BOTHA,
State President.
By Order of the State President-in-Cabinet:
W. A. VAN NIEKERK,
Minister of the Cabinet.

No. R. 131, 1988

AMENDMENT OF PROCLAMATION R. 225 OF 1971 IN ORDER TO AMEND THE AREA IN RESPECT OF WHICH THE QWAQWA LEGISLATIVE ASSEMBLY HAS BEEN ESTABLISHED

Under the powers vested in me by section 1 (2) of the National States Constitution Act, 1971 (Act 21 of 1971), I hereby, with effect from the date of publication hereof, amend the area mentioned in the Schedule to Proclamation R. 225 of 1971, by the insertion of paragraph (d) as defined in the Schedule hereto after paragraph (c) of the said Schedule.

Given under my Hand and the Seal of the Republic of South Africa at Pretoria on this Fourth day of August. One thousand Nine hundred and Eighty-eight.

P. W. BOTHA,
State President.
By Order of the State President in Cabinet:
J. C. HEUNIS,
Minister of the Cabinet.
Little Karoo hit by drought

CAPE TIMES 20/10/83

By MONICA GRAAFF

PEOPLE living in the Little Karoo and the South-Western District — from Riviersonderend to Riversdale — are suffering the worst drought in living memory, say farmers in the area.

Not only was last summer the severest they can remember, but this year the rainfall has been so low that many could lose their crops, they say.

Pastures have become so parched that some farmers are grazing their stock on wheat fields — thereby killing further hopes of a crop.

An Ashton farmer said that in the past year he had received only 14% of the average annual rainfall.

The financial director of a Bredasdorp co-op said there had been a severe drought between 1966 and 1968 — which was then reputed to be the worst in 100 years — but it looked as though this drought would cause worse hardship.
HOUSE OF DELEGATES

For written reply:

General Affairs:

55. Mr K CHETTY asked the Minister of Law and Order:
(a) How many (i) males and (ii) females were detained in terms of security legislation (aa) in 1987 and (bb) from 1 January 1988 to the latest specified date for which figures are available and (b) how many persons in each of the above categories were under the age of 20 years?

The MINISTER OF LAW AND ORDER:

With regard to persons detained in terms of the Security Emergency Regulations, I refer the honourable member to my reply to Oral question 3 of 23 February 1988 in the House of Assembly.

The reply with regard to persons detained in terms of section 29 of the Internal Security Act, 1982 (Act 74 of 1982) is as follows:
(a) (i) 1987
(aa) 452 males
(bb) 30 females
(ii) 1 January to 31 June 1988
(aa) 140 males
(bb) 9 females

(b) (i) 75 males
(ii) 15 males
(bb) 2 females.

Tongaat Town Board: election appointment

73. Mr K CHETTY asked the Minister of Constitutional Development and Planning:
(1) Whether an election will be held on 26 October 1988 to elect members to serve on the Tongaat Town Board, if not, (a) why not and (b) who took this decision.
(2) whether the Administration: House of Delegates was consulted in regard to this decision, if not, why not, if so, with whom did consultation take place?

The MINISTER OF CONSTITUTIONAL DEVELOPMENT AND PLANNING:

This matter vests in the Administrator of Natal and he furnished the following information:
(1) No.
(a) The circumstances in Tongaat are unique and since 1945 the members of the Tongaat Town Board have been appointed by the Administrator in terms of section 202 of the Local Authorities Ordinance No 25 of 1974.
(b) the Administrator-in-Executive Committee.
(2) Yes
The Minister’s Council: House of Delegates

HOUSE OF ASSEMBLY

For oral reply:

General Affairs:

Questions standing over from Tuesday, 28 June 1988:

*12. Mr D J N MALCOMESS — Constitutional Development and Planning. [Reply standing over.]

Educators: occupational specific adjustments

*17. Mr R M BURROWS asked the Minister for Administration and Proclamation:
(1) Whether he received any recommendations from the Commission for Administration in regard to occupational specific adjustments for educators; if so, what recommendations;
(2) whether he has compared these recommendations with those made by the Committee on Education Structures and the Research Committee on Education Structures, as referred to in the reply of the Minister of National Education to Question No 12 on 14 June 1988; if not, why not; if so, what were the differences between the two sets of recommendations received;
(3) whether he has reached a decision on the various recommendations submitted; if not, why not; if so, what decision;
(4) whether he will make a statement on the matter?

The MINISTER FOR ADMINISTRATION AND PRIVATISATION:

(1) No.
(2), (3) and (4) Fall away

New Questions:

Table Mountain: prevention fighting of fires

*1. Mr K M ANDREW asked the Minister of Environment Affairs:
(1) Whether, with reference to the reply of the Minister of Constitutional Development and Planning to Question No 6 on 14 June 1988, his Department has received any proposals in respect of the prevention and fighting of fires on Table Mountain from the Cape Peninsula Nature Area Management Committee; if so, (a) what proposals and (b) when?
(2) whether any action has been taken in respect of these proposals; if not, why not; if so, (a) by whom, (b) when and (c) at what cost?

The MINISTER OF ENVIRONMENT AFFAIRS:

(1) Yes, on 26 May 1987, but as the proposals regarding the prevention and fighting of fires on Table Mountain amounted to executive actions in respect of which the responsibility has been assigned to the Administrator of the Cape of Good Hope on 1 December 1986, these proposals were referred to the said Administrator on 14 July 1987.

The rest of the question falls away.

Cape Peninsula Nature Area Management Committee: proposals

*2. Mr K M ANDREW asked the Minister for Constitutional Development and Planning:

Whether, with reference to his reply to Question No 6 on 14 June 1988, any action has been taken by the Administrator as a result of proposals submitted to him by the Cape Peninsula Nature Area Management Committee; if not, why not; if so, (a) (i) what action, (ii) when and (iii) at what cost and (b) what was the purport of the proposals so submitted?

The MINISTER OF CONSTITUTIONAL DEVELOPMENT AND PLANNING [Reply laid upon the Table with leave of House].

This matter vests in the Administrator of the Cape Province and he has furnished the following information:

Yes
(a) (i) (1) A member of the Cape Town Chamber of Commerce has been appointed to the Cape Peninsula

HOUSE OF ASSEMBLY
Nature Area Management Committee.

(2) A second private landlord has been appointed to the above committee.

(3) A Footpath Plan has been formulated.

(4) An environmental survey using satellite imagery has been initiated.

(5) A working group of the above committee is investigating uniformity of regulations within the Cape Peninsula Nature Area.

(6) Honorary Nature Conservation Officers have been appointed and are continuously being appointed.

(7) Financial assistance has been given to local authorities for major improvements to footpaths and control of invasive vegetation.

(8) The SA Nature Foundation has been approached regarding the establishment of a trust fund for the area.

(9) A code of outdoor behaviour has been formulated.

(10) Management guidelines for the Cape Peninsula Nature Area have been formulated.

(11) Improvements in fire control have been instituted as indicated in the reply to Question No. 6 on 14 June 1988.


(ii) Proposed law enforcement, a more representative management committee; public usage and education; improved fire control; scientific surveys; funding and management guidelines.

Protection of Information Act: declaration signed by teachers/ principals.

3. Mr K M ANDREW asked the Minister of Education and Development Asu.

Whether any teachers or principals at schools falling under his Department in (a) the Cape Peninsula and (b) other specified places in South Africa have been required to sign a declaration in relation to the Protection of Information Act, No 84 of 1982, a copy of which has been furnished to the Minister’s Department for the purpose of his reply; if so, (i) how many, (ii) which teachers or categories of teachers, (iii) since when has this been required and (iv) why?

The DEPUTY MINISTER OF EDUCATION:

(a) No.

(b) Yes, Orange Free State Region

(i) Five (5).

(ii) Principals

(iii) It is not normal practice to expect teaching personnel to make these declarations.

(iv) Due to the fact that the five principals would have attended meetings on which subjects of a confidential nature would have been discussed, the Regional Director concerned considered it necessary for them to sign the declarations.

Mr K M ANDREW: Mr Chairman, arising from the hon the Deputy Minister’s reply, may I ask him what the nature of these meetings was? Were these joint management centre meetings? I do not want to know the details of what was discussed at those meetings but I want to know what the nature of these meetings was which these principals were required to attend.

The DEPUTY MINISTER: Mr Chairman, I made it quite clear that these meetings were of a confidential nature.

King’s House, Durban

4. Mr R W HARDINGHAM asked the Minister of Public Works and Land Affairs:

(i) Whether the premises at King’s House, Durban, were used for (a) official and (b) unofficial purposes during the past two years, if so, what are the relevant details?

(ii) The MINISTER OF PUBLIC WORKS AND LAND AFFAIRS:

(a) No.

(b) No.

5. No.

Umdon Park

*5. Mr R W HARDINGHAM asked the Minister of Public Works and Land Affairs:

Whether the premises at Umdon Park were used for (a) official and (b) unofficial purposes during the past two years; if so, what are the relevant details?

THE MINISTER OF PUBLIC WORKS AND LAND AFFAIRS:

The premises at Umdon Park (also known as Botha House) are under the control of the Umdon Park Trust and in terms of clause 5(i) of the trust deed of 1920 Botha House must be held for the use of Annie Botha, widow of late Louis Botha, the Prime Minister at that stage. The trust deed further stipulates that at her death it must be held for the use of the Prime Minister for the time being and his successors in office for ever.

At present the house is used by the State President and, with the consent of the trustees, as a recreation facility by his nominees. During the past two years the house was used by dignitaries on twelve occasions.

Teachers: proposed Certification Council for training

6. Mr R M BURROWS asked the Minister of National Education:

(i) Whether he or his Department have taken or intends taking any further steps in regard to the proposed Certification Council for Teachers’ Training Bill [B 17/84 (G4A)]; if not, why not; if so, what steps?

(ii) The MINISTER OF NATIONAL EDUCATION:

(1) Yes. Although these funding formulae have already been drafted, no general policy has been tabled under section 2(1)(a) of the National Policy for General Education Affairs Act, 1984 (Act No 76 of 1984), as certain interested parties still have to be consulted. The formulae together with a strategy for their implementation will be announced as soon as general policy has been determined.

(2) Yes. These formulae have been used as a frame of reference for the allocation of funds to education departments for 1987/88 and 1988/89.

(3) Yes, Section 2(2A) of the National Policy for General Education Affairs Act, 1984 (Act No 76 of 1984).

(4) No. General policies regarding the financing of college and school education have not been determined yet.

(5) No.

EDUCATION: Formulae for financing

7. Mr R M BURROWS asked the Minister of National Education:

(i) Whether he will lay upon the Table of the House the formula for the financing of education; if so, what are the relevant details; if not, why not;

(ii) Whether in any previous financial years this formula was used, in full or in part, for the allocation of funds to education departments; if so, in which financial years; if not, what procedure has been followed since September 1984 for the allocation of funds to education departments;

(iii) whether he is obliged to make publicly available any general policies for education that has been determined; if so, in terms of what statutory provisions;

(iv) whether the formula for the financing of college/school education is such a general policy; if so, when was it made publicly available;

(v) whether he will make a statement on the matter?

The MINISTER OF NATIONAL EDUCATION:
E-TVI pollution 'a real threat'

By Kalieer Nyatsamba

Air pollution and acid rain over the Eastern Transvaal were a real threat to the population and the environment, Dr Wynand Louw, compiler of a recently released CSIR report on the topic, said yesterday.

Dr Louw was responding to Eskom's denial on Tuesday that air pollution in the area posed a threat and that there was evidence of acid rain.

Eskom scientists and senior personnel had insisted that air pollution over the Eastern Transvaal highveld was within acceptable limits and posed no problem.

Dr Louw said: "We stand by what we said in the report. We believe there is justification for the present control policy of the Department of Health, and believe it should be made even more stringent in future in certain areas."

"There is definitely a high risk of impact on people and the environment in the long term."

He acknowledged that Eskom had contributed substantially to the report, but it was only one of many bodies whose information had been used.

Dr Fred Kruger, one of the compilers of the CSIR report, said studies had shown rainfall in the area to have an average pH factor of 4.2 -- "the range many overseas experts would call acidic".

Year's wait for disaster victims

Own Correspondent

DURBAN — Many thousands of blacks who lost their homes in the Natal floods of September last year are still waiting for compensation from the State's disaster relief fund. And the application forms of 80 families cannot be traced.

A number of employers have complained of the problems and frustrations experienced in trying unsuccessfully to help their workers obtain compensation.

A spokesman for the kwazulu Disaster Committee said yesterday that about 120 000 payments had been made but there were still 20 000 to be processed.

An administrative problem, which entailed sending a second form for applicants to complete, was largely responsible for the delay.

He hoped the remaining applications would all be considered by October and that all the cheques would be dispatched by the end of November.

Mr Paddy Kearney, director of Diakonia ecumenical church agency in Durban, said yesterday that 80 destitute families at kwandengezi were visited by a kwazulu official shortly after the floods and they filled in application forms.

When there was no response, Diakonia contacted a central Government Minister and the matter was referred to Ulundi. The application forms could not be found.

The homeless families lived in tents until very recently. Then the tents were taken away and the families had to find accommodation with other people in the area.

Mr Kearney said the new magistrate at Hammarsdale was sympathetic and had asked Diakonia to get new application forms filled in.

"It is really unsatisfactory that these families still haven't received financial relief nearly a year after the floods."

A statement issued last month said the kwazulu Disaster Committee was operating under extremely trying conditions.

The committee's task was hampered because many forms were incorrectly completed and by the fact that the original forms could not be accepted by kwazulu.

The statement asked employers acting on behalf of flood victims to be tolerant.
WAITING FOR RELIEF

THOUSANDS of blacks who lost their homes in the Natal floods of September last year are still waiting for compensation from the State's Disaster Relief Fund... and the application forms of 80 families cannot be traced.

A number of people have complained of the problems and frustrations they have experienced over the past months in trying — unsuccessfully so far — to help their employees obtain compensation.

A spokesman for the KwaZulu Disaster Committee said that about 120,000 payments had been made, but there were still 28,000 applications to be processed.

He said an administrative problem, which entailed sending a second form for applications to complete, was largely responsible for the delay.

He hoped the remaining applications would all be considered by the middle of September or beginning of October and that all the cheques would be dispatched to the applicable magistrate's offices by the end of November.

Mr Paddy Kearney, director of Diakonia Ecumenical Church Agency in Durban, said that 80 destitute families at Kwandengezi were visited by a KwaZulu official shortly after the floods and they filled in application forms at that stage.

