

CREDIT OPINION

27 May 2026

Update



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RATINGS

TCTA - Vaal River System (VRS)

Domicile	South Africa
Long Term Rating	Ba3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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TCTA - Vaal River System (VRS)

Update following outlook change to positive

Summary

The credit profile of TCTA - Vaal River System (VRS, the Project or the Issuer, Ba3/Aa3.za positive) is supported by: (1) an on-demand explicit guarantee from the Government of South Africa on specific debt instruments; (2) the project status as a wholly state-owned enterprise undertaking a water project of national importance on directive from the Minister of Water and Sanitation; (3) contractual undertaking of the National Department of Water and Sanitation (DWS) to ensure that TCTA is sufficiently funded to discharge all debt obligations and step in and meet TCTA-VRS's debt obligations in the event of the project's failure to perform or early termination; and (4) a tariff framework providing for full cost recovery to ensure project debt can be repaid, updated annually to account for changes in implementation costs, water demand, funding costs, inflation, regulatory environment, amongst others.

The credit profile also reflects the following challenges: (1) the lack of an explicit on-demand guarantee from the DWS or National Treasury except on specific debt instruments; (2) broader stress at South African state-owned enterprises, which may impact ability to support or cause the government to take a more selective approach to the provision of support; and (3) the Project is exposed to a degree of liquidity risk, albeit manageable in our view.

On 25 June 2025, we assigned first time Ba3 long-term global scale issuer ratings, NP short-term global scale issuer ratings, Aa3.za long-term national scale issuer ratings and P-1.za short-term national scale issuer ratings to the Project (please refer to [press release](#)). We view the Issuer as a Government-Related Issuer (GRI) and the ratings reflect a top-down notching from the Government of South Africa's rating based solely on support. In our view, it is not possible to meaningfully assess the Project's credit profile on a standalone basis, given the close operational and financial linkages with the Government of South Africa and TCTA-VRS's public policy mandate with limited autonomy.

Credit strengths

- » State owned entity undertaking critical national water infrastructure
- » Operating risk is assumed by DWS
- » Contractual government undertakings to meet debt obligations including explicit on-demand guarantees on specific debt instruments
- » Tariff framework providing full cost recovery and DWS covering any delay or non payment from water users

Credit challenges

- » The lack of an explicit on-demand guarantee from the DWS or National Treasury except on specific debt instruments, reflected in the one notch rating differential between the Issuer and the Government of South Africa
- » Broader stress at South African state-owned enterprises may cause the government to take a more selective approach to the provision of support
- » Exposure to a degree of liquidity risk, albeit manageable

Rating outlook

The outlook is positive, reflecting the positive outlook on the Government of South Africa's sovereign bond rating

Factors that could lead to an upgrade

- » An upgrade of the Government of South Africa

Factors that could lead to a downgrade

- » A downgrade of the Government of South Africa
- » Signs of DWS and/or National Treasury being unable or unwilling to provide timely support to the Project in periods of financial stress

Profile

Trans-Caledon Tunnel Authority (TCTA) is a 100% state-owned entity mandated with financing and implementing bulk raw water infrastructure projects of national importance in South Africa. TCTA has typically acted as an Implementing and Funding Agent on behalf of South Africa's National Department of Water and Sanitation (DWS). TCTA's shareholder is represented by the Minister of Water and Sanitation and TCTA is overseen by the Parliamentary Portfolio Committee on Water and Sanitation. The Project is implemented on behalf of DWS and backed by government guarantees to step in and meet the Project's currently outstanding debt obligations as well as an explicit on-demand guarantee on specific debt instruments backed by Government. These undertakings and explicit guarantees on specific debt instruments bind the National Revenue Fund in accordance with section 70 of the Public Finance Management Act No. 1 of 1999 (PFMA).

The TCTA-VRS Project involves the construction of major water infrastructure to ensure reliable water delivery to South Africa's key economic and urban centers, while also addressing environmental risks through the treatment and management of Acid Mine Drainage (AMD) in the Witwatersrand region.

TCTA is listed as a "major public entity" under Schedule 2 of South Africa's Public Finance Management Act 1 of 1999. TCTA's mandate is set out in the Notice of Establishment of 1986 (Notice 2631 in Government Gazette No. 10545, dated 12 December 1986) and

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amended in 2000 (Notice 277 in Government Gazette No. 21017). Directives issued from the Ministry from time to time in terms of Section 103(2) of the National Water Act (Act No. 36 of 1998) give TCTA permission to implement and fund projects on behalf of other water management institutions e.g. the Department of Water and Sanitation.

