

## Welcome to your CDP Water Security Questionnaire 2020

### W0. Introduction

#### W0.1

**(W0.1) Give a general description of and introduction to your organization.**

Anglo American is a leading global mining company and our products are the essential ingredients in almost every aspect of modern life. Our portfolio of world-class competitive mining operations and undeveloped resources provides the metals and minerals that enable a cleaner, more electrified world and that meet the fast growing consumer-driven demands of the world's developed and maturing economies. With our people at the heart of our business, we use innovative practices and the latest technologies to discover new resources and mine, process, move and market our products to our customers around the world – safely, responsibly, and sustainably.

As a responsible miner we are the custodians of what are precious natural resources. We work together with our business partners and diverse stakeholders to unlock the sustainable value that those resources represent for our shareholders, the communities and countries in which we operate, and for society as a whole. Anglo American is re-imagining mining to improve people's lives.

FutureSmart Mining™ is our innovation-led pathway to sustainable mining and includes our far-reaching Sustainable Mining Plan. Aligned to the UN's Sustainable Development Goals, we have set out a series of ambitious 2030 goals and interim targets that relate to three major areas of sustainability – trusted corporate leader, i.e. advocating for the highest standards of governance to drive transparency and trust in mining and mined products; healthy environment; and thriving communities. The technologies and digitalisation referred to are critical enablers to our stretching healthy environment goals, particularly in relation to water usage, as well as climate change and GHG emissions. Some of these are now being rolled out at scale in our operations – in Chile, in Brazil and South Africa.

Our portfolio of world class competitive mining operations and undeveloped resources – spanning diamonds (through De Beers), copper, platinum and other platinum group metals (PGMs), iron ore, coal and nickel - provides the raw materials to meet the growing consumer-driven demands of the world's developed and maturing economies.

De Beers has the global leadership position in diamonds, producing around a third of the world's rough diamonds, by value.



Anglo American has a world-class asset position in copper, with the potential to establish a leading position built around its interests in two of the world’s largest copper mines – Los Bronces (a 50.1% owned subsidiary) and Collahuasi (44% owned joint operation), with Reserve Lives of 35 years and 51 years, respectively.

Anglo American Platinum (held through a 78% interest in Anglo American Platinum Limited) is the world’s leading Platinum Group Metals (PGM) producer.

Anglo American’s iron ore operations provide customers with niche, high iron content ore. In South Africa, we have a majority share (69.7%) in Kumba Iron Ore. In Brazil, we have developed the integrated Minas-Rio operation (100% ownership) which produces a high quality pellet feed product. In manganese, we have a 40% share in Samancor Holdings.

We are the world’s third largest exporter of metallurgical coal and our coal operations in Australia serve customers throughout Asia and the Indian sub-continent, Europe and South America. In South Africa, we supply thermal coal to both the export and domestic energy markets. We have reduced our thermal coal footprint by half in the last five years through a responsible divestment strategy. We do not intend to acquire any additional thermal coal assets. Over time, we expect to continue to reduce our thermal coal footprint but the way we transition the business will be considered and responsible.

Our Nickel business in Brazil has capacity to produce around 45,000 tonnes per annum of nickel, whose primary end use is in the global stainless steel industry.

The water data reported in this CDP response aligns with the data in our 2019 Sustainability Report. Anglo American reported water performance under the definitions we used from 2015 until 2019. In 2020, we plan on re-stating the 2015 baseline, based on operational water balances and consistent definitions. This will serve as a baseline to the 2030 targets. From 2020 all water data reported will be based on QA/QCed water balances. Further information is available in:

- Our integrated Annual Report - <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/investors/annual-reporting/2020/aa-annual-report-2019.pdf>
- Our Sustainability Report - <https://www.angloamerican.com/~media/Files/A/Anglo-American-Group/PLC/investors/annual-reporting/2020/aa-sustainability-report-2019-v1.pdf>

## W-MM0.1a

**(W-MM0.1a) Which activities in the metals and mining sector does your organization engage in?**

Activity	Details of activity
Mining	Copper



	Platinum group metals Iron ore Nickel Diamonds Other mining, please specify Metallurgical Coal; Thermal Coal
Processing	Copper Platinum group metals Nickel

## W0.2

**(W0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date
Reporting year	January 1, 2019	December 31, 2019

## W0.3

**(W0.3) Select the countries/areas for which you will be supplying data.**

- Australia
- Brazil
- Canada
- Chile
- Peru
- South Africa
- Zimbabwe



## W0.4

**(W0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

## W0.5

**(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.**

Companies, entities or groups over which operational control is exercised

## W0.6

**(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?**

No

## W1. Current state

### W1.1

**(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.**

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	DIRECT: Water use at our' operations includes, but is not limited to, drilling, ore processing activities, slurring of tailings, dust suppression, sanitation and hygiene, and cooling activities. Good quality (potable) freshwater is vital for the use in our change houses and offices for the health for our employees and fit for purpose water quality is vital for the

			<p>development and growth of our operations. Thus, without sufficient good quality water, the integrity of our production and health of our workforce would be compromised.</p> <p>INDIRECT: Many of the goods we procure rely on good quality water in their production (e.g. steel and timber). Sufficient amounts of freshwater are also important in the supply of largely hydro-based electricity to our Brazilian operations. In addition, good quality freshwater is required to ensure the health and well-being of our surrounding local communities and employees, who use freshwater for consumption and sanitation Thus, an insufficient supply of these commodities would pose a risk to operational continuity.</p> <p>FUTURE: Future dependency on freshwater in direct operations will reduce as we implement initiatives to meet our 2030 freshwater reduction targets, which will include diversion of good quality water back into the catchments where we operate, increase the use of non-fresh water and increase recycling and re-use of mine water. With predicted global water shortfall of 40% by 2030, exacerbated by the impacts of climate change, it is anticipated that organisations in our value chain will reduce their dependency on freshwater too.</p>
<p>Sufficient amounts of recycled, brackish and/or produced water available for use</p>	<p>Vital</p>	<p>Not important at all</p>	<p>DIRECT: A large proportion of our operations are in water stressed regions, emphasising the importance of relying on lower quality water. Lower quality water can be used in many of our processing operations (from dust suppression to ore processing) and reduces our need for potable water. Thus, recycling and process water initiatives are vital to water security at our operations. Currently, approximately 60% of water required is met by recycled water. Increased water conservation and demand management and use of third-party grey water as opposed to fresh or potable water use is key to our strategy.</p> <p>INDIRECT: Indirect use of lower quality or recycled water is not common across our value chain. Accordingly, it is not deemed important to Anglo American currently. Hence there is an opportunity for Anglo American to focus on grey water use to leave fresh water in the catchments for our stakeholders to drink or use for other purposes.</p> <p>FUTURE: Future dependency on lower quality water in direct operations will increase as we implement initiatives to reduce freshwater and recycle more. With predicted global water shortfall of 40% by 2030, exacerbated by the impacts of climate change, it is anticipated that</p>

			organisations in our value chain will also increase their dependency on lower quality and recycled water.
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## W1.2

**(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Anglo American records consumption of water withdrawals or abstractions by all its operations (100% of facilities) on a monthly basis. Water meters and operational water balances are used to measure and monitor water withdrawal. The data facilitates performance tracking against water reduction targets. Anglo American reported water performance under the definitions we used from 2015 until 2019. In 2020, we plan on re-stating the 2015 baseline, based on operational water balances and consistent Water Accounting Framework (WAF), fresh water and ICMM-aligned definitions. This will serve as a baseline to the 2030 targets. From 2020 all water data reported will be based on QA/QCed water balances.
Water withdrawals – volumes by source	100%	Anglo American records the volume of water abstracted from different sources (surface water, ground water and third parties) at 100% of its facilities monthly. Water meters are used to obtain metered data, which is used to simulate a water balance, that derives the full water reporting data set. The purpose of reporting these data is to ensure adequate supplies of water for operational use, measure our impact on water sources, reduce our dependence on potable water or stressed sources, accurate and consistent reporting to guide management decisions. It also enables us to meet our external reporting requirements in line with the Global Reporting Initiative (GRI) and ICMM guidelines.
Entrained water associated with your metals & mining sector	100%	Anglo American records consumption of produced water withdrawn for all (100% of facilities) of its operations in line with the ICMM water reporting guidelines. Produced

activities - total volumes [only metals and mining sector]		<p>water in this case refers to water entrained in ore. This is recorded monthly and is calculated based on the volume of ore produced.</p>
Water withdrawals quality	100%	<p>Anglo American measures withdrawal quality at its operations where it is relevant. The nature of mining and processing is such that large volumes of recycled or lower quality water are used, the quality of which is not vitally important and hence the quality of withdrawals is not necessarily monitored on an ongoing basis. Where this is a legal or process requirement in our operations, this is undertaken. Anglo American measures this water aspect for all its sites (100%) where its required on an ad hoc basis using sampling approaches and laboratories to determine qualities.</p>
Water discharges – total volumes	100%	<p>Anglo American’s water management standard requires operations to develop a water balance model, which includes measuring and monitoring discharges. Any excess water discharged to the environment occurs as a result of authorised discharges, spills owing to high rainfall or accidental discharges from various operations. The total volume of water discharged from Anglo American facilities is monitored and measured either through calculation, water balance estimation or through metering as discharge occurs and is used to track environmental performance. Where a significant discharge occurs, as a result of a large rainfall event for example, then discharge volumes are estimated and not measured accurately. Anglo American measures this water aspect for all its sites (100%).</p>
Water discharges – volumes by destination	100%	<p>Anglo American’s water management standard requires operations to develop a water balance model, which includes measuring and monitoring discharges. The total volume of water discharged by destination (e.g. surface water, water to third parties etc.) from Anglo American facilities is monitored and measured either through calculation, water balance estimation or through metering as discharge occurs and is used to track environmental performance. Where a significant discharge occurs, as a result of a large rainfall event for example, then discharge volumes are estimated and not measured accurately. Anglo American has embarked on a technical program to</p>

		revise the design capacity and use of all dams towards zero repeats of environmental discharges. Anglo American measures this water aspect for all its sites (100%).
Water discharges – volumes by treatment method	100%	Water is discharged from various sources/processes at certain Anglo American operations. As a result, varying degrees of treatment are required per source of discharge. Anglo American actively measures the quantity discharged per source at the operation and, where necessary, monitors the quality of the discharged water to ensure that the composition of the water is within the treatment method’s specified limits. Anglo American measures this water aspect for all its relevant sites (100%) as it occurs either through meters, sampling and calculations. Where a significant discharge occurs, as a result of a large rainfall event for example, then discharge volumes are estimated and not measured accurately. Anglo American has embarked on a technical program to revise the design capacity and use of all dams towards zero repeats of environmental discharges and to reduce new water use.
Water discharge quality – by standard effluent parameters	100%	Water quality from discharges is measured at all Anglo American sites (100%) as it occurs using sampling approaches and laboratories to determine qualities.
Water discharge quality – temperature	100%	Temperature of discharge is monitored by Anglo American at sites where this is a legal requirement. Anglo American measures this water aspect for all its relevant sites (100%) using sampling approaches and laboratories monthly, or more regularly as required.
Water consumption – total volume	100%	Anglo American records total volumes of consumption of water from all its operations throughout the year (100% of facilities) monthly using metered data. This is done to track performance indicators and used to see whether water reduction targets are met.
Water recycled/reused	100%	Anglo American calculates total volumes of recycled / reused data from all of its operations throughout the year (100% of facilities) on a monthly basis, using the ICMM definitions and a water balance tool to derive the calculations. The Anglo American water-management standard and reporting requirements guides a risk-based, regional approach to water management, in line with global best practice and the ICMM water reporting guidelines. Anglo American expects all operations to have completed water balances with high-quality data by the end of 2020. Anglo American reported water





		performance under the definitions we used from 2015 until 2019. In 2020, we plan on re-stating the 2015 baseline, based on operational water balances and consistent WAF and ICMM-aligned definitions. This will serve as a baseline to the 2030 targets. From 2020 all water data reported will be based on QA/QCed water balances.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Workers at all (100%) of our sites are provided with fully functioning WASH services (clean drinking, cooking and cleaning water; solid waste management and drainage; and hygiene information and education). The primary concerns of our company representatives responsible for public health is that of the quality of drinking water, the hygiene of change houses on site and food safety. We regularly swab facilities, undertake deep cleansing of change houses and sample drinking water to verify the quality. The results of these monitoring measures are reported internally monthly.