When there was no response, Diakonia contacted a Central Government Minister and the matter was referred to Ulundi. The application forms could not be found.
'Eskom not only one to blame'

E TVL residents suffer more ailments — GP

By Therese Anders, Highveld Bureau

WITBANK — People in the air polluted eastern Transvaal highveld are troubled more by chest complaints than other communities, a Witbank general practitioner said yesterday.

The doctor, who cannot be named for professional reasons, agreed with a CSIR scientist who was quoted yesterday as saying air pollution and acid rain in the area had a high potential for impacting on people and the environment.

Said the doctor: "Where there is a lot of pollution in the air, then, somehow or other, it is going to be detrimental to normal health."

He believed people in the region, especially children, had a greater tendency towards allergies and asthma than elsewhere.

A hospital spokesman confirmed this, saying an unusually large number of children were treated for upper respiratory infections, the cause of which was believed to be pollution.

The doctor said he knew of numbers of people who had moved away from the town because the pollution aggravated their chest complaints.

"In fact, some use it as a lever to get a transfer elsewhere by their company."

The doctor, who has practised in the region for almost 40 years, said he believed the pollution had increased in recent years.

"A number of new power stations have been built out here, but don't put the blame all on Eskom.

"The big industries are getting away with murder. One in particular just outside of Witbank pumps gasses and dirt into the atmosphere at a level you can't believe.

"I'm surprised they can get away with it. I don't know how the people who live near there can breathe at all."

Another doctor said he knew there was "poison" in Witbank's air "but isn't it about time tests were done by perhaps the CSIR to show us exactly what we are breathing?"

"Also needed are comparison studies of the number of respiratory illnesses here compared to less polluted regions."

"Only then will we know how bad the problem really is."
Area desperately needs protection from developers — Captrust

**Hout Bay is slowly dying**

By ANDREA WEISS, Staff Reporter

UNCONTROLLED development is destroying Hout Bay, according to the conservation organisation Captrust.

The Hout Bay and Llandudno branch has appealed to residents and developers to act sensitively to prevent Hout Bay becoming "like any other suburb".

Mrs Barbara Jemman, the branch chairman, identified the Longkloof palmitet area, the remainder of the dune system, the beachfront and mountain areas as desperately needing protection against developers.

According to Captrust the Longkloof area falls within a 50-year floodplain and is kept stable by the roots of palmitet reeds which absorb water during flooding but keep the river flowing in summer.

Destabilisation of the area could cause flooding in the Hout Bay valley and erode the river bed higher up, Captrust says.

Mrs Jemman said Captrust would like a ban on building in the 50-year floodplain. The organisation is also concerned about damage to dunes.

**Slowly disappearing**

Development on the beachfront has stopped the natural transport of sand between Hout Bay and Sandy Bay and the large expanse of shifting dunes — which used to be a landmark — is gradually disappearing as the dunes are stabilised by alien vegetation.

"We've accepted that we've lost those dunes but the barrier dune from the top of the Nek (near Suikerbos restaurant) to the beach needs to be protected," Mrs Jemman said.

Part of the barrier dune, which still supports fynbos and milkwood trees, had been gouged out for townhouses between Empire and Victoria roads and permission was granted recently for milkwoods to be cut down in Empire Road, Mrs Jemman said.

The developers advertise their houses as having a Cape setting, yet they destroy the very environment they are advertising," she said.

**Should act together**

Captrust believes that Hout Bay is vulnerable to environmental damage because under the old general plan for the area developers have free rein on their property.

Mrs Jemman said the problems in Hout Bay should be tackled constructively.

"People want advice on how to take the environment into account when they build. The community should act together to provide this kind of input."

- The chief executive officer of the Western Cape Regional Services Council, Mr C H Mocke, said the RSC entered into negotiated development packages with developers where possible.

But this could be done only when a developer chose not to implement existing development rights.

"In theory, all land-use rights represent what is considered to be the most appropriate use of the land."

"In practice, however, because of long-standing sub-division rights in terms of old general plans (some of which were approved as early as 1962), certain land-use zones can be overridden by entrenched sub-division rights," Mr Mocke said.

Certain areas such as the beachfront, Constantia Nek and Sandy Bay had been zoned for amenity purposes, which meant that all development rights would have to be negotiated with the RSC.

A proposed structure plan for Hout Bay was completed and advertised in 1986 but had yet to be finally approved by the RSC.
Eskom’s pollution claims challenged

ESKOM announced this week it was to set aside R123mn over the next six years to upgrade air pollution control equipment, asserting itself as “an anti-pollution force.”

But claims about the effectiveness of pollution control at Eskom power stations were immediately challenged by some environmental experts, who referred to various reports on the high levels of air pollution caused by power stations and industrial plants, particularly in the Transvaal.

In Eskom’s statement, GM in charge of environment control Horman Edeling said every power station built since the late Sixties was equipped with precipitators costing R120mn. Eskom had spent R900mn over the past 20 years to combat air pollution. But improvements still needed to be made.

“In the provision of electricity to improve living standards, a balance must be maintained between people’s health, utilisation of resources, appropriate technology, costs and impact on the environment,” Eskom claims the precipitators can reduce between 95% and 99% of soot, dust from the waste product before it is released, with the remaining 1% or 2% being released above the stable air layer or inversion level by tall chimneys.

For more than 10 years Eskom had been involved, in conjunction with the CSIR, in investigating pollution effects. It had spent about R15m on the project, contributing 70% of the data of the CSIR report.

The type of preventive action used in SA is similar to those used in other climates and, according to Colleen Vogel of Wits University’s Geography Department, the SA atmosphere is not conducive to this type of dispersal process.

“The PM levels are accordingly to the context of the climate,” she said. “Depending on the volatility of the environment, the pollution levels differ.

“We have a very stable winter environment, which collects the waste rather than clearing it. The Eastern Transvaal is the worst possible place for coal burning.”

The CSIR report on pollution mentioned that power stations and industrial plants in the Eastern Transvaal have created among the worst conditions in the world. Plumes on the highveld pump sulphur into the middle level of the atmosphere. This is turned into “acid rain” and carried as far as Natal and the Free State.

A study two years ago by Professor A M Coetzer of the University of Stellenbosch found children exposed to air pollution in the Soweto area much more susceptible to certain respiratory illnesses.

Eskom’s Greg Tossan, a researcher in pollution control, said many of the stations were contradictory and no final answer was available. He could not explain reports recently that claimed SA had the dirtiest skies in the world.

He acknowledged that although he could make statements on the levels of pollution in the air, he was not a medical doctor.

“I can’t speak on the health of the population, but I can tell you the levels of sulphur dioxide in the Eastern Transvaal highveld are not a problem in terms of internationally accepted standards.”

GLEN SHELTON

On “acid rain,” Edeling assured the public there was no reason for concern. SA had a very low sulphur content in its fuel. “The active ingredient in acid rain — it’s in the atmosphere. At present the sulphate and nitrate deposits in SA are much lower than those of comparable areas overseas.”

However, other researchers expressed concern about the accuracy of these findings. Although Eskom met all governmental requirements to prevent pollution, there could be a discrepancy in how these were applied.
Platinum solution

POLLUTION

A window of opportunity has been opened for the marketing of platinum, one of SA’s main metals, in research now being done into pollution-free power generation by using platinum.

FINANCIAL MAIL AUGUST 26 1986

num fuel cells.

The potential new market has been highlighted by a recent announcement that Taiwan is to spend US$35bn over the next 20 years on environmental protection and pollution control.

Taiwan recently postponed the expansion of its stainless steel industry because of the island’s pollution problem. It is currently examining the possibility of a joint venture with SA on stainless steel production.

Platinum fuel cell research could create the technology for producing “clean” electricity, but the programme is still at the developmental stage. However, the possibility exists that worsening air pollution and climatic changes could create the lobbies (and the funds) to accelerate the development of the technology — with a view to fuel cells eventually superseding coal and oil-fired power stations.

“The fuel cell is a clean source of energy. Platinum catalysts are used to convert chemical energy into electrical energy,” says Impala Platinum MD Don Ireland.

Council of Mineral Technology president Aiden Edwards has frequently called on government and the mining sector to pool resources on fuel cell application research. The reason is obvious — SA possesses more than 80% of the world’s known platinum reserves. Currently Japan and the US lead the world in fuel cell application research. Platinum is already extensively used in the control of car exhaust emission in Europe, the US and the Far East.

Fuel cell development has been given added urgency by worldwide concern over deteriorating climatic patterns. The so-called “greenhouse effect” — the gradual warming of the world’s atmosphere, caused by an increase in carbon-dioxide emissions from fossil fuel-burning power generators — has already been blamed for the US drought, worldwide floods and other extreme weather conditions.

Mean northern hemisphere temperatures have gradually increased above normal levels over the past few years — further evidence that the greenhouse effect is more than scientific theory.

But apparently the most damaging aspect of air pollution (contributing to the acid rain which is killing off forests in the northern hemisphere) is the smoke released by burning fossil fuels.

The Council for Scientific and Industrial Research recently reported that the eastern Transvaal Highveld — site of some of the country’s largest power stations — is now the most polluted area in the southern hemisphere.

Taiwanese Deputy Minister of Economic Affairs Hsu Kuo-an recently claimed that “the huge environment protection market has the potential to become a new environment protection industry for the nation.”

SA has an obvious interest in these developments. With exhaust emission control already one of the major markets for platinum, platinum fuel cell development offers the possibility of a major new outlet for the metal — perhaps as early as the mid-Nineties.
Focus on township pollution

Notorious township air pollution is to be the subject of an intensive, two-day international conference in South Africa in November.

The conference, on "residential air pollution," has attracted 31 papers and will include anti-pollution campaigners from townships and industrial centres.

Industrialists, technologists, medics and other scientists are attending from countries such as the United States, India, Malawi, Tanzania and Lesotho.

The conference will be held at the Alpha Centre in Broederstroom on November 10 and 11.

For more information, contact Dr A D Spuridge at (021) 841-3968.
AIDS: Tragedy striking innocent children
Poachers eye SA's rhino, goldmine
There were 60,000 black rhino in Africa in 1970. Today there are about 4,000.

Every day somewhere on the continent rhino are shot down with machine-guns, their horns hacked out and sold illegally for thousands of dollars to eastern countries by highly organised crime syndicates.

So far, the large-scale rhino massacre has occurred beyond South Africa's borders. But conservationists and rhino experts say it would be naive to believe the situation would not change.

According to the SAP's Narcotics Bureau in Pretoria, organised syndicates dealing in illegal trophies have already got a toehold in the country.

At today's black market price of R22,000/kg for rhino horn, and with most of the rest of Africa's rhino dead, it is only a matter of time before the rhino populations in South Africa are attacked, say experts. And conservationists are trying to prepare for the onslaught.

COMBINED OPERATION

The Rhino and Elephant Foundation and the Game Rangers' Association of South Africa held a three-day workshop in Skukuza to decide how to save Africa's most endangered large mammal.

The most significant proposal discussed was a project where South African and Namibian experts, money and staff would be pooled in a combined effort to fight poaching and trading.

At the same time, they would actively try to increase the number of black rhino in southern Africa.

The project, still in its draft stage, will be released officially once it has been accepted by national and provincial conservation bodies.

The workshop called for far more stringent penalties for both poaching and trading.

Dr Martin Brocks, chief research officer at the Natal Parks Board, described South Africa's fines as "hopelessly inadequate".

Scientist Mr Richard Lemaire called for jail sentences without the choice of a fine: "People dealing in illegal rhino trade, as in diamond and drug smuggling, deal in huge sums of money. What's a fine to them? They will simply pay it and then go back to the illegal trade," he said.

It was suggested game rangers train with the SAP in investigating illegal activities.

The workshop also called for liaison between conservationists, law enforcement officers and customs and excise officials in a bid to quash the illegal trade.

The Kruger Park's chief warden, Dr Salmon Joubert, said at the workshop: "It will be foolish to think the solution will be simple. We are fighting the pawns in this game. We must look to the instigators."

Zimbabwe has had a taste of just how difficult the battle is. Although it has the largest black rhino population in Africa, numbers are declining in spite of the game department battle against poaching.

In the Zambesi Valley, the struggle between the game department and poachers coming across the river from Zambia has reached the proportions of a small bush war.

Since 1984 poachers have massacred 139 black rhino in the valley, hacking out the horns and leaving the carcasses to rot.

Mr Robi du Toit, who is doing research sponsored by the World Wildlife Fund on rhino poaching in the Zambesi Valley, likened them to armed bank robbers.

"They're working in 12,000 sq km of thick bush, they're armed and there's no way they're going to come out with their hands up.

"They're like bank robbers and there's gold out there. To them it's worth the risk of being shot," he said.

So far, 43 poachers have been killed in shoot-outs in the Zambesi Valley, but conservationists say the threat of being shot has in no way been a deterrent. With the price for horn sky-high, they keep on coming.

ERRONEOUS IDEA

Why the scramble for rhino horn? Opposed to what most westerners believe, less than 1 percent of horn is sold as an aphrodisiac. The bulk is ground down and used as traditional medicine in the East, in much the same way as animal parts are used as traditional muti in South Africa.

About 40 percent of horn is sold to North Yemen where it is carved into dagger handles.

Kruger Park scientist Dr Anthony Hall-Martin says the Yemenis carry these daggers in their waistbands which "constitute the average North Yemeni yuppy's idea of being well-dressed".

The fight to save the rhino has cost many millions of dollars but the poachers seem to be winning. Is it worth carrying on?

Said Mr Du Toit: "If the rhino goes, the elephants will be next and other species will follow. With the key animals gone, tourists won't be attracted to parks and there will be pressure to convert them into subsistence farming.

"The black rhino is a flagship in conservation. If it goes down, the whole of the conservation system will be undermined."
THE deputy Minister of Health, Dr Michael Veldman, this week paid a visit to Soweto to launch an anti-pollution campaign that would result in areas of the city being declared “smoke-free” in the near future.

The Minister was accompanied by the mayor of Soweto, Mr Nelson Botake, the council's town clerk Mr Nico Malan, Soweto's health officer Dr W Matsie and a group of councillors. Among a group of experts who were with Dr Veldman was Mr Martin Lloyd who had been monitoring the smoke pollution in Soweto for more than a year.

“Soweto is not yet a health hazard, but it could easily develop into one if the situation is not monitored. The conditions at the Mshengu squatter camp is totally unacceptable. The lack of accommodation in Baragwanath Hospital is totally unacceptable. The smoke pollution levels in Soweto during winter is also totally unacceptable,” said Mr Veldman in response to Press questions after the tour.