Detailed credit considerations

The VRS Project represents a major TCTA mandate

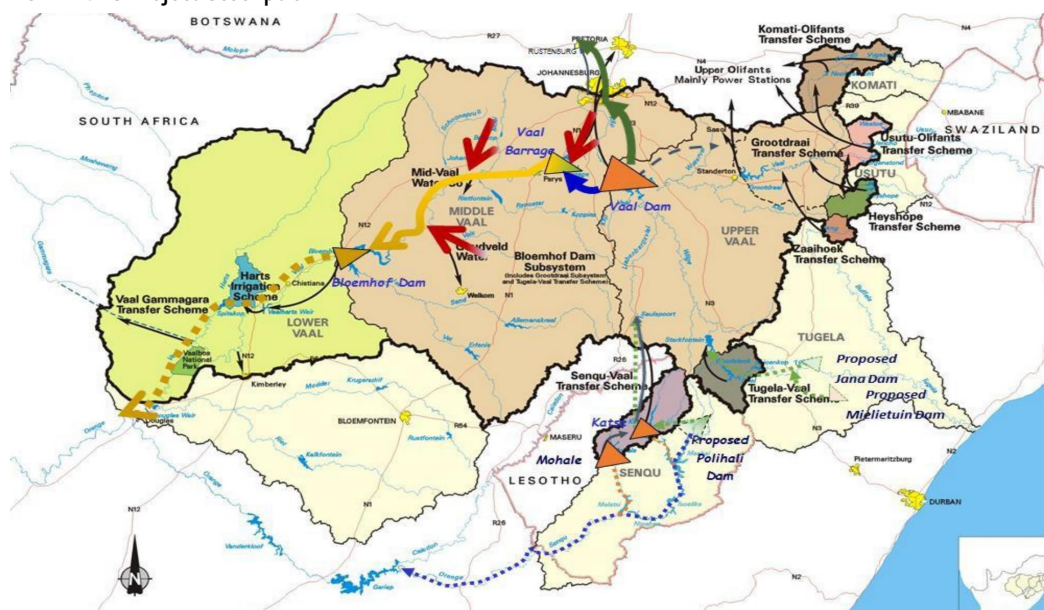
TCTA-VRS was established by the South African government through a Notice of Establishment published on 12 December 1986. Its original mandate was to serve as a special purpose vehicle responsible for financing and constructing South Africa's portion of the Lesotho Highlands Water Project (LHWP), a key initiative aimed at delivering water to the Vaal River System in accordance with South Africa's treaty obligations to the Kingdom of Lesotho.

The collaboration between the Kingdom of Lesotho and the Government of South Africa, and the governance structure of the LHWP, are arranged in a binational treaty (The Treaty).

In 2000, the scope of TCTA's mandate was expanded through an amendment to the Notice of Establishment, enabling the entity to undertake additional infrastructure projects beyond the LHWP.

The Vaal River, South Africa's longest tributary of the Orange River, extends approximately 1,120 kilometers. The VRS supplies water to approximately 45% of the national population, including major metropolitan areas such as Johannesburg, Ekurhuleni, Tshwane, Rustenburg, and the Govan Mbeki municipality, which includes Secunda, Evander, and Bethal. It also supports around 60% of the country's economic activity, providing essential water resources to Eskom's power generation fleet, Sasol's petrochemical complexes in Sasolburg and Secunda, the goldfields of the Free State and North West, the iron and manganese mining operations in the Northern Cape and ArcelorMittal South Africa's steel manufacturing facilities in Vanderbijlpark and Vereeniging.

Exhibit 2
TCTA - VRS Project description



Source: Company

TCTA-VRS is currently managing two major infrastructure initiatives that are central to the long-term sustainability of South Africa's water resources and environmental resilience.