## W1.2b

**(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?**

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	209,868	About the same	<p>COMPARISON: The slight reduction in withdrawals is primarily attributed to Victor mine in Canada where closure procedures started in the reporting year. The result was a 22 300 ML reduction in water withdrawal relative to FY2018. It is important to note that the analysis is based on the withdrawal data provided by the operations which has not been verified or validated against the water balance.</p> <p>FUTURE: In 2017, Anglo American revised its internal water reporting requirements to ensure alignment with the International Council for Mining and Metals (ICMM) guidance, in addition to the 2018 GRI Standards requirements. This revision has fundamentally shifted our site-level reporting of water and as a result we are currently ensuring data consistency and validity for many of the</p>



			<p>reporting requirements. It is anticipated that future volumes will decrease as we implement reduction measures to meet our 2020 and 2030 water reduction targets.</p> <p>We will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
Total discharges	58,188	Much lower	<p>COMPARISON: Our total discharges decreased by 32% in FY2019. This is attributed to our Victor Mine where discharges decreased by 95% in the reporting year due to the initiation of mine closure procedures. It is important to note that the analysis is based on the discharge data provided by the operations which has not been verified or validated against the water balance.</p> <p>FUTURE: It is not possible to predict whether the future volumes will increase or decrease as discharge volumes in the mining sector are driven primarily by rainfall.</p>
Total consumption	151,680	About the same	<p>COMPARISON: The group's water consumption increased slightly in the reporting year. Our operations in the Olifants basin primarily contributed to this. Groundwater withdrawal (dewatering, drainage and sumps) increased substantially at our Zibulo open pit mine, while a 14% decrease in water discharges was achieved through our water reclamation plant. Water consumption is calculated as the difference between water withdrawal and discharge, hence the combination of increased withdrawal and decreased discharge resulted in the slight increase in water consumption for the group. It is important to note that the analysis is based on the discharge data provided by the operations which has not been verified or validated against the water balance.</p> <p>FUTURE: In 2017, Anglo American revised our water reporting requirements to ensure alignment with the ICMM guidance, in addition to the GRI requirements. This revision has fundamentally shifted our site-level reporting of water and as a result we are currently ensuring data consistency and validity for many of the reporting requirements. We are working towards ensuring readiness to disclose accurate consumption and re-use/recycling data next year. For the purposes of CDP reporting this year we have reported consumption as withdrawals less discharge, hence our consumption figures balance. We recognise that this is not a true reflection of consumption, hence our consumption data going forward will change as our definition for consumption is more sophisticated than withdrawals less discharge and is in line with ICMM requirements. It is not possible to predict whether the future consumption volumes will increase or decrease as</p>

			consumption volumes in the mining sector account for rainfall which is difficult to predict. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals.
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## W1.2d

**(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.**

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	51-75	Higher	WRI Aqueduct	Anglo American Group analyses the water stress position of all its operations on a yearly basis. The water stress position of the Anglo American operations has increased slightly in the reporting year. The approach to evaluating whether an operation is in a water stressed area includes consideration of water security, operational water management, water quality and pollution risks, environmental protection and compliance, as well as mine dewatering. Anglo American also assesses the socio-economic needs of the area to understand which other stakeholders require water. For example, in 2018 South Africa completed Regional Limpopo water balance for our Platinum operations indicated that the entire region will remain extremely water stressed till beyond 2028, when water will be freed up as coal fired power stations shut down. Future business plans in relation to the regional and catchment context for operations are assessed to understand whether there will be increased water demand from Anglo American. In 2019 we added to this and are currently developing site and catchment-specific assessments that will provide us with a more complete assessment of business water risk. The integrated site and regional water balances will help us understand the

				<p>impact of any changes in the catchment area, including heat maps related to future climate change and increased water demand within the catchments. This assessment takes into account factors such as climate models, population, agriculture and industry growth. We then use these water balances to develop water management action plans, with site-specific priorities for ensuring water security, managing discharge and flood risks, and protecting our social licence to operate. We take a critical-control approach to prioritising measures that will prevent high-impact water events. The WRI Aqueduct tool has assisted in this process to guide Anglo American on water stress in the basin. However, the approach that Anglo American has adopted in assessing water stress for its operations is more advanced as it takes these other factors into account.</p> <p>We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
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## W1.2h

**(W1.2h) Provide total water withdrawal data by source.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	60,183	Lower	<p>RELEVANCE: Withdrawals from fresh surface water are relevant as this is one of the key sources of water collected by mining operations.</p> <p>COMPARISON: Fresh surface water withdrawal decreased by 16% in the reporting year attributed to our Los Bronces site in the Maipo river basin which is currently facing drought conditions, resulting in an approximately 8150 ML decrease in withdrawal compared to 2018. Our</p>

				<p>coal operations in Australia also contributed to the reduction. <b>FUTURE:</b> It is anticipated that future volumes will decrease as we implement reduction measures to meet our 2020 and 2030 water reduction targets. We are continuously improving our approach by developing climate change forecasts, contingency planning and breakthrough innovations and will review the water targets of the Sustainable Mining Plan in the next year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
Brackish surface water/Seawater	Relevant	26	Much higher	<p><b>RELEVANCE:</b> Withdrawals from brackish surface water/seawater now has limited relevance to our managed operations as only our De Beers Marine operation uses this source.</p> <p><b>COMPARISON:</b> Debmarine Namibia, a coastal diamond mining operation using sea vessels, is the only operation that withdraws seawater. Seawater withdrawal increased by 11 ML in the reporting year.</p> <p><b>FUTURE:</b> It is anticipated that future volumes will remain low as we have only one operation using limited volumes.</p>
Groundwater – renewable	Relevant	100,342	About the same	<p><b>RELEVANCE:</b> Withdrawals from groundwater are relevant as open cast mines needs to dewater for mining.</p> <p><b>COMPARISON:</b> Groundwater withdrawal decreased by 10% in the reporting year. This is directly attributed to Victor mine where closure procedures started in the reporting year. Groundwater withdrawal at the site halved (54% reduction) in FY2019.</p> <p><b>FUTURE:</b> It is anticipated that future volumes will decrease as we implement reduction measures to meet our 2020 and 2030 water reduction targets. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production</p>

				against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.
Groundwater – non-renewable	Not relevant			RELEVANCE & COMPARISON: Anglo American has not split its groundwater use into renewable and non-renewable sources consistently across Anglo American yet and as such is reporting this category as zero, hence there is no change from the previous year. FUTURE: It is anticipated that this approach will not change in the near future, thus reported non-renewable groundwater will remain the same.
Produced/Entrained water	Relevant	4,848	Lower	RELEVANCE: Produced water is relevant as Anglo American extracts water in the ore that is extracted during mining. COMPARISON: The decrease in entrained water in the reporting year is primarily attributed to our Barro Alto facility. Production (mined ore) decreased by 12% in the reporting year which subsequently resulted in a decrease in entrained water from mined ore. FUTURE: It is anticipated that future volumes will increase as we improve our reporting in this category.
Third party sources	Relevant	44,470	Higher	RELEVANCE: Withdrawals from third-party sources are relevant as they can be one of the key sources of water for some of our mining operations. COMPARISON: The noteworthy increase in third party water withdrawal is attributed our Los Bronces site in Chile which had to bring in residual wastewater from industrial third party sources at our Mogalakwena Complex in the Limpopo river basin. We using treated municipal effluent as the main water supply to Mogalakwena in a partnership with the Polokwane municipality. The expansion project at the municipal wastewater treatment works was completed in the year which enabled us to increase our effluent allocation to 20ML/day in the reporting year. This translated into a 20% increase in third party water withdrawal for Mogalakwena Complex.

				FUTURE: It is anticipated that future volumes will remain the same as we strive to reduce the use of potable water but increase the amount of wastewater from other organisations.
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## W1.2i

### (W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	12,486	Much lower	<p>RELEVANCE: Discharge to surface water is relevant as discharge on mining operations does sometimes occur when there are large rainfall events.</p> <p>COMPARISON: The significant decrease in discharge is directly attributed to our Victor operations which started closure procedures in the reporting year. Fresh surface water discharge decreased by 29 900 ML (95%) in the reporting year at this facility, resulting in a 72% decrease in overall fresh surface water discharge for the group.</p> <p>FUTURE: It is not possible to predict whether the future volumes will increase or decrease as discharge volumes in the mining sector are driven primarily by rainfall.</p>
Brackish surface water/seawater	Relevant	8,907	Much higher	<p>RELEVANCE: Discharge to seawater is relevant for our De Beers Marine and Minas Rio operations that discharge seawater.</p> <p>COMPARISON: Our Minas Rio operation in Brazil is the only facility that reported discharge to brackish surface water/seawater destinations. This discharge aspect doubled in the reporting year as Minas Rio's production increased significantly as the operation restarted mining in December 2018 (just before the start of FY2019).</p>

				FUTURE: It is anticipated that future volumes of discharge to sea water will increase as we align with normal operation conditions.
Groundwater	Relevant	2,103	Higher	<p>RELEVANCE: Discharge to ground water is relevant as a number of our operations discharge to groundwater.</p> <p>COMPARISON: Groundwater discharge increased by 24% in the reporting year. This is due to our Kolomela iron ore operation where the relevant discharge increased by 320 ML in the reporting year as a result of increased consumption of freshwater.</p> <p>FUTURE: It is not possible to predict whether the future volumes will increase or decrease as discharge volumes in the mining sector are driven primarily by rainfall.</p>
Third-party destinations	Relevant	34,692	About the same	<p>RELEVANCE: Discharge to third-party destinations is relevant as discharge at some mining or processing operations requires treatment while in other instances, we supply lower quality water to other parties.</p> <p>COMPARISON: A slight reduction in third-party destination discharge was measured in the reporting year and this is primarily attributed to our water reclamation plant for our coal operations where an increase in water reclamation efficiency and volume resulted in lower third party discharges (1800 ML less) for the reporting year.</p> <p>FUTURE: It is not possible to predict whether the future volumes will increase or decrease as discharge volumes in the mining sector are driven primarily by rainfall.</p>

### W-MM1.3

**(W-MM1.3) Do you calculate water intensity information for your metals and mining activities?**

Yes



## W-MM1.3a

**(W-MM1.3a) For your top 5 products by revenue, provide the following intensity information associated with your metals and mining activities.**

Product	Numerator: Water aspect	Denominator	Comparison with previous reporting year	Please explain
Diamonds	Total water withdrawals	Other, please specify  Thousands of carats	Lower	<p>CHANGE: Water withdrawal and production for our managed diamond facilities decreased significantly in the reporting year. Water withdrawal decreased more severely (52%) leading to the overall reduction (-24% year on year) in water withdrawal intensity. This is attributed to our Victor Mine where closure procedures started in the reporting year, resulting in a 51% reduction in groundwater withdrawal.</p> <p>USE: This intensity metric is used internally for tracking water performance.</p> <p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing infrastructure improvements, water treatment/water recovery technologies and managing environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water intensity will improve as we implement the above strategy towards achieving our 2020 BAU and 2030 stretch goal water targets.</p>
Platinum	Total water withdrawals	Other, please specify  Produced ounces (koz)	About the same	<p>CHANGE: Year on year comparisons show that total withdrawal intensity decreased slightly (-1%). This is due to a 4% increase in production at the platinum facilities in the reporting year. Water withdrawal for these sites were about the same, relative to FY2018.</p> <p>USE: This intensity metric is used internally for tracking water performance.</p>



				<p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing infrastructure improvements, water treatment/water recovery technologies and managing environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water intensity will improve as we implement the above strategy towards achieving our 2020 BAU and 2030 stretch goal water targets. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
Copper	Total water withdrawals	Other, please specify Kilotons produced	Lower	<p>CHANGE: Total withdrawal intensity at our managed copper operations decreased by 11% in the reporting year. This was due to the reduction in total withdrawal achieved at our Los Bronces site through water efficiency initiatives and due to ongoing 'mega drought' conditions which has reduced surface water availability (a primary water source for the mine). Water withdrawal at this facility decreased by 8100ML in the reporting year.</p> <p>USE: This intensity metric is used internally for tracking water performance.</p> <p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing infrastructure improvements, water treatment/water recovery technologies and managing</p>

				<p>environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water management will improve as we implement the above strategy towards achieving our 2020 and 2030 stretch goal water targets.</p>
Nickel	Total water withdrawals	Other, please specify Tons produced	Lower	<p>CHANGE: Water intensity for our Nickel operations improved (22%) as a result of a substantial decrease in water withdrawal. This is attributed to our Barro Alto facility where water produced from extracted/mined ore decreased by 2420 ML (99.9%) in the reporting year.</p> <p>USE: This intensity metric is used internally for tracking water performance.</p> <p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing infrastructure improvements, water treatment/water recovery technologies and managing environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water intensity will improve as we implement the above strategy towards achieving our 2020 BAU and 2030 stretch goal water targets. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
Iron Ore	Total water withdrawals	Other, please specify Megatons produced	About the same	<p>CHANGE: Iron-ore production dropped by 2% and water withdrawal increased by 3% in the reporting year, resulting in a slight (4%) increase in overall withdrawal intensity for our iron ore operations. The slight increase in water withdrawal is attributed to our Kolomela site where fresh surface water withdrawal increased by 1500 ML in the reporting year.</p>

				<p>USE: This intensity metric is used internally for tracking water performance.</p> <p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing infrastructure improvements, water treatment/water recovery technologies and managing environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water intensity will improve as we implement the above strategy towards achieving our 2020 BAU and 2030 stretch goal water targets. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
Coal	Total water withdrawals	Other, please specify Megatons produced	Much higher	<p>CHANGE: The significant increase in year on year comparisons of coal's water withdrawal intensity is the result of a noteworthy increase in overall water withdrawal (21%). This was compounded by a 9% decrease in coal production for the reporting year. This is directly attributed to our open pit mine at Zibulo where groundwater withdrawal (pit dewatering, drainage and sumps) increased significantly in the reporting year.</p> <p>USE: This intensity metric is used internally for tracking water performance.</p> <p>STRATEGY: Anglo has revamped its water strategy, starting with the implementation of the Group Water Management Standard in 2016, followed by the initiatives to support the implementation of its key components in 2017. A core element of the Standard is the development of water information and management practices. Thus, in 2018 all operations started the process of completing a self-assessment and gap analysis against the standard which will be finalized in 2020. Congruent to this work towards improved water-information management, Anglo American plans to continue implementing</p>



				<p>infrastructure improvements, water treatment/water recovery technologies and managing environmental impacts, in order to address the specific water risks of each site.</p> <p>TRENDS: It is anticipated that our long-term water intensity will improve as we implement the above strategy towards achieving our 2020 BAU and 2030 stretch goal water targets. We are continuously improving our approach and will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>
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## W1.4

### (W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

## W1.4a

### (W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

#### Row 1

#### % of suppliers by number

1-25

#### % of total procurement spend

26-50

#### Rationale for this coverage

Anglo American's approach to procurement is guided by the Responsible Sourcing Standard for Suppliers, which details performance expectations across 5 pillars of value: labour & human rights; safety & health; business integrity & ethics; environment and social accountability.