Dr Veldman also visited clinics and schools in the township.

MHENGUVILE . . . the squatter camp that made Deputy Minister of Health Dr Michael Veldman see red.
Grip of pollution strangling millions

By FRANCES WILLIAMS

UN studies of world air, water and food contaminants show among other frightful findings that as the thin arms of starving children reach out for food aid, they could be reaching out for premature death from cancer, for cereals stored in humid conditions can become highly carcinogenic.

GENEVA — A devastating picture of an increasingly polluted world has emerged from United Nations studies monitoring air, water and food contaminants in rich and poor countries.

The studies, the most comprehensive ever carried out, suggest that while conditions in industrial countries are generally improving, in the Third World they are deteriorating rapidly. Less than a fifth of the world’s 1.8 billion city dwellers live in air conditions that pose no risk to health. Two in three of the world’s population breathe air that contains disturbingly high levels of sulphur dioxide and dust.

Around 10 percent of all rivers are polluted and five million to six million infants in developing countries die each year from diarrhoea and other water-related diseases. Untreated sewage in water supplies is a crucial problem, the UN says.

Food contamination is normally under control in the industrialised world, but in the Third World pesticides and cancer-causing aflatoxins, formed by some moulds, are causing problems.

The results of the studies were released at the weekend to coincide with a meeting in Geneva of government health and environmental experts sponsored by the United Nations Environment Programme and the World Health Organisation.

On air pollution, the study estimates that 625 million people, mostly in developing countries, are exposed to unacceptable levels of sulphur dioxide, while another 550 million live in “marginal conditions”.

Among the worst-affected cities in the early 1980s were Milan, Tehran, Seoul, Rio de Janeiro, Sao Paulo and Paris. In the middle range were London, Dublin, Athens, Hong Kong, Tokyo, Shanghai, New York, Calcutta and Brussels.

The UN estimates that about 1.250 million people live in unacceptable conditions of smoke and dust.

About 15 percent to 20 percent of people living in cities in North America and Europe may be exposed to unhealthy levels of nitrous oxides from car exhausts during rush-hour traffic, while people living in about a third of the world’s cities are at risk from dangerous or undesirable air lead concentrations.

Mr Michael Gwynne, head of UNEP’s global environment monitoring system, added a chilling postscript to the study on food contamination.

He said countries receiving food aid could be faced with the dilemma of either turning supplies away or distributing them in the knowledge that a high proportion of those receiving it would die of liver cancer.

This was because cereals stored in humid conditions might contain aflatoxins, which are highly carcinogenic, Mr Gwynne said. — The Independent, London.
Fly sprays that punch a hole in earth’s roof

SOME scientists believe that each time we use a fly spray not only do we kill the insects, but the Freon used to propel the insecticide out of the can rises into the stratosphere where it destroys the ozone.

Freon is the trade name of a chemical belonging to a group of substances known as chlorofluorocarbons (CFCs). These chemicals are used not only as propellants for aerosol cans but as refrigerator coolants and solvents. Any one of this chemical group can destroy atmosphere ozone.

With this danger in mind many countries, including the United States and Canada, banned the use of CFCs in aerosol sprays.

In 1957 a young British scientist, Joe Farman, was taking observations on the Antarctic ice cap as part of the International Geophysical Year.

Each year Farman and other scientists in the British Antarctic survey watched as the ozone concentration peaked in spring then slowly died away for the rest of the year. Then, three or four years ago, the results began to change. Just before each spring-time peak the level of ozone would drop dramatically. The scientists suspected their instruments were wrong, but after two years of careful checking the trend was confirmed. It was as if a hole appeared in the ozone layer just before each spring.

The Americans have been quick to investigate the phenomenon. Unlike the British, they have been able to plough men, money and resources into the Antarctic. In particular they have been able to use an expensive instrument that had been reserved for use on the Space Shuttle.

Have CFCs destroyed the ozone to such an extent that large holes are appearing in our protective shield? Not according to Nasa, where researchers attribute the “Ozone Hole” to a springtime upwelling over the poles of air containing little or no ozone.

But the matter does not rest there.

Susan Solomon and 15 scientists are investigating the Antarctic “Ozone Hole”. She and her team have measured the abundance of 15 different gases in the upper atmosphere and ruled out the springtime theory.

It has been argued that since the production of ozone is dependent on solar radiation, if this varies so too would the concentration of ozone. According to this theory, holes could occur in the ozone layer during times of minimum solar activity.

But Solomon claims that the level of oxides of nitrogen she has measured would inhibit the processes related to the solar interaction and has therefore ruled out this cause. So the ball is back in the pollution court, with emissions from air conditioners and aerosol cans the prime suspect.

Oddly enough one of the leading voices in favour of restrictions on CFCs comes from DuPont, the manufacturers of Freon, who suggest that other chemicals (which they also make) could be used for similar applications causing less harm to the environment.

DuPont officials have also said that recent research suggests CFCs also contribute to the warming of the earth’s surface, known as the Greenhouse Effect.

Other scientists are concerned about the increase in ozone levels at ground level. When car exhaust fumes react with sunlight ozone is produced. There is always a certain amount of ozone in the air we breathe but the concentration is as low as 0.025 parts per million. — Gemini News Service
Pair arrested in ivory smuggling probe

A PORTUGUESE man resident in Pretoria and a Malawian were arrested on Tuesday in Botswana in connection with an attempt to smuggle rhino horn, elephant tusks and other contraband from Zambia into Botswana.

A senior Botswana police spokesman said yesterday Kazungula border post officials had discovered "quite a large amount" of leopard and python skins, elephant tusks, rhino horns, ivory bangles and malachite necklaces in secret panels in a truck.

A Volkswagen engine and video were also found in the back of the truck. No value has been put on the goods.

The discovery comes on the heels of reports of extensive multi-million rand smuggling operations stretching from central to southern Africa involving the poaching of endangered animals.

The two men are expected to appear in court today charged with the illegal importation of ivory among other things.

Earlier reports said police identified the owners of the SA-registered truck as A H Pong and Sons. However, Pong said last night he did not own a haulage truck nor did he deal in curio items of any kind.

He said: "I am in the import, export and retail clothing business. I am astounded by this news. I have not been notified by anyone about this."

Sapa-Reuters reports from Dar es Salaam that Tanzanian police said yesterday they had arrested five government employees for smuggling more than a ton of ivory - 152 elephant tusks.
TWO men appeared in the Francistown Magistrate's Court yesterday in connection with trying to smuggle dozens of rhino horns, hundreds of elephant tusks and other contraband from Zambia into Botswana.

A senior Francistown police spokesman identified the men as Zimbabwean Patrick Mufumbi and a Portuguese man resident in SA, Antonio Augusto Antunes Vieira.

The spokesman said Mufumbi was arrested at Kazangula on Tuesday while Vieira was picked up by police in Gaborone on the same day.

He said the confiscated haul — impounded by Botswana authorities at Kazangula border post on Tuesday and possibly destined for SA — consisted of 393 elephant tusks, 94 rhino horns, numerous leopard, crocodile and python skins and dozens of ivory items. The haul was found hidden in secret panels in the truck.

Earlier reports said Botswana authorities identified the owners of the impounded SA-registered truck as A H Pong and Sons.

Yesterday, Pong denied the haulage truck belonged to him but said he knew Vieira and Mufumbi.

He said: "They collected and brought copper scrap from Zaire to me about two or three times."
Pollution problem 'sidelined'

By Theresia Anders,
Highveld Bureau

Aspirant Witbank town councillor Mr Clive Hatch believes Witbank's pollution problem is being sidelined by frightened candidates.

Mr Hatch, who says he is independent of any political grouping, says the town's polluted air should be one of the major election issues.

"Some people deny we even have a problem, but it is no good ignoring it because it is not going to go away," said Mr Hatch.

"What we need is a thorough investigation where all the facts become known so we can see exactly what the dangers are to the people in this town."

He said he believed the pollution issue was being sidelined in Witbank because municipal candidates were frightened of upsetting the industries to which most people in town were connected.

"Witbank certainly can't do without industries, but we must investigate ways of cleaning up the air in our town."

Mr Hatch said it should be investigated whether the Highveld Regional Services Council could provide the town council and industry with finance to beat the pollution problem.
Pretoria to host flood conference

More than 200 delegates — most of them civil engineers — will attend a major conference on floods and their consequences at the CSIR conference centre in Pretoria on October 20 and 21.

The discussions will cover a wide range of topics brought to the forefront by recent flood disasters in the Free State, Northern Cape and Natal, which cost the country an estimated R350 million through damage to infrastructure and facilities.

PROCEEDINGS

The proceedings will be opened by the Minister of National Health and Population Development, Dr W A van Niekerk.

The keynote address will be given by the president of the SA Institute of Civil Engineers, Mr Cliff McMillan.
Oil-laden ship sinking off coast

Staff Reporters
A FULLY LADEN 159 000-ton Greek oil tanker, the Kition, was in danger of sinking early this morning as a salvage vessel desperately towed it away at full power from the coast.

The tanker, taken in tow by the John Ross six miles off Long Beach with an engine room flooding, has sparked a major rescue operation involving two Kuswag anti-pollution vessels and several helicopters.

A spokesman for Pentow Marine said the Kition's engine room was flooding at 1 200 tons of water an hour soon after the John Ross, carrying generator sets and pumps, reached her at 8pm. Gale-force winds were hampering the operation.

The 19-year-old vessel, on her way from the Persian Gulf to Montevideo, Uruguay, first reported being in trouble 12 nautical miles off Cape Point at 5pm yesterday. The John Ross was immediately dispatched.

The Pentow Marine spokesman said a team of salvage experts and divers had been airlifted to the tanker by a Court helicopter and reported water 15 metres deep in the engine room.

He said the tug would be towed out to sea today where bigger pumps would be used.

The oil in the tanker would be enough to keep it afloat even with the engine room totally flooded.

He confirmed that a "no cure no pay" contract had been signed by the tanker's owners and said the Kuswag II was standing by to tackle any oil spillages that might occur when the water was pumped from the engine room.

The 25- to 30-knot south-easter was helping the tug to get the tanker away from the coast.

Late last night the salvage crew on the ship had difficulty establishing the tow because no winches were working.

It was not known when water first started to flood the engine room or where the leak was, but it was hoped that pumps would be able to bring the water level down.
SADF slow on posts — Angola

within a few days.

Van-Dunem also said there was disagree- ment on whether black Namibian soldiers should man the posts.

A Defence Force spokesman said yester- day that in terms of the Geneva agreement channels of communication had been set up to deal with such issues. "The SADF respects and follows these channels and would hope that the other parties would do the same."

A member of Namibia's Interim govern- ment, Jan de Wet, said yesterday it was no longer possible to implement Resolution 435 on November 1. His com- ments followed talks between President P W Botha and members of the interim government. — Sapa-AP.

Minister calls for flood preparedness

PRETORIA — The massive destruction caused by recent floods, and the need for a sharper and more effective reaction to future disasters, were stressed by National Health Minister Willie van Niekerk yesterday.

Speaking at a Floods in Perspective conference organised by the SA Institute of Civil Engineers at the CSIR, Van Niekerk said R627m had been paid out in flood relief. R48m was paid to victims in KwaZulu. The public's "magnanimous" contribution was R23m.

Up to the end of August, a total of 135 600 applications for aid had been received and another 17 000 were being processed.

The Laingsburg floods in 1981 destroed 194 of the 225 houses in the town. Only 20 were repairable.

In the Natal and Free State floods more than 460 people died. Damage was estimated in excess of R1bn. 4 000 far-
mers suffered heavy damage and more than 700 farm dams burst.

"It was worrying," Van Niekerk said, "that so many disasters happened before attention was pernently focused on the problem." In light of the recent disasters, "we have not yet prepared ourselves properly for possible future disasters."

The effect could be minimised by a comprehensive national flood defence policy which would provide immediate and short-term assistance to victims. It would also have to include long-term assistance and proper flood management.

Shortcomings in previous disasters, including communications and lack of facilities, were discussed recently by a task team which included representatives of state departments and Civil Defence.

Durban strike spreads to Maritzburg

WORKERS at Prospective, a subsidiary of Republical Press in Maritzburg, yesterday joined the strike by its Durban plant workers, bringing to more than 300 the number of strikers.

Media Workers' Association general secretary Sithembele Khala said striking workers in Durban were locked out yesterday as the stoppage entered its third day.

Talks called by management had broken down over allegations that the company had failed to follow the agenda. Wages and conditions of service were to be discussed. Workers demanded that salaries for black workers be restructured to match those of white workers.

They also demanded transport for black editors as provided for their white colleagues, that the transport subsidy apply to all workers and that black workers be on a medical scheme. — Sapa.
SA ‘not prepared for floods’

South Africa had not yet prepared itself for possible future flood disaster, the Minister of Health and Population Development, Dr Willie van Nierkerk, said at a Floods in Perspective conference in Pretoria yesterday.

Although it was impossible to limit or control the flood phenomenon, the effects of excessive flooding could be minimised, he said.

Mr C M McMillan, president of the South African Institute of Civil Engineers, said the conference was a natural consequence of the flood disasters in Natal last year and in the Free State and northern Cape earlier this year.

The conference was organised by the hydraulic and water engineering division of the institute.

Mr McMillan said it represented a desire on the part of the civil engineering profession to derive benefit from whatever lessons could be learnt.

Ms Nan Walker of the CSIR and Mr Janette Lindsay of Wits said research indicated that early recognition of abnormal oceanic conditions might enable better predictions of the severity of the rain-bearing potential of particular weather types.

Mr J van Heerden of the Weather Bureau said the bureau had had considerable success with the prediction of the Natal flood, though the prediction of the Free State flood in February this year had been less successful.

This was borne out by Mr N J Nel of the Free State roads department, who told the conference that Bloemfontein officials had been unaware of the developing disaster because the initial rainstorm occurred over a weekend.

The first alarm had come from provincial traffic officers on Sunday. February 21, after primary roads south of Bloemfontein had been flooded.

By then, telephone links had been disrupted and internal radio links had become unreliable because several relay stations had become defective, Mr Nel said.

While road engineers could not reach flooded bridges, rural traffic officers had to take their own decisions regarding the closure of roads and bridges and the diversion of traffic.

There were not enough road signs on hand and some impassable roads could not be properly barricaded.