The first is the LHWP, a treaty-based collaboration between the Governments of South Africa and the Kingdom of Lesotho. The project has two components being water transfer, which is for the account and benefit of the Government of South Africa, and to generate hydroelectric power, which is for the account and benefit of the Kingdom of Lesotho. Phase I of the project, completed in 2003,

included the construction of major dams, transfer tunnels, and a hydropower station, significantly enhancing regional water security. Phase II, which commenced in 2019, involves the construction of the Polihali Dam and a 38.2-kilometer tunnel connecting it to the Katse Dam, as well as a proposed 1,000 MW pumped storage hydropower scheme, subject to the outcome of a joint feasibility study. The total estimated cost of Phase II is approximately R 53.3 billion, with first water delivery expected by November 2028 and full completion anticipated by July 2032. The parts of the project under Phases I and II of the LHWP, situated in Lesotho, are implemented by the Lesotho Highlands Development Authority (LHDA), an entity owned by the Government of the Kingdom of Lesotho, whilst the portion on South-African soil was implemented by TCTA, on behalf of DWS.

A total of R 26.45 billion in loan funding has been raised to date, part of which was used to refinance Phase 1 debt. A further R 10 billion in loan funding is currently being negotiated with various lenders with financial close being planned for the first quarter of 2026/27. The project is behind schedule mainly due to the poor performance of the main works (Dam & Tunnel Contractors). As of November 30, 2025, the dam's construction progress was 41.5%, falling short of the planned 46.0%, while the tunnel's progress was 48.0%, slightly behind the targeted 49.6%.

The second project addresses the environmental legacy of over a century of gold mining in the Witwatersrand region through the Acid Mine Drainage (AMD) program. AMD poses a significant threat to water quality in the Vaal River catchment area due to the oxidation of sulphate-bearing minerals in abandoned underground mines. In this context the government mandated TCTA-VRS to implement both short and long term interventions. The short term interventions, currently fully implemented and funded, involved the construction and upgrade of high-density sludge treatment plants in the Western, Central, and Eastern Basins, with a total cost of R 2.4 billion. These facilities were designed to prevent uncontrolled decant and maintain water levels below environmental critical thresholds. In 2016, the government provided directions to implement long term interventions, which aim to reduce water ingress into mine workings, improve treatment processes and enhance environmental monitoring. However, this phase is currently withdrawn pending a government review of the funding model and optimal technical approach.

LHWP Income and AMD Implementation Agreements are in place to ensure costs recovery for TCTA-VRS, insulating the Project from end user payment risk

The financial sustainability of LHWP and the AMD initiative is underpinned by formal agreements with the DWS, which ensure full cost recovery and mitigate credit risk.

For the LHWP, the Income Agreement between TCTA-VRS and DWS, finalised in 2001 and further amended in 2023, enables TCTA-VRS to recover all debt and associated costs incurred in implementing both Phase I and Phase II of the project. This is achieved through the Vaal River System Raw Water Tariffs, which are levied by DWS on all users of the system (allocated for domestic and industrial use). The tariff structure is designed to include capital recovery and operational costs, with the Capital Unit Charge allocated to debt servicing and infrastructure funding, and the Bulk Operations and Royalties Charge covering royalties to the Kingdom of Lesotho and operational expenses. The project benefits from explicit on-demand government guarantees covering debt currently outstanding and still to be issued up to R 45.45 billion, while DWS also provided an irrevocable undertaking to ensure that TCTA-VRS receives sufficient funds from these tariffs to meet its financial obligations, and further committed to step in and procure funding or make direct payments to lenders in the event of a default by TCTA-VRS or a termination of the project (see also below).

Similarly, the AMD Implementation Agreement governs the funding, implementation, and cost recovery of the AMD project. The short term interventions were financed off-budget by TCTA-VRS, with partial capital contributions from DWS. Under the agreement, DWS commits to repay all costs incurred by TCTA-VRS, with 67% of the debt serviced through fiscal allocations from National Treasury and the remaining 33% recovered off-budget via the VRS Capital Unit Charge. This recovery mechanism has been in place since the 2016/17 financial year and is structured over a 20-year period. TCTA-VRS invoices DWS monthly for the amounts due, which are payable within 30 days, ensuring a predictable and enforceable repayment process.

The tariff framework associated with the Project is designed to recover TCTA's costs incurred, over a predetermined period of time or until debt is repaid in full. TCTA is entitled to receive revenue from DWS irrespective of whether DWS has in turn collected its billings from water users. TCTA is therefore not directly exposed to the offtake risk of the water boards/municipalities, as the revenue streams are paid by DWS directly.