Anglo American has strengthened its risk-based approach to responsible sourcing, which supports prioritised engagement with suppliers who have a higher likelihood of sustainability related risk. These selected suppliers were requested to complete a self-assessment questionnaire, including information on water use and management.

Special clauses in Anglo American's standard supply contracts request suppliers to comply with the sustainability requirements defined in the Standard. The standard requires suppliers to monitor water usage and identify opportunities to reduce usage. No incentive is given to suppliers to report information, but a penalty of non-compliance could result in that supplier losing its contract.

### **Impact of the engagement and measures of success**

The self-assessment questionnaire requests whether the supplier has had any incidents impacting water sources, and detail on whether they are measuring water use. From this, the number of suppliers measuring water usage data is tracked and will be compared on a yearly basis. From the information provided in the self-assessments, selected suppliers are requested to undertake third party on-site assessments. Where risk issues, including non-compliance with the requirements of the Responsible Sourcing Standard for Suppliers, were identified, corrective action plans are developed and agreed with suppliers.

Success is measured through the number of self-assessment questionnaires, audits and training sessions conducted with suppliers. During 2019, 452 supplier self-assessments and 43 on-site assessments were completed, which was well over 25% of supplier expenditure. In 2019, our capability-building programme was rolled out to 286 host community suppliers.

### **Comment**

None.

## **W1.4b**

**(W1.4b) Provide details of any other water-related supplier engagement activity.**

---

### **Type of engagement**

Innovation & collaboration

### **Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services

**% of suppliers by number**

Less than 1%

**% of total procurement spend**

Less than 1%

**Rationale for the coverage of your engagement**

Anglo American's Supply Chain Innovation team sources high water efficiency equipment and collaborates with suppliers on innovation and technology change. The team works with key global suppliers and some selected start-up suppliers to understand their innovation roadmaps and identify innovation opportunities to improve resource efficiency. These opportunities are then scrutinized to identify the opportunities with the most impact. Typically, Anglo American will target suppliers with more mature innovation concepts but will also engage with suppliers at the concept level in certain situations. The selected opportunities are actively pursued as group-wide initiatives, and Anglo American will collaborate with the supplier to drive the development and of the innovation product. Anglo American also scans the market for potential new suppliers with innovation opportunities to engage with.

**Impact of the engagement and measures of success**

By enhancing the water efficiency of our supplier's products, we improve on our own water efficiency and protect water supply of the water catchments within which we and our suppliers operate. Two specific examples we are evaluating: i) A solution to replace old pneumatic rock drills with newly developed electro-hydraulic rock drill technology in underground platinum mining, which has potential for 50% improvement in energy and 75% in water efficiency; and ii) An innovative micro-biological dust suppression system trialled at one of our Platinum operations. A 35% increase of dust suppression effectiveness and 95% reduction in water use have been recorded and we plan to test it at other operations in 2021. Success measurement is done through the establishment of key performance metrics for each innovation project. Metrics typically include water efficiency and usage metrics, to monitor the improvements that an innovative product will have.

**Comment**

None.

**W1.4c**

**(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?**

**PARTNERS:** Local municipalities, communities and bulk water users are some of the key value chain partners in Anglo American's water catchment areas that we engage with. **STRATEGY:** Anglo American implemented a risk-based water management approach in 2016, in line with global best practice and the ICMM reporting guidelines. A cornerstone of the standard is implementing operational and regional water balances to inform the management of regional water risks, in partnership with regional stakeholders. For example Anglo American partnered with a large local brewery, ABInBev and the Municipality of Polokwane (via the Strategic Water Partners Network) to facilitate water conservation in the Polokwane Municipality. The partnership has helped to develop a Water Conservation and Water Demand Management (WCWDM) strategy and business plan for the City of Polokwane (CoP) Local Municipality. The recommended priority interventions include visible leakage repair, bulk meter replacement/installation (improve accuracy of baseline data), pressure management, improved top consumer metering and monitoring as well as flow, pressure and level monitoring. **PRIORITIZATION:** Anglo American's catchment wide approach to water stewardship helps to identify important risks and opportunities in its water catchment areas. Through the risks and opportunities identified, important value chain partners are specified for engagement. **MEASUREMENT:** Success is measured through the depth and extent of partnerships Anglo American as developed. This includes partnerships with municipalities and other organisations. A key indicator of success to date was the formalisation of the Strategic Water Partners Network and completion of the Water Conservation and Water Demand Management (WCWDM) strategy and business plan. Based on the assessment findings the municipality will have an additional R 111.04 million/annum in increased revenue which will contribute greatly to water security in the area.

## W2. Business impacts

### W2.1

**(W2.1) Has your organization experienced any detrimental water-related impacts?**

Yes

### W2.1a

**(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.**



**Country/Area & River basin**

Chile

Other, please specify

Maipo

**Type of impact driver & Primary impact driver**

Physical

Increased water scarcity

**Primary impact**

Reduction or disruption in production capacity

**Description of impact**

Water scarcity and stress is considered one of Anglo American's most significant water risks considering over 50% of operations are located in water scarce areas. For example, Los Bronces which is Anglo American's largest operation in Chile and one of the largest copper deposits in the world is particularly exposed to water stress as the mine is located in an area with Mediterranean climate with little to no surface and groundwater. Chile's central zone, where the operation is located, continues to face unprecedented climate conditions, with 2019 being the driest year since the start of the current decade-long drought, and one of the driest years on record. The Los Bronces operation experienced a reduction in water availability and storage owing to the ongoing drought during 2019. As a result, production decreased by 9% to 335,000 tonnes (2018: 369,500 tonnes), with planned higher grades (0.83% vs 2018: 0.76%) offset by production losses owing to lower water availability. The result was a substantive financial impact due to the 9% reduction in production.

**Primary response**

Increase investment in new technology

**Total financial impact**

207,000,000

**Description of response**

Production decreases due to lower water availability at Los Bronces were partly offset by several water-management initiatives such as increased reuse and recycling, contingency purchases of surplus industrial water from the Andina's Ovejería tailings dam on the neighbouring



mine. The response also included development of new technology like Coarse Particle Recovery and Hydraulic Dry Stacking. In addition, Los Bronces have implemented a water recycling system since 2012 where water is transported to the operation via a 56-kilometre pipeline from the Las Tórtolas tailings dam significantly increasing water reuse. In 2018 we also started development of a tailings water recovery scheme whereby horizontal wells were drilled into the bottom of the dam to facilitate drainage of tailings water for re-use in the site's plant. Solar conductive evaporation covers have also been installed to reduce water loss from tailings dams with results showing that the covers can reduce evaporation by up to 90%. This will facilitate the recovery of water annually, while generating 0.5MW of solar energy at Los Bronces.

The potential financial impact was calculated at \$207million and represents potential lost revenue. It is assumed that the 34,500 tonnes of reduced production compared to 2018 at Los Bronces was due to water. The potential lost revenue was thus calculated by multiplying 34,500 tonnes by the average price of copper per tonne in 2019 (\$6000/tonne).

## W2.2

**(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?**

Yes, fines, enforcement orders or other penalties but none that are considered as significant

## W2.2a

**(W2.2a) Provide the total number and financial value of all water-related fines.**

Row 1

**Total number of fines**

2

**Total value of fines**

54,000

**% of total facilities/operations associated**

2.6

**Number of fines compared to previous reporting year**

Much lower

**Comment**

The fines were not related to any significant incidents and are regarded as administrative. Our Legal Department is contesting these fines which have not been paid. These processes are still under analysis by the Brazilian authorities.

## W3. Procedures

### W-MM3.2

**(W-MM3.2) By river basin, what number of active and inactive tailings dams are within your control?**

---

**Country/Area & River basin**

Chile

Other, please specify

Aconcagua River

**Number of tailings dams in operation**

2

**Number of inactive tailings dams**

3

**Comment**

None.

---



**Country/Area & River basin**

Chile

Other, please specify

Maipo

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

1

**Comment**

None.

---

**Country/Area & River basin**

Brazil

Tocantins

**Number of tailings dams in operation**

5

**Number of inactive tailings dams**

1

**Comment**

None.

---

**Country/Area & River basin**

Brazil

Rio Doce

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

0

**Comment**

None.

---

**Country/Area & River basin**

South Africa

Limpopo

**Number of tailings dams in operation**

6

**Number of inactive tailings dams**

0

**Comment**

None.

---

**Country/Area & River basin**

South Africa

Olifants

**Number of tailings dams in operation**

11

**Number of inactive tailings dams**

5

**Comment**

None.

---

**Country/Area & River basin**

South Africa

Other, please specify

South Atlantic Coast

**Number of tailings dams in operation**

0

**Number of inactive tailings dams**

6

**Comment**

None.

---

**Country/Area & River basin**

South Africa

Vaal

**Number of tailings dams in operation**

4

**Number of inactive tailings dams**

2

**Comment**

None.

---

**Country/Area & River basin**

Australia

Fitzroy

**Number of tailings dams in operation**

3

**Number of inactive tailings dams**

10

**Comment**

None.

---

**Country/Area & River basin**

Canada

Attawapiskat River

**Number of tailings dams in operation**

3

**Number of inactive tailings dams**

0



**Comment**

None.

---

**Country/Area & River basin**

Canada

Mackenzie River

**Number of tailings dams in operation**

0

**Number of inactive tailings dams**

1

**Comment**

None.

---

**Country/Area & River basin**

Zimbabwe

Save

**Number of tailings dams in operation**

2

**Number of inactive tailings dams**

0

**Comment**

None.



## W-MM3.2a

**(W-MM3.2a) Do you evaluate and classify the tailings dams under your control according to the consequences of their failure to human health and ecosystems?**

### Row 1

---

#### **Evaluation of the consequences of tailings dam failure**

Yes, we evaluate the consequences of tailings dam failure

#### **Evaluation/Classification guideline(s)**

South Africa (SANS) 10286

Company-specific guidelines

#### **Tailings dams have been classified as 'hazardous' or 'highly hazardous'**

Yes, tailings dams have been classified as 'hazardous' or 'highly hazardous' (or equivalent)

#### **Please explain**

In 2013-2014, Anglo American developed The Mineral Residue Facilities and Water Management Structures Standard (AA TS 602 001). The revised approach prioritises work based on the Consequence Classification of Structures (“CCS”) rating and embraces current leading practices world-wide including the management of change, the independent reviews and clear requirements for roles, responsibilities, and reporting protocols. The requirements of the Standard exceed current ICMM and regulatory and other industry requirements in all jurisdictions where Anglo American operates. This standard sets minimum requirements for design criteria, monitoring, inspection and surveillance, and was peer-reviewed by international specialists. The standard also adopts local requirements if these are more stringent than the Anglo American Standard.

Every structure in the portfolio must have a Consequence Classification of Structure (CCS) rating based on failure consequence categories. Design, monitoring and surveillance requirements are specified based on this rating. The CCS rating is evaluated independently from the probability of an unwanted event taking place. The CCS rating is described in five categories, from Insignificant, to Minor, Moderate, High, and Major. The higher the CCS rating, the more stringent the requirements are. Any facilities classified as ‘High’ are regarded as ‘hazardous’ and ‘Major’ as ‘highly hazardous’.

The CCS rating is done annually per facility.

## **W-MM3.2b**

**(W-MM3.2b) Provide details for all dams classified as 'hazardous' or 'highly hazardous'.**

---

**Tailings dam name/identifier**

Dams No. 1 and 2

**Country/Area & River basin**

Chile

Other, please specify

Aconcagua River

**Latitude**

32.3951

**Longitude**

71.85

**Hazard classification**

High

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

3.3

**Planned tailings storage impoundment volume in 5 years (Mm3)**

3.3

**Please explain**

None.

---

**Tailings dam name/identifier**

Dam No. 4

**Country/Area & River basin**

Chile

Other, please specify

Aconcagua

**Latitude**

32.3931

**Longitude**

71.0955

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

53

**Planned tailings storage impoundment volume in 5 years (Mm3)**

53

**Please explain**

None.

---

**Tailings dam name/identifier**

El Torito

**Country/Area & River basin**

Chile

Other, please specify

Aconcagua River

**Latitude**

32.3826

**Longitude**

71.0944

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

130

**Planned tailings storage impoundment volume in 5 years (Mm3)**

160

**Please explain**

None.

---

**Tailings dam name/identifier**

Perez Caldera

**Country/Area & River basin**

Chile

Other, please specify

Maipo River

**Latitude**

33.1323

**Longitude**

70.2038

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

50

**Planned tailings storage impoundment volume in 5 years (Mm3)**

35

**Please explain**

---

**Tailings dam name/identifier**

Las Tortolas

**Country/Area & River basin**

Chile

Other, please specify

Maipo River

**Latitude**

33.0726

**Longitude**

70.4356

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

480

**Planned tailings storage impoundment volume in 5 years (Mm3)**

700

**Please explain**

None.

---

**Tailings dam name/identifier**

Serro da Sapo Tailings Dam

**Country/Area & River basin**

Brazil

Rio Doce

**Latitude**

18.5139

**Longitude**

43.2417

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

43

**Planned tailings storage impoundment volume in 5 years (Mm3)**

135

**Please explain**

None.

---

**Tailings dam name/identifier**

Codemin: Slag Pile No. 2

**Country/Area & River basin**

Brazil

Tocantins

**Latitude**

14.0926

**Longitude**

48.2036

**Hazard classification**

High



**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

3.8

**Planned tailings storage impoundment volume in 5 years (Mm3)**

2

**Please explain**

None.

---

**Tailings dam name/identifier**

Barro Alto: Slag Pile No. 1

**Country/Area & River basin**

Brazil

Tocantins

**Latitude**

15.0522

**Longitude**

48.2017

**Hazard classification**

High

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

7.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

1.26

**Please explain**

None.