The Free State and northern Karoo were subject to floods about every 14 years, which made a written disaster plan essential, Mr Nel said. — Pretoria Bureau.
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The Free State and northern Karoo were subject to floods about every 14 years, which made a written disaster plan essential, Mr Nel said. — Pretoria Bureau.
posal. “Someone, somewhere, is going to have to do it, and it could be far better done responsibly by highly qualified scientists, preferably under international supervision, than left to rot on some Third World shoreline.”

Teens, a key figure in a world conference on nuclear waste disposal which SA hosted a couple of years ago, says toxic waste should be taken into the same sort of expert hands that handle radioactive matter.

SA’s geophysical attributes make the country uniquely suited to deal with the disposal of nuclear waste. A spokesman for the Atomic Energy Corporation conceives that — although it is academic at this stage — the importation of atomic waste is feasible in terms of our capacity and technology.

The existing 10,000 ha disposal site at Vaalputs in Namakalanda is close to being the perfect locale. And, with only 100 ha being used for disposal at present, it will be feasible for a long time.

Vaalputs is an area where extremely low rainfall. Existing ground water is estimated at between 3,000 and 10,000 years old; it hardly ever replenished and lies well below the surface of the earth. Human population is virtually non-existent, as are possibilities for agricultural or mineral development. It is seismically among the most stable areas in the world.

Each year the site receives 1,500 metal containers of low-level radioactive waste and 500 concrete containers of medium-level waste which are stored underground. The first ever batch of high-level waste, comprising spent fuel elements from the Koeberg reactor, is undergoing a 10-year “cooling” process underwater at Koeberg. From there, packed in specially designed caskets, it will be transported to Vaalputs, stored and monitored above ground for several decades before being reprocessed for further use.

Most waste problems are not nearly as complex. Nevertheless, according to Futter, identification of suitable sites near urban areas is being hampered by the Nimby syndrome. The attitude displays ignorance of the true nature and potential of waste disposal sites, he argues.

Disposal of waste — solid and liquid, toxic and non-toxic — requires licensed “landfill” sites designated Class I or Class 2, depending on their suitability for particular types of waste. The danger in the selection of sites is the contamination of groundwater. In the case of a Class 1 site, suitable for receiving liquid and hazardous waste, extensive geological and hydrological surveys must ensure that the dumping ground is virtually impermeable and likely to remain so.

Constant monitoring is required. Water samples are taken regularly from boreholes surrounding the fill and tested for traces of leachate (waste- percolated water). The infiltration of water through domestic waste alone can produce a leachate 100 times more polluting than raw sewage. Left unmanaged, leachate is a deadly hazard to groundwater. Where necessary, sites are pumped to contain the leachate, which is then re-circulated to promote evaporation, filtration and biodegradation.

While, for obvious reasons, the sites remain unsuitable for building, they are basically harmless and, during filling, not as unsightly as one might imagine. Solid and liquid wastes are compacted in small cells which are finally covered with earth or ash and are fit for transformation into greenbelt or recreational areas.

The management of toxic waste involves more than merely sanitary disposal — and it is in the field of treatment and detoxification that private-sector waste management companies have built up profitable and safe businesses. Waste-Tech, for example, has a sophisticated laboratory employing qualified staff to design and implement specific treatment programmes for a wide variety of waste products. This is done in close cooperation with chemists from the industrial creators of the waste.

Aside from the initial analysis of waste samples, the laboratory monitors every delivery of gunk requiring disposal. Detailed monitoring of water from some 60 landfill boreholes is carried out on equipment capable of detecting traces of down to one part per million.

The aim is to immobilise toxins. “If it can be made less dangerous, we treat it,” says Wood. Wastes found to be unsuitable for disposal on licensed sites are either organic (such as pesticides, polychlorinated biphenyls and arsenical compounds) or inorganic (acids, alkalins, heavy metals, cyanide compounds and so on). Appropriate treatments to render them safe include neutralisation, precipitation, oxidation or reduction. The result of processing is a harmless solid, destined for the landfill, and a re-usable saline solution.

Certain waste substances are to be neutralised outside: fly ash of which SA produces more than 20 Mt a year, can be blended with liquid toxins to make them inert.

There remain certain substances, such as polychlorinated biphenyls and arslenical compounds, for which there are no treatments. These are sealed in concrete and included in the landfill sites.

Private waste management companies anticipate long pressed for legislation being passed next year to enforce stricter observance of the conditions governing landfill sites. This, they believe, will put an end to careless methods of disposal.

The head of the CSIR’s waste management research programme, Graham Noble, tells the FM that in considering the infrastructure necessary for SA to develop a hazardous waste import industry, technical suitability is critical while engineering costs are considerable. While vast tracts of land exist in SA, the engineering costs of preparing them as fly ash sites for the long-term disposal of toxic wastes from the northern hemisphere would be very high and he cautions: “When the costs of transporting these wastes from abroad to these sites are added, probably few companies from abroad would be prepared to pay the price.”

While this may be true now, the problem is not going to go away. There is an important opportunity here for SA and government should seize it by commissioning a detailed feasibility and environmental impact study to confirm that a risk-managed import programme can be established; and where and how this can best be done. The exercise need not cost much — a lot of information is already available.

Government should then facilitate the development by private enterprise of an industry for which a growing demand seems assured.

SA industry is already highly experienced in handling dangerous processes, so government’s own involvement need not — and should not — go beyond satisfying itself and the public that the profitable exploitation of other countries’ problems is handled safely.
Waste not, want not

It's a growing problem — worldwide. Take the tanker Khian Sea, which left the US on August 31, 1986 with a load of incinerator ash, nasty stuff that no one wants. Well, two years later — and thousands of nautical miles on — she has joined a ghostly fleet of shunned poison ships that haunt the world’s oceans, unable to find willing takers for their cargoes of toxic waste.

In the professional waste management industry (mega-garbage disposal), they call it the “Nimby” syndrome — “Not In My Back Yard.” That’s the cry of communities which, quite understandably, do not wish to be exposed to the environmental hazards of the waste. Horror stories about irresponsible disposal abound — and so a powerful lobby has grown up. In many cases it has beaten governments into submission and left them unwilling or unable to undertake what is in fact not an impossible task — effective, safe management of hazardous waste.

It’s a question of where to put it safely. And despite Pretoria’s stated opposition to anything of the sort, all indications from SA’s well-established private waste management sector are that the country is uniquely equipped in terms of space and technology to do so. With responsible planning and adequate safeguards, the potential exists to set up an industry which could be a massive foreign exchange earner.

Figures from the UK show that toxic waste is big business. It provided the most lucrative part of Britain’s £734m specialist waste-handling industry last year. However, the environmental pressures which have caused other countries to try to export their waste are beginning to be felt in Britain, too.

The issue is highly emotive and, internationally, the lobby against toxic waste has considerable public support. But, as virtually everywhere is now somebody’s backyard, decisions on disposal need to be based on thorough scientific analysis.

While the the bulk of SA’s 15 Mt a year of urban waste is handled by municipalities, private enterprise handles the lucrative industrial market — disposing of the many by-products, toxic or otherwise, of the mining, chemical, fuel and manufacturing sectors. Whether waste disposal is handled internally or farmed out to a specialist company, the cost of safely disposing of hazardous muck, or transforming it into something more acceptable, is high and rising. The days when waste handling involved little more than disposing of rubbish on some remote site and forgetting about it are gone; we are in an era of technological waste management.

Neville Futter, technical manager for Waste-Tech, SA’s largest private waste handling company, describes management of toxic and other wastes as “a complex technical business.” However: “The facilities and technology already exist here to manage the stuff safely. To extend them to international business would be no problem.”

But when Waste-Tech approached the government some years ago with an eye to the lucrative waste import business, it came up against a brick wall. It was apparently conceded that the refusal had more to do with political acceptability than doubts about the country’s ability to cope.

MD Geoff Wood points out that much of the dreaded waste afloat at the moment is actually run-of-the-mill stuff to professional waste management concerns — and a far cry from the real bogey, radioactive matter.

Internationally, increasing attempts are being made to foil the burdens of unwanted toxic waste on Third World countries. While most eager for the huge remuneration offered, they are usually least able to deal with it. But such is the sensitivity over the issue that even these countries are starting to cry halt.

For instance, in the west African state of Guinea Bissau, the government signed, then cancelled, a contract to store 15 Mt of waste. The country stood to earn R1,2bn — about twice its total foreign debt. In neighbouring Guinea, a government company agreed to allow 85 000 t of waste into the country at R100/t. The first load of 15 000 t caused trees to die on the island on which it was dumped and the government declared the agreement null and void and demanded the waste be removed.

In May, the Van Santen cargo company of Rotterdam announced it had acquired a licence from the government of the Congo to store or burn 100 t of contaminated chemical waste there. The price? R186m over eight years. The government later denied having granted the licence and the contract was withdrawn.

It appears that debt-ridden countries offer their services merely as dumping grounds, without the provision of treatment or monitoring facilities. Such ill-advised enterprises have probably contributed to international fears over the disposal of hazardous substances. Even the most naive of these countries are now reluctant to deal in toxic currency. So the way is open for a capable source to take on the responsibility — and reap the rewards.

Economic geology consultant Dr Dennis Toens (formerly of the Atomic Energy Corporation) believes that at some time — “in the spirit of international co-operation” — large countries are going to have to assist small, industrialised nations with waste dis-
Law 'soft on flood control'

By Deborah Smith
Pretoria Bureau

South African legislation controlling flood plain development, where the greatest loss of life occurred during flooding, was "toothless," according to Mr W J R Alexander of the University of Pretoria.

Speaking at a Floods in Perspective conference at the CSIR in Pretoria on Friday, he said legislation was the most effective way to control flood plain development.

There was an imbalance between the very conservative procedures for dam design and the ineffective legislation relating to development on flood plains, he said.

Available procedures were accurate enough for the determination of the 20-year flood line, below which no substantial structures should be permitted, and the regional maximum flood line, above which no controls were needed.

BRIDGES

He said severe floods during the past 15 years had resulted in the loss of more than 1 000 lives and exposed severe shortcomings in available methods for flood frequency determination, legislation controlling flood plain development and the design procedures for bridges.

He said the basic objectives of engineers and hydrologists involved in flood analysis was to estimate the probability of extreme floods occurring and to take steps to minimise loss.

Modern methods of flood analysis had not been applied in southern Africa, said Mr P T Adams of the Department of Water Affairs and Mr G G Pegg of the University of Natal.

South Africa needed to research and adapt information for general application in an arid or semi-arid environment where floods were generated over very large catchments, they said.
Vaal Dam is full

The Vaal Dam is 101.3 percent full, the Rand Water Board announced yesterday. Sterkfontein Dam is 51.7 percent of capacity; Bloemhof 89.3 percent and Woodstock 70 percent.

The total amount of water in dams this week is 78.4 percent compared with 35.4 percent this time last year.

The total amount of rain that has fallen in Vaal Dam catchment area for October to date is 64.7 mm.
Dam faces cyanide pollution threat

By Therese Anders,
Highveld Bureau

LOSkop DAM: - Last night emergency clean-up crews were still trying to clear the spruit which runs into the Loskop Dam of contamination by deadly poisonous calcium cyanide granules.

Some of the 230 drums containing the granules burst open when they landed in the spruit after the truck carrying the deadly cargo was involved in an accident on Monday night.

It has been estimated that between two and three tons of the dangerous chemical may have been washed into the spruit which eventually runs into Loskop Dam.

The clean-up operation was delayed much of yesterday after a front-end loader became bogged down in mud.

However, a spokesman for SA Cyanamid, the chemical's manufacturer, said there was no danger to the local population.

A Department of Water Affairs spokesman, Mr Andre Rouxouw, said at the site that he was satisfied that SA Cyanamid was doing all it could to remove the toxic chemical.

"Of course we are worried, but we believe that the cyanide that has been washed downstream will have been quickly diluted," he said.

The spillage, believed to be SA's biggest cyanide accident, happened when a mechanical horse and trailer went out of control on the steep Kranspoort Pass.

Both the driver and his assistant believed to be Zimbabwe nationals were killed instantly.

The makers of the chemical, SA Cyanamid, say they will spare no expense to clean up the spillage and ensure there is no contamination to the streams leading towards Loskop Dam.

Emergency workers have built dams to block the spruit, but these were only erected more than three hours after the accident.

"During that time the highly toxic substance flowed freely into the spruit and downstream towards Loskop Dam.

SA Cyanamid's Witbank plant manager, Mr John Betts, said he believed local residents were in no danger.

"We have done tests this morning down stream and found very low concentrations."
No trace of cyanide found in Loskop dam

By Therese Anders, Highveld Bureau

Samples taken from the Kranspoort River at the point of inflow into Loskop dam showed no sign of cyanide contamination, SA Cyanamid, manufacturer of the deadly chemical, announced yesterday.

Between two and five tons of calcium cyanide granules were discharged into a spruit flowing into the river when a truck crashed on the steep Kranspoort Pass on Monday night.

Cyanamid's quality assurance manager, Mr James Richards, said water testing had been carried out at regular intervals down the length of the spruit and where the Kranspoort River flowed into Loskop Dam.

"At the dam the level is below detection, which was what we expected."

He said a third dam had been built during the night to contain the spruit water until the clean-up was complete. Maize bags filled with swimming pool chemicals had been placed in the three dams to neutralise the cyanide.

Mr Richards said the last of the 230 drums was being removed from the crash site.

A second crew would begin cleaning up the crash scene during the afternoon and the site would be monitored for at least a week.
This time, disaster was averted

Regulations governing road transportation of hazardous chemicals in South Africa are hopelessly inadequate and seldom enforced, say experts.

Unless authorities introduce stiff legislation soon, South Africa, with one of the highest road accident rates in the world, could be "heading for a major disaster," they claim.

Last week's spillage of deadly calcium cyanide crystals when a truck carrying 230 drums crashed on a Transvaal road near Pretoria was a case in point. It is estimated that two or three tons of cyanide was washed into the stream.

With swift clean-up operations, a disaster was averted.

But, say experts, it could happen again - with fatal results.

Mr. Pieter Erasmus, chairman of the Public Carriers Association, told The Star there were no regulations controlling transportation of cyanide, or any other toxic substance, in drums. The Hazardous Substances Act controlled transportation of dangerous chemicals in tankers only.

"That's one of the major problems with the Act," Mr. Erasmus said. "Normal freight do not have to conform to regulations. They can a dozen different hazardous chemicals in one load," Mr. Erasmus said.