TCTA-VRS's functions are limited and DWS assumes all operating risk

In the course of fulfilling the responsibilities set out in the Notice of Establishment and the directives that are given to it from time to time by the Minister, TCTA-VRS provides the following principal services: (1) structuring and raising project finance; (2) project management and implementation of water infrastructure situated in South Africa (including design, construction and environmental compliance); (3) debt management; and (4) tariff setting.

TCTA-VRS implements off-budget funding of projects on a standalone basis and puts together the financing case. As discussed above, the Project's revenue stream is designed to cover costs (including financing), but no profit is earned. TCTA-VRS does not undertake any construction or operation and maintenance activities for the Project for the infrastructure in Lesotho which is a Treaty responsibility of the LHDA, and as a Treaty responsibility of TCTA, it is responsible for the infrastructure in South Africa up to the designated delivery point at the Ash River outfall. The operations and maintenance activities and risks of the remainder of the VRS are the responsibility of DWS.

TCTA-VRS can only undertake projects on the instruction of the Minister and has a clear public policy mandate. In undertaking its duties, the Notice of Establishment allows TCTA-VRS to (inter alia) appoint staff, open its own bank accounts, borrow money (subject to restrictions, and approval by National Treasury if it is binding the National Revenue Fund). The Notice of Establishment stipulates that TCTA-VRS may not conclude a borrowing agreement conditional on the issue of a guarantee, indemnity or security which will bind the National Revenue Fund before the requirements of Section 70 of the PFMA have been met. TCTA-VRS is required to annually submit to the Minister of Finance a borrowing programme for the year.

Borrowing limits and government guarantees are in place

The Minister of Water and Sanitation, with the concurrence of the Minister of Finance, has approved medium-term borrowing limits for TCTA-VRS under the VRS mandate. These limits have been extended in July 2025, as summarised below.

Exhibit 3

Borrowing limits as of year-end

Financial year-end	Amounts
For the financial year ending 31 March 2027	R24.640 billion
For the financial year ending 31 March 2028	R29.691 billion
For the financial year ending 31 March 2029	R30.064 billion
For the financial year ending 31 March 2030	R30.345 billion
For the financial year ending 31 March 2031	R30.004 billion

Source: Company

The Treaty signed between South Africa and Lesotho highlights (Article 11.6) that the debt raised by TCTA-VRS for the implementation, operation and maintenance of the LWHP should be guaranteed by the South African Government if required by lenders.

All debt relating to the VRS (whether it be for LHWP or AMD) is raised by TCTA-VRS under one combined borrowing programme and one combined borrowing limit, and as such all the currently outstanding TCTA-VRS debt is guaranteed by the South African government.

TCTA-VRS currently has R 24.45 billion of debt facilities in place to fund the Project (currently not fully drawn as construction is still ongoing). All existing facilities are therefore guaranteed by the South African government, following the approval of an increase in the guarantee amount obtained from the Ministry of Finance in December 2023. In the last 12 months, TCTA-VRS's guarantee further increased to R 45.45 billion.

A Guarantee Framework Agreement (GFA), signed between TCTA-VRS and the South African government is also in place to define (1) the terms and conditions under which the guarantees are provided; (2) the reporting and governance requirements, representations, undertakings, and other obligations of TCTA-VRS; and (3) other ancillary matters relating to the granting of the guarantees by the government.

No lenders are part of the Treaty or the GFA. In principle, TCTA-VRS could potentially raise additional debt without a South African government guarantee, subject to lenders' agreement. As such, the assigned issuer rating is therefore positioned one notch below the rating of the South African government. We also note that other obligations, such as those to contractors on the Vaal River System, lack explicit government guarantees and depend on DWS support.

DWS undertakes to 'step in' and meet Project debt obligations in event of TCTA-VRS failure to perform or early termination of the Project

In general, for each project implemented by TCTA there is a separate:

- » borrowing limit authorisation from the Minister of Water and Sanitation in concurrence with the Minister of Finance;
- » Income or Implementation & Income Agreement with DWS undertaking to meet TCTA's debt obligations in relation to the Project; and
- » general ledger and bank account.

The Implementation Agreement with DWS sets out, inter alia:

- » the roles of TCTA and DWS in the planning and implementation of the Project;
- » DWS responsibilities for operating and maintaining the Projects;
- » tariff framework elaborating (i) the calculation of the charges the Project is entitled to receive from DWS (irrespective of whether DWS collects payments from the end water users); and (ii) future annual adjustments; and
- » DWS undertakings to assume the Project's debt obligations to lenders, in the event TCTA fails to fulfil any of its obligations under the financing agreements or is disestablished.