---

**Tailings dam name/identifier**

Venetia FRDs

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

22.25417

**Longitude**

29.175403

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

55.8

**Planned tailings storage impoundment volume in 5 years (Mm3)**

74.6

**Please explain**

None.

---

**Tailings dam name/identifier**

Venetia CRD

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

22.265834

**Longitude**

29.181448

**Hazard classification**

Major

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

16.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

29

**Please explain**

None.

---

**Tailings dam name/identifier**

Amandelbult

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

-24.80972

**Longitude**

27.34895

**Hazard classification**

Major (High)

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

103

**Planned tailings storage impoundment volume in 5 years (Mm3)**

138.5

**Please explain**

None.

---

**Tailings dam name/identifier**

Blinkwater

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

-23.95692

**Longitude**

28.9394

**Hazard classification**

Major (High)

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

37.5

**Planned tailings storage impoundment volume in 5 years (Mm3)**

63.4

**Please explain**

None.

---

**Tailings dam name/identifier**

Vaalkop

**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

-23.98747

**Longitude**

28.92651

**Hazard classification**

Major (High)

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

69.5

**Planned tailings storage impoundment volume in 5 years (Mm3)**

79.6

**Please explain**

None.

---

**Tailings dam name/identifier**

Bank 2 Co-disposal

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

25.5755

**Longitude**

29.2719

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

31.31

**Planned tailings storage impoundment volume in 5 years (Mm3)**

39.35

**Please explain**

None.

---

**Tailings dam name/identifier**

Goedehoop Co-disposal

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

26.0541



**Longitude**

29.2543

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

28

**Planned tailings storage impoundment volume in 5 years (Mm3)**

31.59

**Please explain**

None.

---

**Tailings dam name/identifier**

Klippan Co-disposal

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

25.592

**Longitude**

29.1244

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

39.31

**Planned tailings storage impoundment volume in 5 years (Mm3)**

48.84

**Please explain**

None.

---

**Tailings dam name/identifier**

Blaauwkrans Co- disposal (North ext. and old combined)

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

25.554

**Longitude**

29.0921

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

37.55

**Planned tailings storage impoundment volume in 5 years (Mm3)**

47.76

**Please explain**

None.

---

**Tailings dam name/identifier**

Greenside Co-disposal.

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

25.5741

**Longitude**

29.1113

**Hazard classification**

Major

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

37.3

**Planned tailings storage impoundment volume in 5 years (Mm3)**

43.24

**Please explain**

None.

---

**Tailings dam name/identifier**

Helena Dam 1

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

-25.01605

**Longitude**

30.11316

**Hazard classification**

Major (High)

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

14

**Planned tailings storage impoundment volume in 5 years (Mm3)**

15

**Please explain**

None.

---

**Tailings dam name/identifier**

Mareesburg

**Country/Area & River basin**

South Africa

Olifants

**Latitude**

-25.01143

**Longitude**

30.14734

**Hazard classification**

Major (High)

**Guideline(s) used**

South Africa SANS 10286

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

0.07

**Planned tailings storage impoundment volume in 5 years (Mm3)**

5.55

**Please explain**

None.

---

**Tailings dam name/identifier**

Namaqualand AK3 FRD

**Country/Area & River basin**

South Africa

Other, please specify  
South Atlantic Coast

**Latitude**

29.383198

**Longitude**

17.022719

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify  
Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

29

**Planned tailings storage impoundment volume in 5 years (Mm3)**

29

**Please explain**

None.

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**Tailings dam name/identifier**

Sishen Mine (DMS Dams 1 to 4 and JIG infill Legs 1 to 4)

**Country/Area & River basin**

South Africa

Vaal

**Latitude**

27.44338

**Longitude**

23.02256

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

38

**Planned tailings storage impoundment volume in 5 years (Mm3)**

46.5

**Please explain**

None.

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**Tailings dam name/identifier**

Dam 1



**Country/Area & River basin**

Zimbabwe

Save

**Latitude**

-19.62417

**Longitude**

30.07222

**Hazard classification**

Major

**Guideline(s) used**

Other, please specify

Anglo American Technical Standard (AA TS 602 001)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

7.9

**Planned tailings storage impoundment volume in 5 years (Mm3)**

14.7

**Please explain**

None.

### W-MM3.2c

**(W-MM3.2c) To manage the potential impacts to human health or water ecosystems associated with the tailings dams in your control, what procedures are in place for all of your dams?**

Procedure	Detail of the procedure	Please explain
Acceptable risk levels	<p>Establishment of site-level guidance and standards for acceptable risk levels based on an evaluation of potential chemical and physical risks</p> <p>Establishment of site-level guidance and standards for acceptable risk levels for third party safety in consultation with potentially affected communities, employees and relevant government bodies</p> <p>Establishment of site-level guidance and standards for acceptable risk levels across all life stages, including post-closure</p> <p>Establishment of company-wide standards for acceptable risk levels that follow a company policy to eliminate or minimize water-related risks associated with tailings dams</p> <p>Other, please specify</p> <p>Establishment of site-level guidance and standards for acceptable risk levels for occupational health and safety.</p>	<p>Anglo American has a Group Technical Standard that defines the minimum requirements for Mineral Residue Facilities (MRFs) management, water containment, and water diversion structures management. This Standard applies to all tailings dams, water dams, and mineral waste dumps and stockpiles, either temporary or permanent; and exceeds current ICMM (International Council on Mining and Metals) and regulatory requirements in all host jurisdictions. The standard is applicable throughout the life-cycle, from site selection and early studies, through design, operation and to post-closure, and was peer-reviewed by international specialists. Tailings dams are governed centrally via a globally experienced team, with champions dedicated to each BU. The standard requires 25 key documents with sign-off by the global team. This includes guidance on monitoring, inspection, surveillance and acceptable risk levels for occupational health and safety, third party safety and post mine closure. The standard is applicable for tailings dams in all countries and is updated quarterly and assessed annually. Furthermore, each facility is required to complete quarterly or semi-annually MRF reviews. An online MRF dashboard has been implemented that provides a comprehensive inventory of, and updated risk tables for, all the containment facilities in the Group. Critical controls at facilities are audited internally via the operational risk assurance audits completed through Anglo American Business Assurance Services by our technical specialists, and each of the businesses is addressing identified priority issues. All operations with high-consequence facilities also have an assigned engineer of record and an independent panel of technical experts that review the facilities, in most cases annually. An example of the application of the standard is the fact that our Platinum division management took a decision to stop the Mototolo concentrator for</p>

		<p>three months in 2017 after identifying a potential stability risk at the Helena TSF. We took immediate remedial action by constructing a buttress wall using waste rock to raise the height of the facility, restoring acceptable levels of safety by the end of the year. Ongoing monitoring and further buttressing have reinforced levels of safety.</p>
<p>Operating plan</p>	<p>An operating plan that is aligned with your established acceptable risk levels and critical controls framework</p> <p>An operating plan that includes the operating constraints of the dam and its construction method</p> <p>An operating plan that considers the consequences of breaching the operating constraints of the dam</p> <p>An operating plan that includes periodic review of the foundations and slope materials</p> <p>An operating plan that evaluates the effectiveness of the risk management measures and whether performance objectives are being met</p> <p>Other, please specify</p> <p>An operating plan that includes application of appropriate engineering practices to the slope and foundation materials.</p>	<p>Anglo American has a Group Technical Standard that defines the minimum requirements for Mineral Residue Facilities (MRFs) management, water containment, and water diversion structures management. This Standard applies to all tailings dams, water dams, and mineral waste dumps and stockpiles, either temporary or permanent; and exceeds current ICMM and regulatory requirements in all host jurisdictions.</p> <p>The Consequence Classification of Structure (CCS) rating determines the operating plan. It details minimum design requirements, minimum safety management requirements and minimum inspection and surveillance protocols, based on the consequence classification of the facility; as well as implementation, management and performance monitoring requirements. For example, a Competent Person is assigned on site for all facilities with a 'Major' or 'High' classification. Tailings dams are governed centrally via a globally experienced team, with champions dedicated to each BU. The standard requires 25 key documents with sign-off by the global team. Furthermore, each facility is required to complete quarterly or semi-annually MRF reviews.</p>
<p>Assurance program</p>	<p>An assurance program for the operating phase of the facility that details the procedures for the inspections, audits and reviews</p> <p>An assurance program for each phase of the facilities' life that includes the frequency of the various levels of inspections, audits and reviews</p>	<p>Anglo American has a Group Technical Standard that defines the minimum requirements for Mineral Residue Facilities (MRFs) management, water containment, and water diversion structures management. This Standard applies to all tailings dams, water dams, and mineral waste dumps and stockpiles, either temporary or permanent; and exceeds current ICMM (International Council on Mining and Metals) and regulatory requirements in all host jurisdictions. The standard is applicable throughout the life-cycle, from site selection and early studies, through design, operation and to post-closure, and was peer-reviewed by international specialists. Critical controls at</p>

	<p>An assurance program for each phase of the facilities' life that includes the scope of the various levels of inspections, audits and reviews</p> <p>An assurance program that details the competence requirements for the persons undertaking the inspections, audits and reviews</p> <p>An assurance program that includes an external audit covering the life of facility or the operating plans</p>	<p>facilities are audited internally via the Operational Risk Assurance audits completed through Anglo American Business Assurance Services by our technical specialists, and each of the businesses is addressing identified priority issues. All operations with high-consequence facilities have a competent person (CP) in charge, with the required competencies being described in the standard. Furthermore, every facility must have an assigned engineer of record and an independent panel of technical experts that review the facilities, in most cases annually. An appointed independent Technical Review Panel (TRP) consisting of senior external engineers is mandated for systematic and ongoing independent review. The standard requires 25 key documents with sign-off by the global team. This includes guidance on monitoring, inspection, surveillance, assurance and acceptable risk levels for occupational health and safety, third party safety, post mine closure. The standard is applicable for tailings dams in all countries and is updated quarterly and assessed annually. Furthermore, each facility is required to complete quarterly or semi-annually MRF reviews.</p> <p>An example from this process is the March 2019 review and assessment of facilities at Orapa, De Beers identified potential stability concerns. In a proactive manner, the deposition was stopped, and diverted to the new tailings facility while in situ and lab testing is taking place.</p>
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### W3.3

**(W3.3) Does your organization undertake a water-related risk assessment?**

Yes, water-related risks are assessed

### W3.3a

**(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.**

**Direct operations**

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**Coverage**

Full

**Risk assessment procedure**

Water risks are assessed as part of an enterprise risk management framework

**Frequency of assessment**

More than once a year

**How far into the future are risks considered?**

More than 6 years

**Type of tools and methods used**

Enterprise Risk Management

International methodologies

Other

**Tools and methods used**

ISO 31000 Risk Management Standard

IPCC Climate Change Projections

Internal company methods

Other, please specify

King IV, WRI Aqueduct

**Comment**

None.

**Supply chain**

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**Coverage**

Full

**Risk assessment procedure**

Water risks are assessed as part of an enterprise risk management framework

**Frequency of assessment**

More than once a year

**How far into the future are risks considered?**

More than 6 years

**Type of tools and methods used**

Enterprise Risk Management  
International methodologies  
Other

**Tools and methods used**

ISO 31000 Risk Management Standard  
IPCC Climate Change Projections  
Internal company methods  
Other, please specify  
King IV, WRI Aqueduct

**Comment**

None.

**Other stages of the value chain**

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**Coverage**

Full

**Risk assessment procedure**

Water risks are assessed as part of an enterprise risk management framework



**Frequency of assessment**

More than once a year

**How far into the future are risks considered?**

More than 6 years

**Type of tools and methods used**

- Enterprise Risk Management
- International methodologies
- Other

**Tools and methods used**

- ISO 31000 Risk Management Standard
- IPCC Climate Change Projections
- Internal company methods
- Other, please specify  
King IV, WRI Aqueduct

**Comment**

None.