The other problem was that the Act fell under the Health Department instead of the Department of Transport.

"The Department of Health is not really concerned about what vehicles are carrying on the roads and anyway it doesn't have the infrastructure to police them," Mr. Erasmus said.

Apart from complying with vehicle standards, all that operators are required to do is to display stickers indicating what substance is being carried and stickers with codes indicating how to deal with the substance in case of an accident.

The driver is not required to have any specialist training in dealing with chemicals or to be required to be trained in how to deal with spillage.

However, there is a centre in Johannesburg run by Mr. Grahame Waine, which trains drivers. Mr. Waine said most of the big companies send their drivers to do the course although they were not legally bound to.

"Accidents involving vehicles carrying hazardous substances happen nearly every day. The Hazardous Substances Act is nowhere near adequate as it does not apply to general cargo trucks carrying these substances," Mr. Waine said.

Dukakis prays for a miracle...
Rural black ‘potentially conservation’s greatest ally’

Parks ‘must provide benefits’

By Melanie Gosling

Conservationists have come to realise that the rural black is not simply a poacher and despoiler of the environment, but is potentially conservation’s greatest ally, Chief Mangosuthu Buthelezi, Chief Minister of KwaZulu, said at the official opening of the Endangered Wildlife Trust’s 15th anniversary symposium in Johannesburg last night.

In his address, which was read by kwaZulu’s Minister of Education and Culture, Dr Oscar Didimo, Chief Buthelezi acknowledged that their success or failure depended largely on the public support it received.

Conservation had enlisted considerable support in developed areas, but was “barely tolerated” in undeveloped areas.

In South Africa most game reserves, including the Kruger National Park, the Umfolozi and Hluhluwe reserves, were surrounded by impoverished rural communities.

“The rural poor living outside the boundaries of the game reserves exist in degrading poverty. Their population is increasing and the natural resources at their disposal are decreasing. Yet they live alongside what to them is a rich treasure house of materials like thatch, firewood, meat and building materials,” Chief Buthelezi said.

Animals which escaped from the reserve often destroyed crops or cattle. It was not surprising therefore to find that the surrounding communities resented game reserves.

“For people to appreciate wildlife and game reserves they will need to receive some benefit from them. The benefits must be demonstrated rather than preached,” he said.

Benefits included access to craftwork material and medicinal plants. A percentage of the revenue earned from the reserve could be used to provide a social service like a classroom or clinic.

Chief Buthelezi said the success of a game reserve’s neighbour relations depended on the ability of reserve officials to:

- Want the project to succeed.
- Relate to neighbours as human beings.
- Develop programmes relevant to local needs without sacrificing conservation principles.
- Communicate these principles to the local community.

[Additional content not visible in the image]
Old tribal laws were 'strict'

By Melanie Gosling

Wildlife conservation was not imported to Africa by colonialism but existed for centuries among indigenous African people before the first Europeans arrived on the continent, Chief Victor Suping told the Endangered Wildlife Trust's symposium in Johannesburg yesterday.

Because the Batswana people of what is now Botswana and Botswana had had to depend on nature for their survival, they had lived in total harmony with the environment, he said.

**TABOOS**

They had evolved a highly sophisticated conservation ethic which was expressed in taboos, totem animals, customs and laws which were passed on from generation to generation by word of mouth.

The laws were strict and complex but in most cases were rational and based on sound principles.

"Wanton destruction never occurred in our traditional society."

Chief Suping said the problem of tribal poaching in Africa had become a problem only after tribal laws were replaced by colonial concepts and laws.

"By neglecting to take long-established conservation ethics into account, colonial conservation concepts and laws never gained the support of the tribal people.

"Consequently the destruction of Africa's wildlife continues."

It was imperative to re-institute a conservation ethic among the indigenous people of Africa and to re-awaken an aesthetic appreciation of wildlife in their culture.

"In particular we must make them aware that historically their conservation ethics were at least equal to, and perhaps more advanced, than those of Western cultures," Chief Suping added.
By Melanie Gosling

Rural blacks usually had no alternative but to degrade the environment to survive, Chief Justice Nxumalo of kwaZulu’s Bureau of Natural Resources said at an Endangered Wildlife Trust symposium in Johannesnburg yesterday.

Speaking on the theme “National Parks and Neighbours”, Chief Nxumalo said when rural people damaged the environment it was not out of malice but to obtain the materials they needed to exist in their daily lives.

He said the Government had never taken the trouble to explain to rural people why conservation was important.

“All my people know of conservation is what they see happening in game reserves. They tell me the people in the game reserves care more about animals than about black people.

“When they see conservation officials, they think about being arrested.”

Chief Nxumalo said to win local support for conservation a new approach, which took local needs and aspirations into account, was necessary.

Mr Tony Conway, warden of the Umfolozi and Hluhluwe Game Reserves, said the Natal Parks Board was fully aware of the crisis developing outside conserved areas regarding the decline of natural resources which rural people needed daily.

He said it was the board's policy to try to address the people’s needs, without compromising the main objective of conservation, by allowing limited use of natural resources from the game reserves.

At Mkuze Game Reserve, people had been allowed to cut thatch and reeds in the reserve and between 1983 and 1986 had bought 17 000 kg of meat from culled animals at very low prices.

At Ndumu Game Reserve, local people had bought 13 000 kg of culled meat and at Umfolozi Game Reserve they had been allowed to cut 222 tons of thatch grass in the past four years.
First floods... now a wind whipping

Fierce storm lashes Free State town

Staff Reporters

A storm caused serious damage and injured at least one person in Koffiefontein in the Free State this week.

‘Strong winds, rain and hail lashed the town.

It lifted the roofs of about 26 houses in De Beers, a coloured suburb, as well as those of a shop and several houses in the town.

Town Clerk Mr Dan le Roux said the home of the mayor, Mr Flip Tolken, was one of those hit.

Yesterday Mr Tolken was still assessing the damage.

Mr le Roux said the 26 houses damaged were newly constructed. People who lost their homes in the recent floods were to move into them soon.

Clearing-up operations have been launched in the town because many trees have been uprooted.

Tents have been brought in from neighbouring towns to house the homeless, many of whom lost their former tent homes in the storm.

A police spokesman confirmed said one person was hurt when a stone fell on his foot in the African township of Dithlake.

“The roofs of houses and a shop were torn off during the storm,” he said. “The most damage was caused by the wind, accompanied by rain and hail.”

Mrs Therese van Schalkwyk said she had never seen anything like it. “You could not see your hands in front of your face.”

Electricity and telephone links in the town were cut.

Mrs Van Schalkwyk said some of the tents in which people in the coloured area of De Beers had been staying since the floods earlier in the year, had been swept away.

In the Bullfontein area, trees were uprooted and there were power failures at Hennenman and in the Winburg regions.

Jagersfontein, Venterstad and Warden had 20 mm of rain. Hail and 25 mm of rain fell at Hantam in the Colesberg district.

Meanwhile, hail the size of hens eggs caused considerable damage in Philispontown, also in the Free State, on Monday night.

About a quarter of the fruit and rose trees in the district were stripped and damage amounting to thousands of rands was caused.

Window panes were broken and there was also considerable damage to cars.

A number of elderly people in a home for the aged watched the roofs of their houses cave in under the weight of the hail and rain.

Many houses were flooded.
Urgent Call for Action: Wild Coast Plunder

By Jane Connghan

Trawlers' referrals as cruelly have been so far.

By commercial operators.

Local forage for food from the sea, but their livelihood is being threatened.

In order to maintain a balance of species, the commission recommends that trawlers operate at no more than 15% of their capacity.
Dam levels up 40 pc on last year

The state of dams falling under the Rand Water Board (RWB) has improved by about 40 percent since November last year.

The RWB yesterday reported that the Vaal Dam was 100.8 percent full while the Sterkfontein Dam was 82.5 percent full. It said the Bloemhof Dam was 99.8 percent full and the Woodstock Dam was at 67.4 percent.

The total content of all dams was averaged at 89.3 percent last week and 90.1 percent this week (compared with 40.3 percent on November 7 1987).

The average rainfall for last month was 77.2 mm.
Clamour for crackdown on rhino horn racketeers

JUNE BEARZI

THE Government has been called on to take urgent action to crush the “carnage cartels” which have made vast sums by annihilating Africa's wildlife and to investigate alleged Defence Force involvement in the scandal.

The calls from top conservationists, Progressive Federal Party politicians and a shocked public are a sequel to the ongoing Saturday Star expose of the wholesale slaughter of rhino and elephant in black African states and the use of South Africa to funnel the contraband to black markets overseas.

In further developments this week, the Saturday Star was told that a Donika Daniel Massa had been arrested in Zambia when a truck registered in the name of a Johannesburg man had fallen off the ferry which crosses the Zambezi into Botswana. Customs officials said that when they had examined a broken axle on the truck, they had found a concealed compartment containing 29,000 Mandrax tablets and rhino horn.

Mr Rupert Lorimer, PFP MP for Bryanston and the party's spokesman on environmental affairs, said he had asked for the military board of inquiry appointed by the Minister of Defence, General Magnus Malan, to probe claims of illegal ivory dealings by the SADF to extend its scope to rhino horn smuggling.

This follows the indictment in the United States of two SADF members, Major Marius Meiring and Sergeant-Major Waldemar Schutte, on charges of smuggling rhino horn, the skins of other endangered animals and AK-47 rifles into the US.

© TO PAGE 2
Water crisis afflicts Graafwater as boreholes give up the ghost

CAPE TOWN — The small Sandveld town of Graafwater may soon have to change its name — to Graafsonderwater perhaps?

Cape provincial officials, as well as members of the Department of Water Affairs, are expected to discuss the town’s water problems today as locals prepare for the possibility of the last four boreholes giving up the ghost in the near future.

As the town — situated between Clanwilliam and Lambert’s Bay — blistered in temperatures of 42 deg C and higher at the weekend, tipplers in the local hotel faced the bleak prospect of having to switch their mixers from water.

"We’re worried," said Mr Hennie Germishuys, the town clerk, yesterday.

"There is just drinking water left," he said.

Graafwater last faced similar problems "four to five years ago" but a new borehole managed to carry the town through the dry summer months after that.

Then blistering heat this year drained the town’s two dams and water restrictions were implemented.

But yesterday Mr Germishuys said three of the town’s boreholes could no longer be operated.

Earlier a spokesman for his office said pressure in the pipes was so low that showers and flush toilets were unable to work properly.

The wife of the hotel owner was not too pessimistic.

There was still drinking water available and this could be used to make ice to cool fevered and worried brows, she said.

And the odd drink?

"Of course!"
THE obscure dusty track branching from the main road from Louis Trichardt to Nkhelele at Ha-Mafula is hidden in a corner.

Beyond the turn-off are two large water reservoirs. Beyond them the twisting track winds itself straight into the evergreen foliage.

The trees become bigger with a small river flowing with clear water. Birds of a feather, and of different feathers, sing along in the trees.

This is Mandadzi, literally translated to mean the power of lightning. There is nothing awesome or fearful about the place — the kind of fear associated with lightning, that is. Instead this is a picnic spot with a difference.

**Unique**

Situated at Ha-Mafula, about 25km from Louis Trichardt on the Pisaanghoek road, Mandadzi is a unique resort — complete with its own natural waterfalls. It is also unique in that it is the only such place owned and controlled by a black man in this country.

Mr Gidimani Ramabulana (33) is an imaginative man. A former security law detainee and son of a controversial homeland politician, Mr Ramabulana said Mandadzi's unspoiled natural outlook is a chance for the young of today to experience the spirit of Africa as it was before colonialism.

"Some whites have told me to build this and that here but I said no. It is our place. It is a place one can come to and just relax in nature as it is," he said.

Unspoiled and natural relaxation is indeed the name of the place. The only "modern" trappings are the rotating boma stands. Even these try to remain antique. No charcoal is allowed. Only local wood used.

Mandadzi also has the highest waterfall in the Northern Transvaal. Standing underneath the falls, the power of water as it splashes down explains the name — there is power in that water.

The area was recently opened to the public although finishing touches are still being made. When complete, a donkey cart service from the gates will come into operation. A minimum fee is charged while food and refreshments are served — at a price. The spot is ideally situated for travellers from far with a cheap motel nearby which provides ample accommodation.

**Donkey cart service will ferry visitors**
Southwest will blow...
Sand storms lash Cape Flats

By ANDRE KOOPMAN

Sand was yesterday piled up to the windows of homes in Khayelitsha and sandbanks blocked off doorways as the howling south-easter continued its blistering assault on the Peninsula for the ninth consecutive day.

Gale-force winds gusting from 55 up to 70 knots flattened at least four trees, slowed shipping in the harbour and caused the closure of some roads as driving wind-blasts dumped bants of sand on roads and reduced visibility to less than three metres.

A section of Baden Powell Drive, stretching from Sunnyside to beyond Strandfontein, was closed off, as was Morgenster Road, a main thoroughfare into Mitchells Plain. Spine Road, which runs into Khayelitsha, was also closed.

The weather office at D.F. Malan has forecast that the wind will continue blowing today but will start moderating and should "almost be over" by tomorrow.

A spokesman said it was unusual for the wind to blow so strongly for a stretch of nine days. He attributed the weather to an "intense high pressure cell south-south-west of Cape Town, coupled with a low pressure cell off the coast of Namibia, which caused a very steep pressure gradient".

Residents of the new upmarket Khayelitsha development of Kulani Park found that it was painful to stay outside.

In Zodiac Street sand piled up above window level of many homes. Others could not be entered because of sand piled up high against the doors.

Mrs Xoliswa Masikleho showed the Cape Times how her kitchen door had buckled under the weight of the sand.

Sand was also piled right up to the top of her kitchen window and was seeping through other windows and doors.

Mrs Masikleho and another resident, Mrs Mavis Tshwela, said the situation had been worsened by the fact that an engineering company had cleared a vast tract of land next to the township.
wind would die down and change to north-west by Thursday.

In Khayelitsha and Mitchell's Plain, sand blocked drains and made roads impassable.

In the shack settlements of Site B, Site C and Green Point in Khayelitsha, roofs were blown off and families were left homeless.

At Kulani Park, sand piled up to window level.

A school teacher, Miss Pamela Ncapha, said the wind was so strong that it blew sand into her house even with the windows closed.

"You can feel the sand particles hitting you inside the house. It's as if you are outside. In the mornings you cannot open the doors because of the sand."