In each Implementation Agreement, DWS undertakes to 'step in' and meet project debt obligations in event of TCTA failure to perform or early termination of the Project. TCTA's Notice of Establishment stipulates that TCTA may not conclude a borrowing agreement conditional on the issue of a guarantee, indemnity or security which will bind the National Revenue Fund before the requirements of Section 70 of the PFMA have been met. Accordingly, the Minister of Finance has formally concurred to the Minister of Water and Sanitation giving (1) undertakings to funders that DWS would step in and takeover TCTA's obligations towards them if TCTA breaches finance agreements, and (2) undertakings to TCTA to make sure that TCTA is always sufficiently funded to enable it to repay its debt. Under the PFMA, TCTA and DWS are required to report annually on the projects to the Minister of Finance.

National scale rating application

Moody's National Scale Credit Ratings (NSRs) are intended as relative measures of creditworthiness among debt issues and issuers within a country, enabling market participants to better differentiate relative risks. NSRs differ from Moody's global scale credit ratings in that they are not globally comparable with the full universe of Moody's rated entities, but only with NSRs for other rated debt issues and issuers within the same country. NSRs are designated by a ".nn" country modifier signifying the relevant country, as in ".za" for South Africa. For further information on Moody's approach to national scale credit ratings, please refer to Moody's Credit rating Methodology published in August 2022 entitled "Mapping National Scale Ratings from Global Scale Ratings Methodology". While NSRs have no inherent absolute meaning in terms of default risk or expected loss, a historical probability of default consistent with a given NSR can be inferred from the GSR to which it maps back at that particular point in time.

NSRs are assigned by applying the published correspondence from GSRs. Where a single GSR maps to multiple national scale ratings, Rating Committees assign higher or lower NSRs to individual issuers and debts depending on their relative credit position within the same GSR category, using the same methodologies as are used to determine the GSRs. The mapping profile for South Africa indicates that a Ba3 GSR maps to an NSR range of Aa3.za to A2.za. We have assigned a Aa3.za NSR to the Project.

Drivers of recovery prospects

In the event of a debt default the Project presents high recovery prospects in our view. This reflects, positively, the essentiality of the Project's critical water infrastructure to South Africa and contractual undertaking of the government to assume the Project's debt obligations, in addition to the explicit on-demand guarantees on specific debt instruments to the lenders. Recovery could, however, be diminished by the untested process setting out the government's obligations to lenders in the event of an Issuer default, and may be subject to delays given these undertakings do not represent an explicit on-demand guarantee.

Liquidity analysis

TCTA-VRS relies on receiving timely payments from DWS and on the demand meeting projections (since the tariffs are set with respect to a forecast user demand profile). If demand is materially lower, then the tariff framework adjusts the tariff, but with a lag and repaid over the remaining debt repayment period. These events could give rise to a strain TCTA-VRS ability to service debt in a timely way, in which case we expect DWS will provide sufficient funding to meet its financial obligations to lenders and contractors.

Ultimately, however, we consider the liquidity risk manageable and we view the credit profile of the Project to be underpinned by DWS undertakings in each Implementation Agreement. In the event of liquidity strain at any project, TCTA-VRS may request an increase in its borrowing limit, or, DWS may restructure the revenue stream to accommodate liquidity pressure.

TCTA-VRS does manage its liquidity position and can raise short-term funds if required. In practice TCTA-VRS has access to committed revolving credit facilities to manage day to day liquidity. The projects do not maintain cash funded reserve accounts.

Rating methodology and scorecard factors

The principal methodology used in these ratings is Government-Related Issuers, published in May 2025. Please see the Rating Methodologies page on www.moody's.com for a copy of this methodology. The Project's ratings reflect a top-down notching from the government of South Africa's rating based solely on support. In our view, it is not possible to meaningfully assess the Project's credit profile on a standalone basis, given the close operational and financial linkages with the government of South Africa and TCTA's public policy mandate with limited autonomy.

Ratings

Exhibit 4

Category	Moody's Rating
TCTA - VAAL RIVER SYSTEM (VRS)	
Outlook	Stable
Issuer Rating -Dom Curr	Ba3
ST Issuer Rating -Dom Curr	NP
NSR LT Issuer Rating	Aa3.za
NSR ST Issuer Rating	P-1.za

Source: Moody's Ratings

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