**W3.3b**

**(W3.3b) Which of the following contextual issues are considered in your organization’s water-related risk assessments?**

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Using the World Resources Institutes Aqueduct tool, about 75% of our sites lie within water-stressed areas. For this reason, the risk classification of water availability was increased to a principal risk in 2018 and is extremely relevant to our water-related risk assessment. Anglo American conducts extensive water availability and water quality monitoring and analysis of surface water and groundwater resources, water

		<p>intensity levels and freshwater usage at all of our sites and the catchments they operate in to assess security of supply and risk. This is done in line with our new water management standard, which has a more structured approach to managing catchment-wide water risks, in partnership with regional stakeholders. The objective is to understand water deficits and surpluses before undertaking a conceptual source-water project to meet shortfalls in collaboration with other industry partners and government. Preliminary findings indicate significant supply shortfalls in 2022 and the importance of water supply and demand management at our operations, other mining operations and municipalities. In 2019, we focused our efforts in forging partnerships between government and industry to accelerate the development of bulk-water infrastructure improvements to supply the Olifants river catchment in the Limpopo region. Furthermore, all operations initiated a detailed self-assessment and gap analysis against the water standard in 2018. As part of this assessment, each site is required to complete a site-wide water balance, providing a more accurate and detailed understanding of water withdrawals, use, efficiency, discharge, consumption, storage and conveyance, and which underpins the effective assessment and evaluation of site-specific water risks. At year end, 62% of our sites had completed (or restated) their water balance, with the remaining site assessments to be finalised in 2020. The results will provide an effective assessment and evaluation of site-specific water risks.</p>
<p>Water quality at a basin/catchment level</p>	<p>Relevant, always included</p>	<p>Off-site surface and sub-surface water quality is a principal risk for Anglo American, specifically related to high salinity, high sulphate content, acid rock drainage and metal leaching at certain operations. Operational water balances will enable us to better understand and manage water quality issues. We are increasingly using hydrogeological models to assist in identifying potential risks related to seepage from tailings dams and affected water containment facilities, and to develop solutions. Along with quantity or withdrawal information, Anglo American conducts extensive water availability and water quality monitoring and analysis of surface water and groundwater resources at all of our sites and the catchments they operate in to assess security of supply and risk. This is done in line with our new water management standard, which has a more structured approach to managing catchment-wide water risks, in partnership with regional stakeholders. At an operational level, Anglo American measures quality parameters of both surface water and ground water quality on a monthly basis to track performance. Water balances enable us to better understand and manage water quality issues. We are increasingly using hydrogeological models to assist in</p>



		<p>identifying potential risks related to seepage from tailings dams and affected water containment facilities, and to develop solutions. In addition, we are required to report these parameters to the authorities as part of our license requirements. We factor current river basin management plans into our risk assessments to ensure we understand any potential limitations or opportunities that may arise in relation to these plans. This is both in terms of quality and quantities. We use this data and our internal company knowledge to feed into the risk assessments we conduct on site regularly.</p>
<p>Stakeholder conflicts concerning water resources at a basin/catchment level</p>	<p>Relevant, always included</p>	<p>Stakeholder conflict over water resources is a significant risk for Anglo American, particularly in Platinum. As part of our risk assessment we identify opportunities to work in partnership with the water utilities and stakeholders to manage the water supply. This catchment-based approach is an integral component of our new Water Management Standard. For example, we participated in the Olifants River water resource development project established with other mining companies, comprised of various local stakeholders. The consortium assesses acid mine drainage in the Olifants river catchment in Mpumalanga, including the feasibility of applying mine-impacted water for irrigation purposes. In Peru, the risk of reduced access to fresh water can raise serious community concerns. Our community engagement around the Quellaveco project builds on the Dialogue Table, a formal consultation process carried out to develop the Quellaveco copper project in a sustainable way. In addition, we use the Socio-Economic Assessment Toolbox (SEAT) to understand our water related socio-economic impacts, enhance stakeholder dialogue and the management of social issues. Our ongoing stakeholder engagement provides us with internal company knowledge that allows us to integrate these issues into our risk processes.</p>
<p>Implications of water on your key commodities/raw materials</p>	<p>Relevant, always included</p>	<p>Anglo American's key procured commodities/raw materials include steel, timber, diesel, chemicals, electricity and explosives. Delays caused by water issues that affect the production of these commodities will reduce production levels and profit margins. The issue surrounding future water implications on key commodities/raw materials are factored into the risk assessment process through engagements and the dissemination of questionnaires to suppliers requesting environmental and water related information. We use the feedback from our internal engagement with our suppliers to feed into our risk management processes.</p>

<p>Water-related regulatory frameworks</p>	<p>Relevant, always included</p>	<p>Failure to comply with water-related regulatory frameworks threatens our regulatory licence to operate. Future potential regulatory changes at a local level can pose significant risks to Anglo American. For example, there is future regulation on the inclusion of water costs in closure cost estimates in South Africa that may lead to increased costs. Anglo American’s corporate water management standard requires sites to manage their water issues in compliance with applicable laws, regulations and other obligations or requirements. We use both internal company knowledge and external legal compliance audits to ensure we stay up to date with current regulatory information and tariffs at a local level. Our regulatory teams within each country also provide us with new or pending regulatory issues within the water areas to allow us to plan for future changes. The Anglo American Legal department, the Minerals Council South Africa forums and other working groups also inform the business risks related to future regulation. Regulatory and tariff information gathered in this manner is integrated into our on-site water risk assessment processes that are ongoing.</p>
<p>Status of ecosystems and habitats</p>	<p>Relevant, always included</p>	<p>Biodiversity and habitats are considered as part of the integrated risk management process because it underpins the structure, function and composition of ecosystems and the services they provide to societies and economies. Water withdrawn and water outputs from our recycling processes or tailings dams are considered a potential threat to biodiversity. Water discharges and accidental spillages have the potential to disturb local ecosystems and habitats. Bio-monitoring surveys are conducted to determine any possible decline in water body integrity due to permitted discharges at certain sites. For operations that have been identified as having a moderate-to-high biodiversity risk we have developed, and are planning implementation of, biodiversity action plans. The implementation of biodiversity action plans provides a structured framework that ensures ecosystems are functioning in the vicinity of mining activities. Our on-site environmental scientists with internal company knowledge manage these issues and feed relevant information into the risk processes on site. In line with international guidance, we have developed a new biodiversity technical standard, approved in November 2018 and have set an ambitious target of a measurable net positive impact (NPI) on biodiversity as a result of Anglo American’s activities. The standard defines the minimum requirements to manage biodiversity. During 2019, we made important progress in applying our new biodiversity technical standard.</p>

Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Unhygienic conditions pose a risk to public health and inherently the health and safety of our employees, resulting in disruptions to the work force. Access to safe water, adequate sanitation and proper hygiene is a basic human right. As such Anglo American incorporates access to fully functioning WASH services at all mining operations and hostels. Internal company knowledge is used to integrate the contextual issues of WASH services into the risk assessment process.
Other contextual issues, please specify	Relevant, always included	Impact of Tailings Storage Facility Failure on water sources. The release of waste material leading to environmental damage of water sources, caused by tailings storage facility (TSF) failure is a significant risk to Anglo American. Anglo American's integrated risk management framework is used to assess our water risks, including those from TSFs. It follows four well-defined processes: 1. Risk Identification 2. Analysis of Risks and Controls, 3. Determination of Management Actions, 4. Reporting and Monitoring. To assess the risk of TSF failure, formal auditing of the implementation of the AA TS 602 001 technical standard (Mineral Residue Facilities and Water Management Structures Standard) takes place. The standard provides minimum criteria and required frequencies for surveillance and inspection of tailings facilities, water dams and waste dumps.

### W3.3c

**(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?**

	Relevance & inclusion	Please explain
Customers	Relevant, always included	We consider this stakeholder group to be relevant in our water risk assessments. Our customers are interested in us being able to meet our contractual metal supply obligations and they want to know what could impact this. In terms of responsible sourcing of our metal they want guarantees we are not polluting the environment. We engage with our customers in various ways. We engage with our customers through business and industry forums and direct personal engagements, where relevant. One of the ways is also through sharing information on our environmental performance on an annual basis in our Sustainability Report. Any relevant feedback we receive from our customers will subsequently be used in the risk management process.

Employees	Relevant, always included	<p>Employees are included in water risk assessment processes where relevant to their work responsibilities. Where required and where relevant, employees that have a responsibility or activity that involve water management will be included in the risk management processes that happen at an operational level. Water targets are also included in performance contracts of relevant managers. In addition, employees are made aware of water risks through communications initiatives around, for example, World Water Day and World Water Week. Engagement with our employees around water is done on a continuous basis through emails, stakeholder workshops and in the day to day running of operations. For example, we have an Environmental Champion of the Quarter Award within Anglo American Platinum. In the previous reporting year, a Water Awareness Quarter was created to increase awareness of the importance of conserving and protecting our water resources. As part of the Water Awareness Quarter we developed a water guideline document that was distributed to all employees. During this reporting year, water formed part of the annual best practice share at the annual year-end Environmental Forum meeting at Anglo American Platinum. In addition, our facilities have fully functioning “WASH” services at all mining operations and hostels. Any relevant feedback we receive from our employees will subsequently be used in the risk management process.</p>
Investors	Relevant, always included	<p>Investor concerns related to water (and environmental issues generally) are increasingly important given the water related risks that Anglo American is exposed to. Investors are particularly interested in understanding the risk around water supply for our operations in water stressed areas and the potential risk of tailings storage facility failure. The potential risk is that investors divest from Anglo American due to environmental issues such as water that directly impact on Anglo American’s ability to generate expected returns. We also consider investors via our materiality panel. We engage with investors through meetings, such as the AGM, interviews and direct electronic queries which occur on a regular basis. These investor views are factored into the company’s water risk assessment.</p>
Local communities	Relevant, always included	<p>The concerns and perspectives of local communities are central to our water risk assessments and social-impact assessments as the risk of stakeholder conflict in a catchment can directly impact our operations. Competition for water among users is of increasing importance, as has been shown by demonstrations by local communities about water supply outside some of our Platinum operations in South Africa. We engage with local communities regularly in a formal (e.g. community meetings) and informal (e.g. one-on-one meetings) manner and the views expressed by these communities factor into our water risk assessments. For example, In Limpopo province, we are evaluating options for investments to improve the water supply to the region and, in Mogalakwena</p>

		<p>municipality, we are partnering with Hall Core Water Mapela to provide 3.5 million litres of potable water daily to more than 70,000 people. In our copper operations, we are working with communities near Los Bronces and El Soldado to optimise rural potable water supply wells with equipment and technology. More than 55,000 people in the Chacabuco province will benefit from Anglo American’s collaboration with WeTechs to develop a sensor-based technology to automate and monitor water levels in 23 rural potable water systems. The project contributed to a 30% increase in water availability, 40% reduction in pipe ruptures and 25% reduction in energy consumption.</p>
NGOs	Relevant, always included	<p>The concerns and perspectives of key NGOs are important considerations in our water risk assessments and social impact assessments as NGOs can create reputational risks and impacts if Anglo American is perceived as not proactively addressing water. Partnerships are the predominant method of engagement with NGO’s to address this. For example, the partnership between Iron Ore Brazil’s Minas-Rio operation and BioAtlântica Institute (IBio), a non-profit organisation that works to improve the environmental quality and promote integrated management of regional resources. The objective of this partnership is the development of an Environmental and Productive Zoning Plan for the Santo Antonio river sub-basins, which is the first step of the Water Availability Master Plan. We also engaged with the Centre for Environmental Rights which commissioned a study to look into the compliance of eight large coal mining operations with their water-use licences. We submitted all the relevant information and co-operated fully. These engagements are typically done face-to-face on a specific needs basis throughout the year and feed into the risk assessment process thereafter, where relevant.</p>
Other water users at a basin/catchment level	Relevant, always included	<p>Competition for scarce resources is increasing and the needs and rights of other users are central to our legal and social license to operate. Water forums are developed and often led by Anglo American operations to ensure that the requirements of all the mining companies, other water users and the municipalities are known and risks determined through these forums. We engage with the water forums in meetings and workshops on a regular basis throughout the year and this information is used in our risk assessments. For example, we actively participate in the Olifants River Water Forum established with other mining companies. Anglo American has also worked with Exxaro and the Strategic Water Partners Network (SWPN) programme to develop the first draft water-loss-reduction plan for Gauteng province. This programme aims to reduce the business-interruption risks in Gauteng and earn water credits.</p>

Regulators	Relevant, always included	Engagement with regulators, such as the Department of Water and Sanitation in South Africa and the Water Department in Chile, is important as they are responsible for setting the regulations, developing water pricing reforms and reviewing and approving our water use licenses. Regulatory risks are critical and thus the concerns and perspectives of regulators are critical inputs to our water risk assessments. Our engagement with the regulators is done regularly throughout the year in face-to-face meetings and workshops. We also engage with local municipalities as the water services authorities through partnerships to improve the overall water availability in the regions in which we operate. We provide assistance (financially and technical) with demand side management and water conservation programmes as well as infrastructure development.
River basin management authorities	Relevant, always included	Anglo American understands that the management of the river basins we operate in can have direct consequences on mining operations, such as inadequate supply of water or community unrest. The river basin management can impact on water quality and quantity provided to Anglo American. Where Catchment Management Associations or regional river basin management authorities have been set up at a local level, Anglo American will engage with this stakeholder. For example, at our Amandebult Platinum operations we actively participate on a regular basis with the Thabazimbi Catchment Management Association. The Association discusses water security, water conservation and feedback by the Department of Water Affairs and Sanitation about New Water Use License Applications and legislation changes if any. For this reason, Anglo American incorporates these stakeholders into its water risk assessment process. Anglo American engages with these associations and authorities through routine meetings.
Statutory special interest groups at a local level	Relevant, always included	Water demand from other interest groups in the catchments we operate, can create risks such as community unrest for those operations. Thus, we take a lead role to co-ordinate stakeholders into interest groups that work together with regulators, including the respective municipality, water catchment agency and governments, to manage the local water issues. For example, our Anglo American Platinum operation leads the Olifants River water resource development project for effective catchment water management. In Chile, our Los Bronces Copper operation participates in the round tables as part of the Maipo Irrigation Society and Mapocho River Supervisory Board to coordinate the use of water rights in the area that we operate in. This engagement usually takes place throughout the year in the form of regular face-to-face meetings.

Suppliers	Relevant, always included	There is a risk of increased production prices in the case of an interruption of the supply of products and commodities. Accordingly, we have started to facilitate engagement with suppliers by requesting environmental and water information to gain further insight into the magnitude of this risk. Furthermore, Anglo American's Supply Chain Innovation team sources high water efficiency equipment and collaborates with suppliers on innovation and technology change. The team works with key global suppliers and some selected start-up suppliers to understand their innovation roadmaps and identify innovation opportunities to improve resource efficiency. These opportunities are then scrutinized to identify the opportunities with the most impact. This engagement usually takes place throughout the year in the form of regular face-to-face meetings. This process is considered in ongoing water risk and opportunity assessments.
Water utilities at a local level	Relevant, always included	In many of the less developed areas in which we operate, we look to play a leading role in supplying water to communities. This mitigates societal risks and contributes to our social license to operate. For example, Kumba Iron Ore pumps excess water from its open-cast mining pits to Sedibeng Water, the local water services provider. Sedibeng treats the water and supplies it to the local communities. We constantly engage with the water supply companies through face-to-face meetings on a regular basis throughout the year.
Other stakeholder, please specify	Not considered	

### W3.3W3.3d

**(W3.3d) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.**

Anglo American uses internal water specialists supported by external consultants and other relevant stakeholders to assess water risks at each operation. This approach allows Anglo American to provide specific details of water related risks in the areas in which they operate. Key risks are identified following a bottom up approach and reflected within a structured framework such that they are systematically managed. This risk management process is aligned with the ISO 31000 international risk management standards and the King Code of Corporate Governance for South Africa (King IV). Anglo American is also using IPPC future climate projections as a tool to understand future water risks.