Khayelitsha faced an "emergency situation", said Mr Graham Lawrence, acting chief executive officer of the Lindeluthu West Town Committee.

Urgent meeting

The committee had its first meeting last night and discussed the wind damage as an "urgent matter", he said.

"We approached the Provincial Administration for help and they responded yesterday," he added.

"They provided earthmoving equipment which we supplemented with machinery hired at short notice from private contractors."

Today discussions would be held with the Defence Forces, he said.

"We will need manpower and equipment to help individual householders."

The wind and sand had caused "a fair amount of disruption", particularly in the south, where land being developed by the Provincial Administration had been cleared of vegetation.

"Fortunately, the wind has abated somewhat this morning," he added.

The major concern was restoring access, he said. "We had severe congestion on main routes in," he said.

However, no loss of life had been reported and most of the damage was caused by "sand penetration" rather than directly by the wind.

The City Council's cleaning branch has been hard at work since the weekend, according to city engineer Mr Des Riley.

"They're already out there and can be supplemented if necessary."

In Mitchell's Plain things were slightly better.

"We've had good co-operation from contractors," Mr Riley said. "They've helped us to clean up roads and private property."

Extra men and heavy machinery "in significant numbers" were drafted in at the weekend to cope with masses of sand blocking roads and piled up alarmingly against walls. • See page 17.
PRETORIA — A board of inquiry convened by the Defence Force to investigate alleged ivory smuggling from Angola by its members has concluded that there was no evidence upon which disciplinary action against personnel could be taken.

The allegations were made by Mr Van Note in a report submitted to the US Congress. The story received wide coverage in the media, here and overseas.

"The board found that there was no evidence to prove that the SADF was responsible for or involved in the killing of elephants," a statement by the public relations department at SADF Headquarters said yesterday.

"However, small quantities of ivory, captured by Unita from poachers and others in Angola, were transported by the Defence Force on behalf of Unita over an 18-month period from mid-1978 to the end of 1979.

"The board also found that the amount of ivory transported over this 18-month period was less than 0.25% of the amount which Mr Van Note claimed.

"This practice was stopped by the Defence Force and Unita at the end of 1979."

The board of inquiry was convened a "few weeks ago" and handed its report to the chief of the SADF, General Jannie Geldenhuys, for forwarding to the Minister of Defence, General Magnus Malan.

The statement said the board, in the course of its investigations, travelled thousands of kilometres and interviewed "scores of witnesses" both in the SADF and civilians, including leading conservationists, wildlife experts and elephant specialists in an effort to prove or disprove Mr Van Note's allegations.

The statement said to date Mr Van Note has consistently refused to reveal his sources of information.

"Furthermore, a study of court records in Namibia showed that nine members of the Defence Force were convicted and sentenced for illegal possession of ivory during the period 1979 to date," the statement said.

"The board also found that the figures given for the elephant population in Angola in Mr Van Note's report could not be substantiated. Leading conservationists placed the elephant population at no more than 12,000. In addition, they doubted the logistic probability for the world market to have absorbed the quantity of ivory implicit in the report and to have moved it through the alleged channels described in the report." — Sapa
The pollution stakes shift: Nukes are OK but coal's out

Conservationists are now more troubled by the menace of a globe poisoned to death by coal pollution than nuclear reactors.

TIM BRADFORD reports

The "greenhouse effect" is an issue that has smoldered for decades and flared up this year with the drought in the American corn belt.

A solemn conference of scientists and politicians in Toronto in June conceded that nuclear power is a good thing compared with power from fossil fuels because it does not pollute the environment with carbon dioxide or sulphur.

But the same conference nearly deadlocked over whether there was anything more to be said in favour of nuclear power, which has lost credibility due to problems related to nuclear safety, radioactive waste and nuclear weapons proliferation.

The conservation lobby has long argued that a nuclear power station is inefficient, expensive, requires a lot of energy to build and maintain and hardly ever meets its design performance. It is difficult and expensive to dismantle and produces several hundred cubic metres of radioactive waste a year, which nobody knows what to do with.

How to save the world from death by overheating?

Think of that carbon dioxide sitting there, like the thin clear glass of a greenhouse, letting the short wavelength light of the sun through and trapping the long wavelengths of heat as it bounces back. Think of it becoming thicker every year, so that in the next 50 years the mean temperature of the globe could rise by as much as four degrees centigrade.

Four degrees centigrade is about the difference between the global temperature now and the temperature at the depth of the last Ice Age. Given 20,000 years or so, life on Earth could adjust to this increase. We only have about 50 years.

The melting of the polar ice caps could push the sea levels up by two metres. This is bad news for people living at sea level — Londoners, Venetians and New Yorkers and dwellers in the deltas of the Nile, Ganges and Yangtse.

Droughts could become more frequent; so could storms. Plants which flourish at one temperature don't take kindly to another.

In the face of such a future, the Toronto conference set a goal for the world; it should reduce carbon dioxide emissions into the atmosphere by 20 percent. It can do this in a number of ways. It can use improved technologies to get more energy out of the same quantity of coal or oil. It can also try other ways of raising energy.

But this is only part of the solution. Fossil fuel combustion, in industry and cars as well as in power stations, is responsible for half of the projected warming. Some of the threat comes from the steady rise in other gases: the nitrous oxides from agricultural run-off are implicated in acid rain and in global warming; the chloro-fluorocarbons that destroy the ozone layer are 10,000 times more efficient than carbon at trapping heat.

— The Guardian, London
STORMS and hail damage have cost the insurance industry almost R1-billion since 1987 — and experts predict that things will get worse.

Deforestation, the spread of man and cyclical temperature changes are all factors which make the future look bleak. Experts believe SA is in for more floods, resulting in loss of life, destruction and huge financial costs.

The Natal floods in September last year cost the industry more than R600-million and brought the problem to the attention of the public.

Since 1979, only one year has passed when no losses were recorded because of storms and hail damage.

In the Pretoria-Witwatersrand-Vereeniging area, two afternoons caused R15-million damage to cars and R14.5-million to industrial and domestic buildings in one month.

After the Natal floods revisited, who bore the brunt of the loss, requested that the industry produce a more detailed risk profile so they could ascertain more correctly their risk and gauge the premium more accurately.

SA Insurance Association (SIA) special perils committee chairman Peter Evans says prospects are not good, and urgent action needs to be taken.

"Over the last 10 to 15 years suburbia has exploded. Whereas previously a storm would have hit open ground, it now hits suburbs and industrialised areas.

"These areas now have tarmacked roads and concrete pavements so water is not soaked up as it used to be. The deforestation in river catchment areas is a major problem because forest areas can absorb between 200mm and 300mm of rain per hour, but farming land can only soak up 20mm to 30mm."

The committee is looking at Durban and Pinetown.

We are superimposing the 50-year flood line on maps and aerial photographs to see which developed places could be hit during storms.

Well-known hydrologist Des Midgley is involved in the operation and will be advising us."

Mr Evans believes municipalities should have powers to discourage people from building below the flood line.

To minimise risks the committee will hold discussions with local authorities on water supply.

"If the water and electricity supply is cut off in the Durban area it can cost industry between R5-million and R10-million in lost production a day. We also need to find ways of stopping rivers from flooding developed areas by building dams and protecting the banks."

Mr Evans expects the survey to finish in mid-1988.

WASHINGTON. — Mr Craig Van Note, the American conservationist who told the US Congress that the SA military was helping smuggle massive quantities of ivory from southern Angola, has blasted the SADF's inquiry into the charges as a "whitewash".

He said his information had come directly from SA soldiers who had "witnessed" the illegal trade which he charged was being "coordinated" by Jose Lopes Ferreira, a former Portuguese colonist in Angola now living "outside Johannesburg".

He also raised new allegations that as elephant herds had been poached out, SA and Unita forces had turned their attention to black rhino. He claimed to have evidence that members of the SADF were machine-gunning the highly endangered species from helicopters.

SADF Major Marius Meiring, his wife Pat and Sergeant-Major Waldemar Schutte were last month indicted by a Connecticut grand jury for smuggling rhino horn, leopard and cheetah skins and captured AK-47 rifles into the US.

In testimony to a congressional committee last July, Mr Van Note said that Unita had "ruthlessly liquidated perhaps 100 000 elephants" since 1976 and that the SADF had trucked or flown "most of the tusks" to warehouses at Rundu in the Caprivi Strip.

SADF denies charges

The SADF instituted a board of inquiry whose findings were sketched in a press release last Tuesday. The release made no mention of the alleged Rundu staging post. It said that the SADF had stopped transporting ivory for Unita after 1979.

The SADF also denied involvement in the killing of elephant, a charge Mr Van Note insisted was true. The press statement said that the Swiss-based convention on international trade in endangered species (Cites) "only came into existence in 1982". Mr Van Note said Cites went into effect, and was signed by SA, in 1970.

"Who did they talk to?" Mr Van Note asked. "They did not talk to the inhabitants of eastern and southern Angola, who would verify the massacre, or to the pilots and truck drivers, or to the SA and Unita poachers. They did not interview Jose Lopes Ferreira. The recent indictment of two SADF officers was ignored."
KHAYELITSHA WALL ... Casual labourers were yesterday hired to stack a kilometre-long, double wall of straw bales along Spine Road, Khayelitsha, in a bid to stop the encroachment of thousands of tons of windswept sand from nearby construction sites.

Walls of straw

by CHARL DE VILLIERS

A DOUBLE bulwark of straw bales was yesterday placed between Spine Road in Khayelitsha and nearby bulldozed sandflats after a gale-force wind last week dumped thousands of tons of sand into houses and blocked roads.

The R330,000 project, launched last week by the Cape Provincial Administration, is aimed at containing shifting sand with a rampart of bales, irrigating construction sites and carpeting loose sand with straw.

"Construction work, combined with erosion, traffic and the settlement of people had undermined the effectiveness of earlier stabilisation with straw," Mr J W Theron, MEC for black affairs, said yesterday.

Vast tracts of bare, bulldozed duneland lie to the seaward of Khayelitsha and virtually in the direct path of the gale-force south-easterly winds which blow throughout the Cape summer.

Riebeeck-West farmer Mr Stooff Smuts yesterday said he had been contracted to deliver 15,000 bales of straw for the stabilisation of loose sand adjacent to the sprawling township.

By yesterday afternoon a team of 120 casual woman labourers had stacked 6,500 bales in a double line parallel to Spine Road, which had borne the brunt of last week’s forcible gales.

Windswept sand blocked off doorways and piled up to window height, spilling into many houses and making roads impassable to traffic.

Mr Theron said the reclamation project was aimed at stabilising sandy areas at Khayelitsha and the nearby newly-developed Lingilethu-West township.

Besides the "wall of straw" — consisting of bales packed three wide and four deep — engineers had proposed that other areas be irrigated and covered with straw to contain shifting sand, he added.
2 men in court over 184 tusks of ivory

By JIM FREEMAN

Two men appeared in the magistrate's court at Grootfontein in Namibia yesterday for allegedly smuggling 184 elephant tusks in a false compartment of a truck.

The two men, a Portuguese citizen and a Tswana, were remanded after being arrested at a roadblock at the town on Sunday.

Police spokesman Chief Inspector Kerie du Rand said the weight and value of the ivory had not yet been determined. The ivory would have to be sent to experts from the Namibian directorate of nature conservation for grading before a value could be established, he said.

Inspector Du Rand added that the ivory was on its way to South Africa from either Zambia, Botswana or Zimbabwe.

He said the police diamond and narcotics branch, which also dealt with ivory and rhino horn smuggling, had been tipped off at Katima Mulilo that a large consignment of tusks would be smuggled into Namibia.

Inspector Du Rand said the ivory had not been poached in Angola, nor had the SA Defence Force been implicated.

A nature conservation spokesman in Windhoek, Mr Jan Joubert, said Namibia was a smuggling conduit into South Africa. Its vast borders meant smugglers could enter easily, while border controls between South Africa, Botswana and Zimbabwe were far stricter.
Ivory haul in Namibia

POLICE in Namibia said yesterday they had intercepted a big shipment of ivory suspected of being on its way to SA.

They added men at a roadblock in the north of the country discovered 184 elephant tusks in the false compartment of a truck after they were tipped off that smugglers were heading south from the Caprivi Strip.

A spokesman said it was believed the ivory came from either Botswana or Zambia.

He added the ivory would have to be sent to Namibian Directorate of Nature Conservation experts for grading before a value could be established.

He said the police diamond and narcotics branch, which also deals with ivory and rhino horn smuggling, was on the lookout for the load as it headed south.

The spokesman stipulated the ivory had not been poached in Angola. Nor was the SADF involved.

The SADF admitted recently that its trucks had been used several years ago to transport ivory in Angola.

Elephants

Endangered Wildlife Trust director John Ledger said it appeared there was a massive network of ivory smuggling into SA.

He added it was regrettable that animals such as elephants and rhinos were being slaughtered for short-term gains by greedy people who lacked knowledge of how important these wild animals were.

184 elephant tusks seized in Namibia

"These animals are national treasures," he said.

Poachers also recently slaughtered some rare rhino in Swaziland for their horns, which are highly prized in the Middle East and Far East where it is believed they have aphrodisiacal powers. Rhino horns also bring high prices in the Persian Gulf where they are used as dagger handles.

Two Reef men appeared in Grootfontein Magistrate’s Court yesterday charged with dealing in and smuggling ivory. They were released on bail of R50 000 and R10 000.
Blame ‘silly’ planning for Khayelitsha’s sand

Staff Reporter

Poor site management and the over-hasty excavation of dunes at Khayelitsha have been blamed for forcing the Cape Provincial Administration’s costly sand stabilisation project in the township.

“It was very silly to leave such a huge area unstabilised and exposed to the wind,” Mr Pat Morant of the CSIR’s division of earth, marine and atmospheric science and technology said yesterday.

The R330,000 project to stabilise shifting sand with bales of straw started on Monday after wind-swept sand caused huge problems during last week’s south-easterly gales.

“Dunes should only have been flattened once the areas were needed for construction and the region should have been developed to the north instead of southwards, since the prevailing winds come from the south,” Mr Morant said.

A consulting engineer said straw dug into shifting sand was a cheap and simple method of stabilisation, but it was “irresponsible” to build homes in an area surrounded by unstabilised sand.