In 2018, Anglo American newly designated water security as a principal risk in that it has the potential to threaten the business model, future performance, solvency or liquidity of Anglo American.

The tools used in the risk management process evaluate risk at both a company and facility level. Our water management standard ensures coverage of risks at all levels of the value chain as the standard adopts a catchment-wide approach to managing water risks. This ensures both upstream and downstream users and suppliers are catered for when assessing and managing water risks. The use of future climate projections and modelled climate data also ensures that a long-term view (30 to 40 years ahead) is accounted for in assessing water risks.

The risk-response decision making process for strategic, operational and project-related risks, including those from water, follows four well-defined processes: 1. Identifying risks; 2 analysing risks and controls to manage identified risks; 3 determining management actions required; and 4. reporting and monitoring.

The tools used in the risk process cover different timescales. IPPC future climate projections are used to understand water risks in the long-term (30 to 40 years ahead) whereas the other tools are used for short and medium-term operational risks, which can be 5 years in the future.

## W4. Risks and opportunities

### W4.1

**(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes, both in direct operations and the rest of our value chain

### W4.1a

**(W4.1a) How does your organization define substantive financial or strategic impact on your business?**

‘Substantive change’ would be anything that could materially affect our ability to meet business objectives and, or, is of material importance to stakeholders. Materiality is defined as a matter that, in the view of the Board, senior management and key stakeholder groups, is of such importance that it could in the short, medium or long term:

- have a significant influence on, or is of material interest to our stakeholders
- substantively influence the company’s ability to meet its strategic objectives
- has a high degree of inter-connectivity with other material issues.

From a financial perspective and with respect to water, a ‘substantive change’ would be a disruption to our operations or supply chain caused by a water incident that results in a change in production or increase in costs. A water incident may, for example, include a community protesting around





water supply and preventing usual operations or insufficient supply of potable water from a municipal supplier. Considering this definition and to quantify substantive change, Anglo American uses its risk assessment methodology and in particular the financial consequence rating within the risk methodology to identify and measure a substantive financial or strategic impact to our business.

Financially Anglo American defines substantive change as a loss in revenue or increase in operating costs of more than \$25 million.

### W4.1b

**(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?**

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	13	76-99	For the purposes of CDP water reporting Anglo American considers all of its operating mines to be exposed to water risks with a potential to have a substantive financial impact. Offices, exploration and divested mines are not included.

### W4.1c

**(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?**

**Country/Area & River basin**

South Africa

Limpopo

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

25,640,060

**% company's total global revenue that could be affected**

11-20

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 7 individual sites in the Limpopo WMA - these have been grouped into a single facility.

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**Country/Area & River basin**

South Africa

Olifants

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

32,382,934

**% company's total global revenue that could be affected**

1-10



**Comment**

The production value that is deemed most appropriate for Anglo American operations is ‘tonnes milled/processed’, hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 8 individual sites in the Olifants WMA – these have been grouped into a single facility.

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**Country/Area & River basin**

South Africa

Vaal

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

42,396,151

**% company’s total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is ‘tonnes milled/processed’, hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 3 individual sites in the Vaal WMA - these have been grouped into a single facility.

**Country/Area & River basin**

Zimbabwe

Save

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

2,092,404

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There is one site in the Save Basin.

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**Country/Area & River basin**

Brazil

Rio Doce

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

43,459,171

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There is one site in the Rio Doce Basin.

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**Country/Area & River basin**

Brazil

Tocantins

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

2,883,016

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 2 individual sites in the Tocantins Basin - these have been grouped into a single facility.

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**Country/Area & River basin**

Chile

Other, please specify

Aconcagua River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

7,914,144

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin. Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 2 individual sites in the Aconcagua River basin - these have been grouped into a single facility.

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**Country/Area & River basin**



Peru  
Other, please specify  
Asana River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

0

**% company's total global revenue that could be affected**

Less than 1%

**Comment**

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. Note that there are no production values or revenue data for this river basin, as it includes only one project, which is not yet operational.

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**Country/Area & River basin**

Canada  
Attawapiskat River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

1,106,961

**% company's total global revenue that could be affected**

Less than 1%

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There is one site in the Mackenzie River Basin.

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**Country/Area & River basin**

Canada

Mackenzie River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

3,509,901

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.



Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 2 sites in the Mackenzie River Basin - these have been grouped into a single facility.

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**Country/Area & River basin**

Australia  
Fitzroy River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

44,211,565

**% company's total global revenue that could be affected**

11-20

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There are 6 individual sites in the Fitzroy Basin – these have been grouped into a single facility.

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**Country/Area & River basin**

South Africa  
Other, please specify

South Atlantic Coast

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

0

**% company's total global revenue that could be affected**

Less than 1%

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin.

Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There is 1 individual site towards the South Atlantic Coast of Namibia.

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**Country/Area & River basin**

Chile

Other, please specify

Maipo River

**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

1-25

**Production value for the metals & mining activities associated with these facilities**

42,008,430

**% company's total global revenue that could be affected**

1-10

**Comment**

The production value that is deemed most appropriate for Anglo American operations is 'tonnes milled/processed', hence this is used for the river basin. Anglo American regards all of our operating mines to be exposed to water risks that could have a substantive change. There is one individual site in the Maipo River basin.

## W4.2

**(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.**

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**Country/Area & River basin**

Chile

Other, please specify

Maipo

**Type of risk & Primary risk driver**

Physical

Increased water scarcity

**Primary potential impact**

Reduced revenues from lower sales/output

**Company-specific description**

Water scarcity and stress is considered one of Anglo American's most significant water risks considering 50% of operations are located in water scarce areas. For example, Los Bronces which is Anglo American's largest operation in Chile and one of the largest copper deposits in the world is particularly exposed to water stress as the mine is located in an area with Mediterranean climate with little to no surface and groundwater. Chile's central zone, where the operation is located, continues to face unprecedented climate conditions, with 2019 being the driest year since the start of the current decade-long drought, and one of the driest years on record. The Los Bronces operation experienced a reduction in water availability and storage owing to the ongoing drought during 2019. As a result, production decreased by 9% to 335,000 tonnes (2018: 369,500 tonnes), with planned higher grades (0.83% vs 2018: 0.76%) offset by production losses owing to lower water availability. The result was a substantive financial impact due to the 9% reduction in production.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

High

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

207,000,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The potential financial impact was calculated at \$207million and represents potential lost revenue. It is assumed that the 34,500 tonnes of reduced production compared to 2018 at Los Bronces was due to water. The potential lost revenue was thus calculated by multiplying this figure by the average price of copper per tonne in 2019 (\$6000/tonne).

**Primary response to risk**

Increase investment in new technology

**Description of response**

Production decreases due to lower water availability at Los Bronces were partly offset by several water-management initiatives such as increased reuse and recycling, contingency purchases of surplus industrial water from the Andina's Ovejeria tailings dam on the neighbouring mine. The response also included development of new technology like Coarse Particle Recovery and Hydraulic Dry Stacking. In addition, Los Bronces have implemented a water recycling system where water is transported to the operation via a 56-kilometre pipeline from the Las Tórtolas tailings dam significantly increasing water reuse. In 2018 we also started development of a tailings water recovery scheme whereby horizontal wells were drilled into the bottom of the dam to facilitate drainage of tailings water for re-use in the site's plant. Solar conductive evaporation covers have also been installed to reduce water loss from tailings dams with results showing that the covers can reduce evaporation by up to 90%. This will facilitate the recovery of water annually, while generating 0.5MW of solar energy at Los Bronces.

**Cost of response**

17,000,000

**Explanation of cost of response**

Recent water project expenditure at Los Bronces was US\$17 million which excludes the operational costs of purchasing water. These are once off costs and derived from quotations and invoices.

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**Country/Area & River basin**

South Africa  
Olifants

**Type of risk & Primary risk driver**

Physical

Increased water scarcity

**Primary potential impact**

Increased compliance costs

**Company-specific description**

Anglo American Coal South Africa's operations are located in the Olifants river catchment in Mpumalanga. This catchment is under significant water stress because of historical coal mining impacts, compounded by impacts from agriculture, industry and sewage pollution. The main water quality issue associated with many Coal operations is that mine affected water is saline. One of the risks associated with this saline rich water is possible water quality non-compliance when discharging to the environment. For example, in previous reporting years there were incidents at Coal South Africa's operations, that related to the overflow of mine affected water into the receiving environment. More stringent discharge requirements are likely to result in increased compliance costs and reputational risk. The potential impacts may involve an increase in operational costs and long-term reduction in shareholder value. New draft legislation in South Africa, which incorporates water liability in closure costs, has been published and may result in significant increases in current closure liabilities across the industry. Active treatment of this saline water with available technology is likely to result in significant cost increases to operations.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1,500,000,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The potential financial impact relates to the total establishment capex cost (\$1.5 billion) of the eMalahleni water-reclamation plant which was incurred historically.

**Primary response to risk**

Increase investment in new technology

**Description of response**

At Coal South Africa, long term integrated water management plans are being developed for sites to mitigate non-compliance risk and post closure water management liability. These will be based on hydrogeological models, which provide high confidence water and salt balances and improve prediction and quantification of risks at the receptor. Coal South Africa uses water-treatment plants to treat mine-affected water. The flagship eMalahleni water-reclamation plant treats up to 50 million litres of mine-affected water every day and supplies water to the eMalahleni Municipality. Coal South Africa is piloting passive water-treatment technologies at three sites, as they do not require active human intervention in the long term, or power. The treated effluent is suitable for irrigation of crops in local communities. This will reduce our potential closure liability estimate. Mafube mine was selected by the Department of Water and Sanitation as the first trial site to demonstrate aspects of mine-water irrigation for crop production. The irrigation project will be part of our Green Engine project. The Green Engine project's purpose is to create a self-sustaining, integrated agro-industrial hub, using mine-impacted land and mine water at a coal mine that is due for closure - sustainable mine water re-use and rehabilitated land utilisation on a regional scale helps to create secondary economies with community involvement, ensuring a positive legacy is created for life after mining.

**Cost of response**

880,000

**Explanation of cost of response**

The cost of the response (\$880,000) relates specifically to the costs Anglo American contributed to both the Green Engine and Mafube irrigation trial project to date. These costs are for infrastructure and other studies and are a once off cost.

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**Country/Area & River basin**

South Africa  
Limpopo

**Type of risk & Primary risk driver**

Physical  
Increased water scarcity

**Primary potential impact**

Constraint to growth

**Company-specific description**

The Mogalakwena Complex is water secure for production under current conditions. Expansion of the Mogalakwena Complex is, however, potentially hindered by regional water scarcity due to increased demand and low water assurance associated with drought conditions. This is further compounded by climate change, with modelling predicting highly variable drought and wet cycles with a potential 10% increase in high and low rainfall margins, as well as shorter and wetter rainy periods, with longer dry periods per annum. The mine is located in an area where there are rapidly growing demands for water to support agricultural, mining, industrial and domestic consumption in order to support on-going economic development and growth.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate



**Potential financial impact figure (currency)**

4,100,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The financial impact is estimated based on the net sales revenue lost from a single day at our biggest Platinum operation that faces the most significant long-term water supply risks in South Africa, Mogalakwena. Mogalakwena's revenue for the reporting year was \$1.5 billion. If the operation is stopped for a day due to water supply concerns this equates to approximately \$4.1 million per day.

**Primary response to risk**

Other, please specify

Water-related capital expenditure

**Description of response**

In order to mitigate the current risk of current water supply to Mogalakwena, we have 1. Test filtered tailings to dewater tailings; 2. Upgraded the Polokwane Sewage Works to secure an additional 6ML of treated sewage water for reuse in the operation which has enabled us to increase our total effluent allocation from the Polokwane wastewater plant to 20Mℓ/day. To fully use the allocation from this plant, we have initiated a pipeline upgrade project from Polokwane to Mogalakwena which is expected to be completed in 2021; 3. Undertaken tailings seepage recovery; 4. Evaluated the utilisation of additional wastewater effluent from Municipal Wastewater treatment plants in Limpopo. 5. Completed groundwater studies as part of the expansion studies to determine potential water sources for the concentrator; and 6. Invested in the research and development of various water-saving technologies with some already in the pilot phase e.g. course-flotation. In addition to this, Anglo American Platinum has initiated a project to provide access to 3.5ML of potable water to 100,000 members of Mapela community in the 42 villages around Mogalakwena complex, in partnership with Mogalakwena municipality and the Mapela traditional authority.

**Cost of response**

3,100,000

### **Explanation of cost of response**

\$6.7 million has been spent by Anglo American Platinum since 2014 to support the upgrade of Polokwane's sewage works for quality improvement and to secure an additional 6 MI/d for Mogalakwena. Of the total cost \$0.9 million was incurred in the reporting year. In addition, \$2.2million was spent on the Hall Core Mapela Community project, hence the total cost is \$3.1million. The cost of the response relates to actual costs incurred during the reporting year from invoices and are once off costs.

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### **Country/Area & River basin**

Brazil

Rio Doce

### **Type of risk & Primary risk driver**

Physical

Increased water scarcity

### **Primary potential impact**

Increased operating costs

### **Company-specific description**

One of the biggest challenges faced by the Minas-Rio operation is the water scarcity that affects the South-Central region of Brazil. Since 2012, rainfall has been below the historical average. These lower rainfall rates have had an impact on the water availability in the Peixe River, which is responsible for the supply of up to 80% of fresh water for primary activities at the Minas-Rio operation (steady state). The low levels of water also impact the quality of the water in the Peixe River. Two years previously, the operation completely shut down water abstraction from the Peixe River, due to the mandatory limits imposed by the operation's water abstraction permit in a condition of regional water scarcity. During this restriction period in 2017, water availability to support operations reached critically low levels and, while operations were sustained mainly by the contingency water volumes stored in the tailings dam, water abstraction from the tailings dam was exploited almost to complete exhaustion. Only with emergency actions taken in order to maximise the use of "water" ponds isolated within the tailings dam at the end of the dry season, it was possible to prevent an operational stoppage. In the last reporting year, there has been better rainfall when compared to the previous six years of water shortages, which reflects in the increase of the availability for the water catchment in the Peixe river. However, this is still a risk to the operation and has led to impacts such as increased operating costs to address water scarcity.

**Timeframe**

1-3 years

**Magnitude of potential impact**

Medium

**Likelihood**

More likely than not

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

6,300,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The potential financial impact of \$6.3million represents the potential loss of revenue from a day's lost production due to water scarcity issues. This is calculated from the revenue generated by the operation in the reporting year of \$2.3billion. Although this has not happened yet at Minas Rio this has occurred at other Anglo American operations.

**Primary response to risk**

Increase investment in new technology

**Description of response**

To mitigate this risk, a water security plan in case new water supply is needed was prepared for Minas Rio considering the long-term view of the operation's water demand. In parallel, studies and reviews are being carried out to review the operational water balance to verify opportunities for reducing water consumption (filtering and increasing the content of solids in the pipeline). The operating license for the tailings dam was

obtained, consequently increasing the availability of storage for water. The Active Treatment System (ATS), downstream of the tailings dam, remains in operation in order to guarantee the appropriate water discharges. Stochastic studies are currently being carried out to assess probabilistic scenarios on the main water sources. These actions will allow a greater understanding of the basin and future scenarios. There have been significant advances in the beneficial use of water, with emphasis on the feasibility of reusing pipeline water in the port complex (Porto do Açu).

**Cost of response**

6,000,000

**Explanation of cost of response**

In the order of US\$6 million was spent on modifying the chemistry of the water as well as the acquisition and installation of additional pumping capacity at the tailings dam to increase the use of process water recirculated and stored in the tailings dam reservoir. The cost estimates were derived from incurred operational costs and invoices and were a once off cost.

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**Country/Area & River basin**

Chile

Other, please specify

Aconcagua

**Type of risk & Primary risk driver**

Physical

Leaching of pollutants to groundwater bodies

**Primary potential impact**

Fines, penalties or enforcement orders

**Company-specific description**

At Copper's El Soldado operation, sulphate seepage from the El Torito tailings dam has the potential to impact downstream water bodies and groundwater wells used by the local community. Sulphate concentration limits in the monitoring wells and the dam lagoon have exceeded the permit conditions and the Chilean regulations for potable and irrigation water. The impacts are being mitigated by way of the installation of

drains and further studies are being undertaken. Long term sustainable and more effective solutions have been evaluated, designed and are included in the Environmental Impact Assessment (EIA) for the tailings dam expansion that was submitted in the reporting year to enable rapid implementation. There is a potential risk of fines or penalties from the authorities as well as impacts on the communities that use downstream wells if the water is polluted.

**Timeframe**

1-3 years

**Magnitude of potential impact**

Medium

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

6,000,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The potential financial impact represents the most significant fine issued by the authorities in Chile for environmental non-compliance and represents the worst-case scenario. This impact is potentially ongoing for the life of the mine (30 to 40 years) or until such time as the issue has been resolved.

**Primary response to risk**

Engage with regulators/policymakers

### **Description of response**

Superficial drains were complemented by the installation of underground drains to capture the seepage. These drains were installed during 2016 and the seepage water is pumped back to the tailings dam. Additional studies to identify solutions and technologies to mitigate sulphate in the tailings dam water are underway.

### **Cost of response**

1,000,000

### **Explanation of cost of response**

The installation of the underground drains to capture seepage cost approximately US\$1 million and was a once off cost.

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### **Country/Area & River basin**

Chile

Other, please specify

Aconcagua

### **Type of risk & Primary risk driver**

Physical

Leaching of pollutants to groundwater bodies

### **Primary potential impact**

Increased operating costs

### **Company-specific description**

At Copper's Los Bronces operation, acidic water is generated in the inactive Donoso waste rock dump. Los Bronces is in a climatic region of considerable variability, which experienced increased precipitation rates in 2016 and 2017, following a prolonged drought that ended in 2015. Although this was below the average precipitation, snowfall on the waste dump in 2017 increased the rate of acid mine drainage during that period. The operation manages the discharge of acid mine drainage into the environment using an engineering design to contain, manage and treat melting ice on the waste rock dump, and is currently developing a permanent solution to the issue. In addition, the operation developed a Water Discharge Strategy in compliance with ICMM requirements and the local context of the Los Bronces Operations. The objectives of this

strategy are to comply with regulatory changes as well as ensure early warning plans are implemented to trigger specific actions as required and ensure baseline data is available in a timely manner.

The primary potential impact is increased operating costs in developing a system to manage and treat the polluted water. Secondary impacts include fines or penalties from pollution of the groundwater.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Medium

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

35,000,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

\$35 million is the estimated cost of building a water treatment plant, derived from engineering quotes, and represents the worst-case scenario as the site is investigating alternatives including recycling and re-use. These costs would only be incurred between 2020 and 2022 if it is necessary to build the water treatment plant.

**Primary response to risk**

Engage with regulators/policymakers

### **Description of response**

The first phase in addressing this risk was carried out in 2016 and involved the installation of a sophisticated collection system to collect and recycle the acid mine water through the tailings facility. The second phase involves building a water treatment plant, which would only be required between 2020 and 2022. However, the site is engaging with the authorities and investigating alternatives including recycling and re-use and have agreed together on the plan for mitigating the risk. This plan was submitted in the reporting year for approval by the authorities.

### **Cost of response**

30,000,000

### **Explanation of cost of response**

The installation of a sophisticated collection system to collect and recycle the acid mine water through the tailings facility cost approximately US\$30 million and is a once-off cost.

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### **Country/Area & River basin**

Canada  
Attawapiskat River

### **Type of risk & Primary risk driver**

Reputation & markets  
Water-related litigation

### **Primary potential impact**

Litigation

### **Company-specific description**

The impact of our mining operations on surface and ground water sources is of particular concern at De Beers Victor mine (which is currently undergoing closure) where mercury levels occur naturally in the local environment. The site monitors mercury in surrounding waterways and fens to comply with provincial requirements and confirm projections from the operation's environmental impact statement. In December 2016, Wildlands League publicly announced that they were initiating legal action (a private prosecution) against De Beers Canada associated with alleged issues with mercury monitoring at Victor mine. The prosecution alleges that De Beers Canada's annual reporting of its mercury



monitoring programme to the Government of Ontario and Attawapiskat First Nation did not comply with the reporting requirements specified in the permit. De Beers Canada defended the prosecution and in December 2018, the judge found in favour of De Beers Canada and that the prosecution and all charges against De Beers Canada should be stayed. The private prosecutor then filed an appeal. The appeal was heard by a provincial court judge on 25 June 2019 and the decision was issued on 24 December 2019 in favour of the private prosecutor's appeal. De Beers Canada is seeking leave to appeal the decision to the Court of Appeal. A decision on the request for leave would be expected to occur in Q1 of 2020.

**Timeframe**

1-3 years

**Magnitude of potential impact**

High

**Likelihood**

Very unlikely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

10,000,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The financial impact of \$10 million is calculated based on the anticipated closure costs at Victor which includes two phases of environmental site assessments, human health and ecological risk assessments and remedial action and risk management planning to define the source and

nature of the low levels of mercury present in two creeks adjacent to Victor mine. The results of this work will be integrated into the mine closure plan.

**Primary response to risk**

Engage with regulators/policymakers

**Description of response**

Victor's Annual Mercury Monitoring Report was completed and published in July 2016. In response to comments received from various stakeholders, the detailed report provides additional data and analysis not included in previous annual reports, including information over and above that required by the regulator. The site carries out continuous monitoring and review to mitigate any mercury discharges. Results of the monitoring demonstrated that mercury levels in the surrounding environment are consistently below the Canadian Water Quality Guidelines. De Beers will continue this monitoring throughout the mine's closure process.

For additional assurance, environmental site assessments and a human health and ecological risk assessment were conducted to assess the links between the mercury and the mine, and potential risks associated with the river basin's water. The conclusion of the assessment was that there is little or no risk. The outcomes of these assessments, the monitoring and remedial action and risk management planning work was integrated into the mine closure plan in 2018.

**Cost of response**

10,000,000

**Explanation of cost of response**

The final closure cost for Victor mine in 2018 totalled to US\$10 million.

**W4.2a**

**(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.**

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**Country/Area & River basin**

South Africa

Limpopo

**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

Physical

Inadequate infrastructure

**Primary potential impact**

Constraint to growth

**Company-specific description**

All Anglo American Platinum operations in South Africa and Zimbabwe are in water stressed areas. Increasing water scarcity in South Africa because of rising demand, deterioration of bulk infrastructure and intermittent droughts, exacerbated by the El Nino weather effect, will continue to pose a challenge to our operations and future expansions, and is a particular risk for our operations in Limpopo. Water supply from bulk water infrastructure typically provided by both local and national government has been and continues to be a significant concern. Expansion of the Mogalakwena Complex is potentially hindered by limited water access and on-going drought conditions. Water supply to the Rustenburg and Thabazimbi circles has been a concern for several years because of a continued increase in the demand for potable water in the area by other users. The primary impact is constrained growth and increased operational costs from sourcing alternative water supplies which impacts all parts of our value chain, such as the potential risk of community unrest should the community perceive that Anglo American Platinum is using up the available water in the catchment and reduced taxes and revenue for suppliers and government.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

High

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

4,100,000

**Potential financial impact figure - minimum (currency)**

**Potential financial impact figure - maximum (currency)**

**Explanation of financial impact**

The financial impact is estimated based on the net sales revenue lost from a single day at our biggest Platinum operation that faces the most significant long-term water supply risks in South Africa, Mogalakwena. Mogalakwena's revenue for the reporting year was \$1.5 billion. If the operation is stopped for a day due to water supply concerns this equates to approximately \$4.1 million per day.

**Primary response to risk**

Direct operations

Other, please specify

Engage with regulators/policymakers and other stakeholders

**Description of response**

Anglo American has signed a memorandum of understanding with the Global Water Development subsidiary of private infrastructure developer Blackstone. The aim is to develop water-related infrastructure projects as private/public partnerships, financed and managed by Blackstone. As a result, Amplats commissioned a study to restate the regional water balances of the Limpopo region which showed that the Flag Boshielo Dam would be water stretched up to 2030 because the Olifants River Development Scheme has insufficient resources to facilitate additional bulk water transfer from the De Hoop Dam. Accordingly, various regional bulk water generation projects were expedited in 2018.

Anglo American engaged with the Polokwane municipality and a large local brewery to initiate a potable water, demand-side management programme within the region, under the Strategic Water Partners Network. Based on the assessment findings, a 20% reduction of the system

volume and a 50% increase in the billed consumption was recommended as realistic targets. This will result in a saving of 12.7 Ml/day. As a result of the volume reduction and increase in billed consumption, the municipality will have an additional R 111.04 million/annum in increased revenue which will contribute greatly to water security in the area.

Anglo American has also been actively involved in partnerships (Olifants Joint Water Partnership and the Lebalelo Water Board) to source water into the Northern and Eastern Limb platinum operations and communities. This has included collaboration with 30 organisations to supply bulk water services to the area. Used (grey) water is also sourced for the Northern Limb operations through partnerships with the municipalities of Polokwane and Mokopane.

**Cost of response**

600,000

**Explanation of cost of response**

The cost of the response is the budget of \$600,000 for the first phase of the Strategic Water Users Network project at the Polokwane municipality for 2019 and 2020.

## W4.3

**(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes, we have identified opportunities, and some/all are being realized

## W4.3a

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

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**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

Anglo American aims to eliminate the use of fresh water from mining processes. Our work towards a waterless mine focuses on evaporation measurement and dry tailings disposal, exploring innovative approaches to dry separation, and non-aqueous processing. Mining operations store water in dams to ensure a reliable water supply and enable recycling, but evaporation accounts for 10% to 25% of water lost. We are testing a new technology developed by Australia’s Commonwealth Scientific and Industrial Research Organisation (CSIRO) to more accurately measure and manage evaporation rates. Significant water losses are also incurred in tailings disposal. Fine particle slurries are particularly difficult to dewater and current dry disposal options have prohibitive capital and operating costs. In partnership with an innovation leader, we are conducting promising research, testing bespoke polymers to separate water from fine slurries. This lower-cost dewatering technology creates dry, stackable tailings. To minimise the amount of water sent to tailings in the first place, we are also exploring innovative methods for more targeted comminution (crushing and grinding ore to the required particle size), dewatering waste far earlier in the process. Early estimates indicate the potential for a 30% to 40% reduction in water used per unit of mineral production. We are confident these dry processing techniques will allow us to re-use 80% of process water, moving us closer towards the waterless mine.

**Estimated timeframe for realization**

More than 6 years

**Magnitude of potential financial impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

15,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

### **Explanation of financial impact**

An example is provided for the Los Bronces operation. The operation loses 25% of its water to evaporation on a yearly basis. The site uses approximately 30 million m<sup>3</sup> per year of new fresh water at approximately \$2/m<sup>3</sup>. The installation of evaporation covers will eliminate this evaporation loss and can result in cost savings of approximately \$15million.