Despite numerous attempts, CPA engineers could not be reached for comment yesterday.
## GOVERNMENT NOTICES

**GOEWERMENSKENNISGEWINGS**

**ADMINISTRATION: VOLKRAAD**

DEPARTEMENT VAN LANDBOU EN WATERVOORSIENING

No. R. 2525  
15 December 1988

**WET OP BEWARING VAN LANDBOUHULPBRONNE,**  
1983 (WET 43 VAN 1983)

**VLOEDHULPSKEMA VIR VLOEDRAMPGEBIEDE.**  
WYSIGING

1. Andre Isak van Niekerk, Adjunct-minister van Landbou, handelende namens die Minister van Landbou en Watervorsiening, wysig hiermee kragtens die bevoegdheid my verleen by artikel 8, gelee met artikel 9, van die Wet op Bewaring van Landbouhulpbronne, 1983 (Wet 43 van 1983), die Tabel van die Vloedhulpskema vir Vloedrampgebiede afgekondig by Goewermentskennisgewing R. 47 van 15 Januarie 1988, soos in die Bylae uiteengesit.

A. I. VAN NIEKERK,  
Adjunct-minister van Landbou.

**BYLAE**

Die volgende inskrywing word hierby aan die einde van die Tabel, in die kolomme soos aangedui ingevoeg:

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<th>Date of inception</th>
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<td>2 and 3 April 1988</td>
<td>1 October 1988</td>
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<td>7. Die landboudistrik Calvinia</td>
<td>2 en 3 April 1988</td>
<td>1 Oktober 1988**</td>
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139—A  

**11617—1**
US probe names SA army men as rhino-horn smugglers

An American probe into wild-life smuggling names three South Africans ... and rebukes former Rhodesian Prime Minister Ian Smith.

EDDIE KOCH reports

generated wildlife trophies and AK-47 rifles into the US.

A formal request has been made for the extradition of Major Marius Meiring, his wife Pat and Sergeant Major Waldfried Schutte to stand trial in the US.

A press release from the US State Department says: "A detailed affidavit filed ... by the principal undercover agent, Special Agent Richard Moulton of the Fish and Wildlife Service, disclosed that the horns involved in this case were apparently obtained from rhinos killed by South African army troops in Angola. These horns — together with the communist bloc's machineguns and ammunition which were captured by South African troops in Angola — were sold on the black market by major Meiring and his wife."

"Sergeant Major Schutte illegally smuggled a rhino horn into the United States in August while he was in the Chicago area to participate in a sky-diving event as part of the SADF parachuting team ... In addition to the rhino horn ... the undercover agents purchased a total of six Communist bloc AK-47 machine guns."

"Reports received by the Fish and Wildlife Service during the past year indicate that members of the SADF, duty in Angola and Namibia have been actively engaged in the killing and smuggling of wildlife species — including rhinos and elephants — for personal gain and profit."

World-wide trade in rhino horns, which can be sold on the black market for the same price as gold, has been blamed for reducing Africa's black rhino herds from some 65,000 in 1970 to less than 4,000 in 1988. Dr Das Herbst, representative for South Africa's Defence Ministry, told the 'Weekly Mail' he could not comment on the reports because they were being investigated by an internal board of inquiry.

The US state attorney's charge in the wake of claims that UN officials have financed military aid from South Africa by massacring thou-sands of elephants and transporting their tusks to South Africa, from where they are distributed by an illicit ivory ring. The claims, made in evidence to the US Congress by conservationist Craig van Note, have been denied by the SADF as well as Unita leader Jonas Savimbi.

This week the SADF announced that an internal board of inquiry had investigated Van Note's claims and found no evidence to justify action being taken against its members for alleged involvement in the smuggling of ivory from Angola.

"The board found that there was no evidence to prove that the Defence Force was responsible for or involved in the killing of elephants," said a statement from SADF headquarters in Pretoria.

"However, small quantities of ivory, captured by Unita from poachers and others in Angola, were transported by the Defence Force on behalf of Unita over an 18-month period from mid-1978 to the end of 1979 ... The board found that the amount of ivory transported over this period was less than 0.25 percent of the amount which Mr Van Note claimed."

The statement said the board had travelled thousands of kilometres and interviewed scores of witnesses during its probe into Van Note's claims.

"One conservationist said in evidence before the board that 'unless one has access to information not available ... there is no indication that the level of elephant poaching he postulates for Angola and Mozambique has in fact occurred'. ..."
Charred bodies found after fire destroys 5 shacks

Six killed in Vaal blaze

By Montshiwa Moroke

Memories of the piercing cries of a four-year-old child and mangled corrugated iron are all that remain following a fire which swept through five shacks and left six people dead, including three children, in Evaton, Vereeniging, at the weekend.

Sheer determination and the will to live saved the lives of two elderly women.

The mysterious fire was the second at 1536 Union Road within two weeks.

Neighbours were still shaken yesterday as they recounted the deadly blaze which took place at about 2am on Saturday.

They said after the fire had gutted the five shacks, only the charred remains of the dead could be recovered. The bodies of two young women who had been sleeping on a bed and three children on the floor were found huddled together.

The charred body of a Mr Zulu was found elsewhere in the burnt-out dwellings.

Mrs Lydia Tshabalala and Mrs Queen Tshoaela, who were trapped in the same shack in which the five died, miraculously escaped death and bore no visible injuries.

Mrs Lydia Tshabalala, who was rescued by neighbours, says she is lucky to be alive.

after they were treated at the Sebokeng Hospital.

The names of the six who died were given by neighbours as Mr Zulu, Ms Virginia Tshoaela (23), Thuliso Tshoaela (6), Pule Tshoaela (5) and Dikeledi Tshoaela (4). Mr Mantho Moloi (19), who was an overnight visitor, also died in the blaze.

One of the survivors, Mrs Lydia Tshabalala, who is in her fifties, said she was woken by screams from people outside alerting them to the raging fire.

"Eight of us were fast asleep in the fourth house, oblivious of the deadly fire. When we woke up we ran this way and that trying to get out. In the darkness we managed to find the door, but the key was nowhere to be found.

"The flames were spreading from house next door. The flames were fierce and we were absolutely terrified."

"Some of the men outside managed to make an opening at the bottom of the shack. We squeezed and pushed our heads outside and the men managed to drag us out," Mrs Tshabalala said.

She said the fire had apparently started at shack 36, where the occupants were away at the time, and rapidly spread through the row of shacks.

Another witness, Mr Queen Qubulu, said the occupants of the fifth shack were saved by men who chopped the corrugated iron. Mr Willie Mzabuku, who managed to escape, rescued his wife and six children.

"We heard the cries of Dikeledi who was screaming 'mama, mama' inside the shack apparently trying to find a way out. The screams faded moments later as the flames devoured the shack."

"By the time the fire brigade arrived it was too late," said Mr Qubulu.
Hundreds free from floods

Own Correspondent and Sapa

DURBAN. — Hundreds of families were left homeless when floods lashed Natal at the Christmas weekend, causing damage amounting to millions of rands.

The weather office warned hard-hit residents that more rain was expected overnight.

A 22-year-old man, Mr Pradip Kumar Seewper-singh, drowned when his car was swept away while he was crossing the Umbilo River near Verulam.

A weather spokesman said Durban, where 89.3mm of rain fell in 20 minutes — was worst hit.

Homes were flooded and more than 20 shops were damaged, with some owners reporting damage to goods between R50,000 and R100,000.

Most of Natal was in darkness on Christmas Eve after a storm blew down power lines. Lightning caused blackouts in other areas, including Chatsworth, Demain, KwaMashu, Adams Mission and Hillcrest.

In the Marlboro area businesses were destroyed, trees uprooted and boats and caravans lifted into the air and flung hundreds of metres by the tornado-like storm on Christmas Day.

An unidentified man was struck by flying debris at Albert Falls and was later admitted to hospital in Northdale with back injuries.

At Midmar a visitor, Mr James Field of Modderfontein, was injured when a caravon blew over and fell on top of him. The gale-force wind, accompanied by heavy rain and hail, whipped away tents and blew over caravans.

Disaster fund

"We were terrified. We were inside our caravan and were hanging on for dear life because it was rocking so hard," said one camper. "We could see the storm through the windows and it was incredible to see boats go flying past us through the air."

The Albert Falls Yacht Club building was also demolished.

In Howick and Tweedie huge trees were blown down, power lines were disrupted and the roof of a shopping centre was ripped off.

The Chambers of Commerce of Natal and KwaZulu, the Natal Red Cross and the KwaZulu Government Welfare Department will hold today to plan a relief fund for families left destitute by the floods.

Reports of hail and wind damage were also received from Umlazi.

People had to flee their homes in Umlazi when the river rose dramatically within hours on Saturday night.

The mayor of Umlazi, Mr Patrick Zulu, said 50 houses were destroyed by the flood. In some of the houses furniture and Christmas trees were washed away, while in others water ran six metres deep and owners did not sleep the whole night.

Hundreds of families in Chatsworth and Isipingo spent their Christmas Day mopping up. Many homes were without piped water most of the day. In Lotus Park, Isipingo, about five families had to abandoned their homes when the foundations were exposed.

In Umbilo homes were also flooded.

A spokesman for Eskom said power went off when the only area still without electricity yesterday.

"On Saturday night, after Durban, Cape St Lucia had the most rain — 65mm — while Richards Bay had 100mm, Mt. Umfolozi 85mm, KwaZulu 150mm, Port Shepstone 125mm and Makhini 62mm."

Fast-bowling find rips through WP batsmen

By MICHAEL OWEN-SMITH

THE contract wrangles and injury that have prevented Sylvester Colman from playing more than one Cup match for Northern Transvaal the past two seasons may not be news for his new province.

But it has helped South Africa earn a new strike bowling prospect.

The 24-year-old Northern Transvaal fast bowler Fanie de Villiers returned career-best figures of six for 47 to Western Province at Newlands on Saturday to put his side firmly in control of their Currie Cup match.

At the close of the first day New-

erns had six bonus points to Western Province's two and were also only by only 32 runs on the first innings with nine second-innings wickets.

This was largely due to the bat of de Villiers and an unbroken partnership of 127 between Mandy Yashar and his captain, who scored 55 and 42 runs.

Apart from a superb innings from Peter Kirsten and a useful contribution from Eric Simons, who out of partners, was not very fistic for the home side.

But, to get back to Petrus Snyders, de Villiers, or "Vingine Fanie" as he is familiarly known.

He has now taken 14 wickets in the Currie Cup this season and, a Springbok team to be chosen right now, his claims would be stronger than ever.

Fished players such as Western Province's Johnny Rook and Stephen Ferries and Free State's Allan Gis and Corrie van Zyl.

De Villiers is in only his second season for the Northern Transvaal side and one wonders whether he would have had that chance had Clarke been regularly available.

He had previously only twice taken five wickets in an innings and was in the less demanding B section. And this is the opportunity that he has restored Western Province to Newlands in less than a year.

It has been a remarkable success story for the Pretoria Teachers' Col-
Floods ravage much of Natal

DURBAN — Flood-ravaged Natal last night braced itself for more damage as the Weather Bureau issued special warnings of more rain.

Mopping-up operations continued yesterday after violent storms lashed the province at the weekend to cause millions of rand's worth of damage and leave hundreds of families homeless.

Durban was one of areas worst hit with the Louis Botha weather office recording 69.9mm of rain in 30 minutes.

Reports of hail and wind damage were also received from northern Natal.

Umlazi mayor Patrick Zulu estimated damage to property in the town at almost R180 000.

He said more than 50 houses were wrecked by Christmas Eve floods that left hundreds homeless and roads badly damaged.

KwaMashu mayor Vasinini Mambbo said more than 20 houses had been destroyed near the river.

A Yerulian family of four was killed in a head-on crash on the old North Coast Road near Tongaat on Sunday afternoon. Police identified them as Ashwin Maharaj, 35, his wife, Anita, 25, and two

relatives, Anoopa Maharaj, 25, and her sister, Usana Maharaj, 22.

Heavy rains also caused bathing to be banned at Amanzimtoti yesterday because of dirty water.

More than 20 shops in Grey Street, Field Street and in Commercial Road in Durban were damaged.

Shop owners reported damage to their goods from R50 000 to R80 000. Many spent most of Christmas Day clearing out water and moving damaged stocks.

Others in Field Street said the gutter could not hold water pushing down the road and it flowed under their doors.

Houses all over the Durban area were flooded.

The Bellair home of Cornelius van der Westhuizen and his wife, Hanmetjie, was flooded and their two-week-old swimming bath filled with sand when water ran through their property.

Hundreds of families in Chatsworth and Isipingo spent Christmas Day mopping up after a downpour flooded homes, blocked roads and left many people without piped water.

Southern Durban Indian Local Affairs

Natal mops up after widespread floods

Committee member Ramcharitar Pandey said yesterday he visited flooded areas of Chatsworth on Christmas Day to help families whose homes were flooded.

Parts of Kharwastan and Silverglan were also without piped water for almost all of Sunday after mains burst on Saturday night.

In Silverglan, Riversdale and Parkside roads were closed after portions were washed away. Telephone poles were also knocked over.

In Chatsworth's Unit 5, scores of homes were knee-deep in water. At Lotus Park, Isipingo, about five families abandoned their homes when foundations were exposed. They spent the night with neighbours, friends and relatives.

In Eiland Road, a retaining wall collapsed and the road was partially

blocked with rubble and plants from a garden.

In Umhlungs, some homes were flooded and part of Campbell Drive subsided after being undermined by rain water. More than 100mm were recorded within two hours.

An Estom spokesman said Mphophomeni was the only area still without electricity yesterday after a storm on Saturday afternoon.

He said men had worked throughout the night to restore electricity to Gronick, Dalton and Seven Oaks.

A Sats spokesman said there had been no major problems to its service nor delays as a result of the rain.
Millions of rands lost as deluge lashes Durban

The Argus Correspondent

DURBAN. — It was a black Christmas weekend for thousands of Durban residents who lost millions in Saturday night's deluge. At Louis Botha airport 69.9mm was recorded.

One man lost his life when his car was washed off a north coast bridge and his body has not yet been recovered.

A house in Wren Road, Yellowwood Park, burnt down while the family were helping to pump water out of a neighbour's home.

At Clairwood a factory went up in flames while in Chatsworth a panelbeating business was flooded.

The fire brigade had 80 calls for help on Christmas Eve and nobody had any sleep.

More than 15 accidents were reported in the Durban area, leaving at least 30 people injured and about 20 vehicles damaged.

Thousands of residents in various areas had a "cold" Christmas when electricity supplies were disrupted by vicious lightning strikes.

Police said a Verulam farmer, Mr Pradeep Kumar Ponnarajan, was returning home from a Christmas party when his car plunged into the swollen Oxford River in Verulam at 2am.

Helping hands

Police divers recovered Mr Ponnarajan's car early yesterday when the river had subsided, but there was no sign of his body.

Yesterday while some people observed Christmas, thousands more around the city were mopping up the rain water, digging away silt from their living rooms, while others lent a helping hand to gangs of workmen clearing away rubble to make roads passable.

Police were kept working throughout Saturday night and for most of yesterday.

Scores of motorists were stranded on the southern freeway where water levels reached three metres in some sections.

A deputy officer at the Durban-Central Fire Station said they were inundated with calls for help to pump water out of homes and salvage belongings.

Thousands of shack dwellers in Ntuzuma, Phoenix and Inanda suffered severe damage to their homes.

During the height of the storm, parts of Inanda were hit by a power failure.

The worst hit areas on Saturday night by the heavy downpour were Chatsworth where a number of roads were flooded and hundreds of homes suffered electricity blackouts and homes were damaged with a slick build up.

False alarms

At the height of the storm police went out to about 100 false alarms resulting from burglar alarms being triggered by the storm.

Chatsworth was one of the worst hit areas suffering flooded roads and power failures, while in KwaMashu streets were reduced to rivers and water levels rose to 0.5 metres.

Residents said certain roads in Umlazi, KwaMashu and Clermont were impassable.

Appeals have been broadcast on the radio to scores of homeowners in KwaMashu and Umlazi whose locked houses were flooded while they were away on holiday.

People had to flee their homes in Umlazi as the water level rose dramatically within hours on Saturday night.

The Mayor of Umlazi, Mr Patric Zulu, said 35 houses were badly damaged in Umlazi. In some of the houses furniture and food prepared for Christmas were washed away, while in others water ran six metres high.

Reports of flooding were received from Yellowwood Park, Durban North, central Durban, Clairwood and Morningside.

Lightning damage

According to an electricity department spokesman, there was no power in Demat, KwaMakhutha, areas south of Amanzimtoti, Adams Mission and Hillcrest. A spokesman said most of the damage was due to lightning.

A police spokesman said a multi-million rand townhouse development could be affected.

More rain is expected tonight, according to the Met Office spokesman who said that Durban was worst hit by the weekend downpour.

After Durban, Cape St Lucia had the most rain - 23.2mm while Richards Bay had 18.5mm; Pietermaritzburg 8.5mm; Kokstad 15.6mm; Port Shepstone 13.6mm and Makhathini 6.3mm on Saturday night.

MUD FALL: The foundations of this building were undermined in the deluge which hit Durban on Saturday.

OVERFLOW: Powerboaters clear up at the Midmar dam holiday resort after the weekend's heavy rains.
By Deborah Smith, Pretoria Bureau

The pollution climate in the eastern Transvaal highveld is among the worst in the southern hemisphere, according to a report released by the Council for Scientific and Industrial Research in Pretoria.

The research into the atmospheric pollution of the eastern Transvaal highveld, and its effects on inhabitants and on the environment, was initiated by the CSIR under contract by the Government.

FUTURE STRATEGIES

Research showed that the atmosphere was unfavourable for the dispersion of atmospheric pollutants, said Dr C W Louw, one of the authors.

The degree of pollution would have to be accepted and taken into account in future atmospheric pollution management strategies, he said.

Power stations, and to a lesser degree smaller industries and domestic combustion, released substantial amounts of air pollutants into the eastern Transvaal highveld atmosphere.

There was concern about pollutants that accumulated in the upper layers of the atmosphere because the trapped pollution was deposited as acid rain, which could have a detrimental effect on the environment, said Dr Louw.

The eastern portion of the Vaal Dam catchment area and the forests along the escarpment were particularly at risk.

Dr Louw said any effects on natural systems were likely to be masked partially by other environmental problems such as drought and an incomplete understanding of the processes of pollution damage.

Tests on schoolchildren had revealed an increased frequency of certain respiratory symptoms, though lung-function tests revealed no significant differences between exposed and unexposed children.

This indicated that control measures had succeeded in maintaining atmospheric pollution levels below the thresholds of risk to human health, he said.

Rainfall acidity had risen substantially and there were indications that the strongly acid soil of the eastern Transvaal, not under cultivation, might be affected by acid rain.

He said the consequences of acidification of the upland streams in the Sabi-Tzaneen area could not be predicted at present.

The foliar damage, apparently caused by atmospheric pollution, to pine plantations had been diagnosed and needed urgent evaluation.

Continued, well-planned and co-ordinated research was imperative.

This would enable experts to plan and implement effective control measures and to adapt conservation-management practices in order to minimise the impact of atmospheric pollution.
Families left homeless by tornado

Natal counts the cost of violent storm

Staff Reporters

Mopping-up operations continued in Natal today after violent storms that lashed the province over the Christmas weekend, causing damage estimated at millions of rand, leaving many families homeless and causing at least one death.

In Durban, the Louis Botha weather office recorded 69.8 mm of rain in 30 minutes on Christmas Day. The Weather Bureau in Pretoria reports that rain is still falling over most of Natal today.

In Maritzburg buildings were destroyed, trees uprooted and boats and caravans swaying hundreds of metres when a tornado-like storm ripped through the town on Christmas Day, injuring at least two people.

Reports of bad and wind damage have been received from northern Natal.

At Pietermaritzburg, south of Durban, five families had to abandon their homes after their houses were destroyed. At Umlazi, on the north coast, several homes had to be abandoned.

Mr Bobbie Sperreard of Durban spent Christmas Day on the banks of the Umzimkulu River while police searched for his son's body after his car had been washed away from a collapsing bridge.

No trace

A diver from Umlazi Protection Services could find no trace of Mr Sperreard. The strength of the current had knocked out all the car's windows and washed the seats loose.

At Natal Park Beach, Midmar Dam resident Mr James Reid of Neatho was rescued on Christmas Day when a carabout blew over and crashed on top of him.

The bodies of two men were found in a car blown over on a road near Pietermaritzburg.

No trace of Mr Sperreard could be found.

Hundreds of families in Pietermaritzburg and Umlazi spent Christmas Day mopping up.

The toll from the storms reached 16 people killed.

Black matric results show improvement

The results of the Black matriculation examinations, released at the weekend by the Department of Education and Training, showed a slight improvement over last year.

Of the candidates whose results have been released, 57.4 per cent (or 46,984 pupils) passed compared with 56.9 per cent last year.

Matri-culation exemption was obtained by 20.8 per cent of successful candidates.

The figures include the results of candidates in the six self-governing states.

Of the 52,000 pupils who wrote the exams, 54.7 per cent passed in 1987, the pass rate was 45.6 per cent.

Of those who passed, 27.3 per cent managed to obtain a university entrance.

The pass rate in Soweto schools also improved. Of the 4,608 candidates, 37.8 per cent passed, compared with 28 per cent in 1987.

Papenfus swop now under way

Pretoria Bureau 27/12/88

The exchange of South African, Cuban and Angolan prisoners of war was "already underway," according to a spokesman for the SA Defence Force in Pretoria today.

A Foreign Affairs spokesman confirmed that moves to exchange South African prisoners of war with Cuba and Angola, who have been held in Namibia, are proceeding on course.

Neither official could reveal at what stage the exchanges now stand.

Negotiations were not, he said, has been reported, "being protracted" because of the involvement of Angola and Cuba that might otherwise undermine the agreement.

According to the agreement signed in New York on November 1st, Angola and South Africa are to exchange all POWs. The spokesman said:

"One prisoner known to be due for repatriation is Lieutenant Donnino Roi de Almeida Vitora, who brought his Soviet MIG-21 fighter jet down in Namibia recently in an emergency landing.

"Private Papienuis (DM), from Gora, Pretoria, would be one "as soon as possible," said the Foreign Affairs spokesman, who pointed out that the agreement between the three countries was only signed last Thursday."

Murder suspect identified

Police have identified a suspect in connection with...
DURBAN. — The death toll following weekend floods in Natal rose to at least six as information began to come in from remote rural areas, SABC radio news reported yesterday.

In the Ndwevwe area near Verulam two children died when the house in which they were sleeping collapsed during a cloudburst. The victims are Lindani Hlongwa, 4, and Tozi Ngcobo, 8.

Six other people in the house escaped unhurt.

Three people in the Umbumbulu district on the South Coast drowned when their bakkie was washed off a causeway over the Obvane River. The bakkie, belonging to a Roman Catholic priest, the Rev C.J. Chiliza, was found a kilometre from the causeway. The bodies of his two companions have already been found, and police are still searching for Mr. Chiliza.

Mr. Chiliza and his companions had been to an outstation on Christmas Eve for a service late in the afternoon and were on their way back to the church at Umbumbulu for the Christmas midnight mass when the drownings occurred.

The first flood victim, Mr. Pradeepkumar Powana, who drowned when his bakkie was swept away when a bridge over the Umfolozi River near Verulam collapsed, has also not yet been found.

Meanwhile, insurance claims resulting from the Christmas weekend storms are already pouring in, with many more expected as holidaymakers return home and companies resume business next week.

Mutual & Federal general manager Mr. Theo Vels said claims had been lodged at their Durban branch and early estimates were that these would be more than R500,000.

Mr. Vels said he did not expect the storms to cost insurers the R400m the Natal floods had cost in 1987.

Federated General (FedGen) general manager Mr. John Towsey said they were expecting claims around R750,000, although it was still too early to assess the full extent of the damage.

SA Eagle general manager Mr. Jim McIntosh said between 40 and 50 claims were reported yesterday, although a spate were expected next week after the Christmas-New Year break ended.

He said it was difficult to gauge the extent of the damage as many homes were empty as owners were still on holiday. — Sapa and Own Correspondent
Recall death of 5
Weeping mourners

SOWETAN Thursday, December 29, 1988

APOTRER

REPORTER

SOWETAN
Eight fires in
W Cape mountains
Lightning on Tuesday and yest-
erday.

HUNDREDS of firefighters helped by air force helicopters are battling to contain eight fires caused by lightning in mountain ranges in the Western Cape.

Several orchards have been damaged in spite of the efforts of firefighters who fought throughout the night to protect the trees.

LIGHTNING

Mr Rudolf Andrag, regional director of forestry for the Department of Environment Affairs, said there were two fires in the Cedarberg near Clanwilliam, two in the mountains above Tulbagh, three above Franschoek and one above Riversdale.

The fires were caused by
Copters help fight fires in mountains

Staff Reporter

LIGHTNING sparked fires which late yesterday still raged in mountain ranges from Clanwilliam to Grabouw, prompting helicopter-assisted firefighting operations with hundreds of forestry workers and farm labourers.

The fires had consumed about 4,000 hectares of mainly mountain fynbos by late yesterday.

Palls of smoke towered above Tulbagh, Wolseley and Clanwilliam through to the Hottentots-Holland range between Franschoek and Grabouw, with flames at one stage threatening Saron, a mission settlement near Tulbagh.

Hundreds of firefighters fanned out below the mostly inaccessible blazes with two Ysterplaat-based Aloeoste helicopters airlifting men to try to prevent the blaze spreading.

Regional chief of Conservation, Forestry, Mr Rudolf Andrag ruled out immediate damage to life or property at Saron, saying sparse vegetation around the town would halt the flames.

An abating wind was improving firefighting prospects and an earlier threat to farmers and their citrus crops had been averted, he added.

The fires are burning in the Saron berg south-west of Tulbagh out of control; the Great Winterhoek Mountains north of Tulbagh in the higher peaks; the Mostert's Hoek Twins and Waalhoek area near Wolseley out of control in higher reaches; the Cedarberg above Algeria near Clanwilliam out of control and in the Hottentots-Holland mountains in the Franschoek, Grabouw, Stellenbosch areas in higher peaks.

Other fires which raged at Riversdale and Swellendam yesterday were brought under control, Mr Andrag said.

"Our biggest problem is manpower. It's a very widespread area and danger points constantly change," he said.

He ruled out the use of helicopter-borne water-buckets as "too dangerous for the pilots in the mountains".

Mr Andrag described the widespread lightning-caused fires as "a bit of an exception".

A spokesman for the Meteorological Bureau at D F Malan Airport said thunder and lightning occurred about twice a month in the south-western Cape at this time of year, and was "certainly nothing unusual".
Orchards threatened as seven fires rage on

By HENRY DU PLESSIS
Staff Reporter

AT least seven fires are still raging on Western Cape mountain ranges.

Mr Rudolf Andrag, regional director of forestry for the Department of Environment Affairs, said a fire above Riversdale was extinguished by rain in the area.

The fires were started by lightning on Tuesday and Wednesday.

Mr Andrag said that one of two fires in the Cedarberg range was under control but the other, south of the Algeria forest station, was still unchecked.

Three fires in the area of Tulbagh and Wolseley were still threatening orchards and plantations, but not farmhouses.

VELD BURNT
Fires were still burning above Franschhoek.

Tulbagh orchards were damaged when fire swept the Rooidezand mountains above Winterhoek, burning about 500 hectares of veld.

Apple, peach and plum orchards on three farms were damaged with two farms in the Winterhoek area bearing the brunt.

The fire started about midday on Wednesday on Panorama Farm and spread rapidly, fanned by a strong wind, said Mr Koos Theron of Erfdeel Farm.

Mr Theron said the fire was chased up the mountain by the wind at one stage, but the wind changed direction and the flames came racing down to the edge of his plum and peach orchards.

The first rows of trees closest to the fire were badly burnt and the next three to four rows were scorched.

PRUNED
The plum trees were young and ready to deliver their first full crop when the fire reached them.

Mr Theron believed, however, that if he pruned them well in the autumn they might recover.

According to a neighbour, a flare-up in the middle of one of the Winterhoek orchards spread both ways because of the fleshy wind.

The fire on Winterhoek also swept through a pine forest and, fuelled by the dry needles on the ground, severely scorched the trees.

The pine forest was still in danger late yesterday.

According to a source who did not want to be identified, this fire was seen by locals as the worst in 35 years.

An estimate of the damage was not possible at this stage, because the price of the fruit on the market was not yet known and farmers still had to assess what percentage of their crops they had lost.

At Montershoek, at the foot of Mitchell's Pass to Ceres and a distance above Bergvlei, a fire also burnt fiercely in the upper reaches of the mountain.

It seemed to be far away from cultivated lands, though it was fanned by a strong wind.

Picture, LEON MÜLLER, The Argus

out five fronts. The wind controlling the flames.