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### **Type of opportunity**

Products and services

### **Primary water-related opportunity**

New R&D opportunities

### **Company-specific description & strategy to realize opportunity**

One of the great challenges facing the mining industry is how to extract more metal with less waste, while minimising costs and our environmental footprint.

Our Concentrate the Mine™ concept integrates different enabling technologies to deliver a large increase in output, with a significant reduction in energy and water use.

Coarse particle recovery (CPR) allows us to float particles at sizes two to three times larger than normal, consuming less energy and increasing production. It enables us to easily extract water from the process, leaving a waste stream that is dry and stackable. CPR will allow us to re-use 80% of process water and can be applied to most Anglo American assets. It represents an important change because water sent to tailings disposal often represents the biggest water loss at a mine.

Following successful testing in the laboratory and at small pilot scale at Los Bronces, we are now constructing a demonstration plant at El Soldado copper mine that uses a CPR technology called Hydrofloat™ in a new way. Here, a single, five metres in diameter Hydrofloat™ cell, the largest in the world, will treat 100% of mill throughput, with the objective of proving the waste rejection process at full scale. If we can prove the process at El Soldado, Anglo American will be the first company in the world to deploy CPR successfully to reject coarse gangue (near-worthless waste material) on a commercial scale. If that happens, it will change the way the mining industry approaches flotation. As early adopters this will enable Anglo American to set new standards for base-metal concentrate processing and to become the industry leaders in dry stacking.

**Estimated timeframe for realization**

More than 6 years

**Magnitude of potential financial impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

18,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

An example is provided for the Los Bronces operation. The operation uses 30million m3 per year of new fresh water at approximately \$2/m3. The use of CPR technology can result in savings of up to 30%, translating into a cost saving of approximately \$18million.

## **W5. Facility-level water accounting**

### **W5.1**

**(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.**



**Facility reference number**

Facility 1

**Facility name (optional)**

**Country/Area & River basin**

Australia

Fitzroy

**Latitude**

-24.631

**Longitude**

150.061

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

18,194

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

5,765

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

4,386

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

1,098

**Withdrawals from third party sources**

6,946

**Total water discharges at this facility (megaliters/year)**

2,754

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

1

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

2,753

**Total water consumption at this facility (megaliters/year)**

15,440

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). The noteworthy decrease in consumption at our Fitzroy basin sites is the result of a 22% decrease in overall water withdrawal in the reporting year (consumption is calculated as the (total withdrawal) minus (total discharge). This is attributed to our Dawson coal mine where groundwater and fresh surface water withdrawal decreased by 36% and 49% respectively.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data.

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 2

**Facility name (optional)**

**Country/Area & River basin**

South Africa  
Olifants

**Latitude**

-26.155

**Longitude**

28.836

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

54,956

**Comparison of total withdrawals with previous reporting year**

Much higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

180

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

37,241

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

295

**Withdrawals from third party sources**

17,240

**Total water discharges at this facility (megaliters/year)**

16,221

**Comparison of total discharges with previous reporting year**

Lower

**Discharges to fresh surface water**

3,216

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

13,005

**Total water consumption at this facility (megaliters/year)**

38,736

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Water consumption increased significantly at our Olifants river basin facilities. This is directly attributed to substantial groundwater withdrawal (dewatering, drainage and sumps) from the open pit mine at Zibulo in the reporting year. Water discharge to groundwater and third part destinations also decreased by 14% in the reporting year which is also directly attributed to our water reclamation plant for water reuse at our coal facilities.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding

financial years' data.

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 3

**Facility name (optional)**

**Country/Area & River basin**

South Africa

Vaal

**Latitude**

-27.737

**Longitude**

22.997

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

33,778

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

3,298

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

28,526

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

1,954

**Total water discharges at this facility (megaliters/year)**

19,676

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

463

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

337

**Discharges to third party destinations**

18,876

**Total water consumption at this facility (megaliters/year)**

14,102

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Water withdrawal, discharge and consumption remain relatively consistent with the previous reporting year. Discharges increased slightly to fresh surface water, groundwater and third-party destinations, while water withdrawal increased by 1500 ML due to a noteworthy increase in fresh surface water withdrawal at Kolomela.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 4

**Facility name (optional)**



**Country/Area & River basin**

South Africa

Limpopo

**Latitude**

-24.007

**Longitude**

28.928

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

25,562

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

12,508

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

13,053

**Total water discharges at this facility (megaliters/year)**

1,183

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

2

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

1,140

**Discharges to third party destinations**

41

**Total water consumption at this facility (megaliters/year)**

24,379

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Water withdrawal, discharge and consumption remained relatively consistent with the previous reporting year at our Limpopo facilities. The most significant changes occurred at our Mogalakwena Complex where groundwater withdrawal decreased by 1190ML due to continued efforts to increase water withdrawal from treated municipal effluent sources as an alternative to potable water withdrawal.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 5

**Facility name (optional)**

**Country/Area & River basin**

Brazil

Rio Doce

**Latitude**

-18.881

**Longitude**

-43.429

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

28,781

**Comparison of total withdrawals with previous reporting year**

About the same

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

25,243

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

1,612

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

1,911

**Withdrawals from third party sources**

15

**Total water discharges at this facility (megaliters/year)**

13,053

**Comparison of total discharges with previous reporting year**

Higher

**Discharges to fresh surface water**

4,135

**Discharges to brackish surface water/seawater**

8,904

**Discharges to groundwater**

3

**Discharges to third party destinations**

11

**Total water consumption at this facility (megaliters/year)**

15,728

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Water consumption at our Minas Rio facility remained relatively constant in the year except for a significant increase in discharge to brackish surface water/sea water destinations.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 6

**Facility name (optional)**

**Country/Area & River basin**

Brazil  
Tocantins

**Latitude**

-15.073

**Longitude**

-48.967

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

6,327

**Comparison of total withdrawals with previous reporting year**

Lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

6,233

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

91

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

2

**Withdrawals from third party sources**

1

**Total water discharges at this facility (megaliters/year)**

1

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

1

**Total water consumption at this facility (megaliters/year)**

6,326

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). The decrease in consumption is attributed to a 2420 ML decrease in produced water at our Barro Alto facility which comes from moisture in extracted/mined ore. Production

(mined ore) decreased by 12% in the reporting year.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 7

**Facility name (optional)**

**Country/Area & River basin**

Chile

Other, please specify

Aconcagua River

**Latitude**

-32.65

**Longitude**

-71.16

**Located in area with water stress**



Yes

**Total water withdrawals at this facility (megaliters/year)**

5,723

**Comparison of total withdrawals with previous reporting year**

Higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

142

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

5,358

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

223

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

390

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

144

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

246

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

5,333

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). The increase in water consumption at our Aconcagua river facilities increased as a result of a significant increase in groundwater withdrawal at El Soldado. The region is facing severe drought conditions, hence decreased freshwater withdrawal (82%) was offset by increased groundwater withdrawal (50%) in the reporting year. Discharge to fresh surface water and groundwater also decreased slightly, resulting in higher water consumption in the reporting year. Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data. It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

**Facility reference number**

Facility 8

**Facility name (optional)**

**Country/Area & River basin**

Chile

Other, please specify

Maipo River

**Latitude**

-33.148

**Longitude**

-70.286

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

16,703

**Comparison of total withdrawals with previous reporting year**

Much higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

7,425

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

4,370

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

1,260

**Withdrawals from third party sources**

3,647

**Total water discharges at this facility (megaliters/year)**

221

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

221

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

16,482

**Comparison of total consumption with previous reporting year**

Much lower

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Los Bronces is the only facility located within the Maipo river basin. The region surrounding Los Bronces is currently facing the longest 'mega-drought' on record, resulting in a 9855 ML decrease in fresh surface water withdrawal at this site. Water withdrawal from third party sources did increase by 2540 ML in the reporting year as water was brought in to ensure operational sustainability. Discharge decreased by 0%, hence the decrease in water consumption is a direct result of the decreased withdrawal.

Thresholds for comparison: • "Much lower" pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years' data. • "Lower" pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years' data. • "About the same" pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years' data. • "Higher" pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years' data. • "Much higher" pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years' data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 9

**Facility name (optional)**

**Country/Area & River basin**

Peru

Other, please specify

Asana River

**Latitude**

-17.149

**Longitude**

-70.616

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

1,668

**Comparison of total withdrawals with previous reporting year**

Much higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

599

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

1,068

**Total water discharges at this facility (megaliters/year)**

0

**Comparison of total discharges with previous reporting year**

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

1,668

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Our greenfield project, Quellaveco copper mine, is the only site located in the Asana river basin. The mine is currently under construction; hence water withdrawal levels remain irregular on a month to month basis according to the construction stage. Groundwater and third party water withdrawal increased significantly in the reporting year while discharge decreased by 0.83ML to 0ML in the reporting period.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the

preceding financial years' data. • "About the same" pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years' data. • "Higher" pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years' data. • "Much higher" pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years' data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 10

**Facility name (optional)**

**Country/Area & River basin**

Zimbabwe

Save

**Latitude**

-19.623

**Longitude**

30.094

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

1,538

**Comparison of total withdrawals with previous reporting year**



Higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

1,538

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

0

**Comparison of total discharges with previous reporting year**

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

1,538

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Unki Complex is the only facility located in the Save river basin. A combination of increased production (tonnes milled increased by 9%) and persistent, severe drought conditions led to higher fresh water withdrawal and overall water consumption in the reporting year. Although discharge did take place during the year, the volume (0.12ML) was small.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 11

**Facility name (optional)**

**Country/Area & River basin**

South Africa  
Other, please specify  
South Atlantic Coast

**Latitude**

-26.67

**Longitude**

17.06

**Located in area with water stress**

Yes

**Total water withdrawals at this facility (megaliters/year)**

158

**Comparison of total withdrawals with previous reporting year**

Much lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

158

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

0

**Comparison of total discharges with previous reporting year**

About the same

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

158

**Comparison of total consumption with previous reporting year**

Much lower

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Namaqualand mine is the only facility located within the South Atlantic Coast river basin. The region is currently experiencing severe drought conditions, leading to a 52% decrease in fresh surface water withdrawal in the reporting year. Namaqualand does not discharge water, hence the 52% decrease in water consumption is a direct result of the drop in water withdrawal in the reporting year.

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

---

**Facility reference number**

Facility 12

**Facility name (optional)**

**Country/Area & River basin**

Canada  
Attawapiskat River

**Latitude**

52.822

**Longitude**

-83.887

**Located in area with water stress**

No

**Total water withdrawals at this facility (megaliters/year)**

12,918

**Comparison of total withdrawals with previous reporting year**

Much lower

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**

7,616

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

5,243

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

59

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

1,614

**Comparison of total discharges with previous reporting year**

Much lower

**Discharges to fresh surface water**

1,614

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

11,305

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated (withdrawal minus discharge). Victor mine is the only site that lies within the Attawapiskat basin. Closure procedures started at this facility in the reporting year resulting in a 51% reduction in groundwater withdrawal and a 95% reduction in fresh surface water discharge relative to the previous reporting year. The significant increase in water consumption was the direct result of the 29 968 ML in surface water discharge, as the water consumption is calculated as (total withdrawals) minus (total discharges).

Thresholds for comparison: • “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data. • “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. • “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data. • “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data. • “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding

financial years' data.

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

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**Facility reference number**

Facility 13

**Facility name (optional)**

**Country/Area & River basin**

Canada  
Mackenzie River

**Latitude**

63.435

**Longitude**

-109.201

**Located in area with water stress**

No

**Total water withdrawals at this facility (megaliters/year)**

2,683

**Comparison of total withdrawals with previous reporting year**

Higher

**Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes**



1,976

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

708

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0

**Total water discharges at this facility (megaliters/year)**

3,041

**Comparison of total discharges with previous reporting year**

Much higher

**Discharges to fresh surface water**

2,885

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

156

**Discharges to third party destinations**

0

**Total water consumption at this facility (megaliters/year)**

-358

**Comparison of total consumption with previous reporting year**

Much lower

**Please explain**

Water withdrawals are directly measured. Consumption data is estimated. The decrease in water consumption is directly attributed to fresh surface water discharge at our Gahcho Kue facility which increased by more than 700% year on year. In order to access the kimberlite deposits at the Gahcho Kue mine, the water level of parts of Kennedy lake was lowered. Consequently, clean water is continuously pumped into another watershed, resulting in discharges exceeding consumption. The result is the “negative” 358 ML of water consumption (consumption is calculated as (total withdrawals) minus (total discharges)).

Thresholds for comparison:

- “Much lower” pertains to data of decreasing trend which has a difference in 30% or more from the preceding financial years’ data.
- “Lower” pertains to data of decreasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data.
- “About the same” pertains to data which has less than 10% difference (greater or lesser) from the preceding financial years’ data.
- “Higher” pertains to data of increasing trend which has a difference of more than 5% and less than 30% from the preceding financial years’ data.
- “Much higher” pertains to data of increasing trend which has a difference in 30% or more from the preceding financial years’ data.

It is important to note that this analysis is based on the water data provided by the operations which has not been verified or validated against the water balance.

**W5.1a**

**(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been externally verified?**

**Water withdrawals – total volumes**

---

**% verified**

Not verified

**Water withdrawals – volume by source**

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**% verified**

Not verified

**Water withdrawals – quality**

---

**% verified**

Not verified

**Water discharges – total volumes**

---

**% verified**

Not verified

**Water discharges – volume by destination**

---

**% verified**

Not verified

**Water discharges – volume by treatment method**

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**% verified**

Not verified

**Water discharge quality – quality by standard effluent parameters**

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**% verified**

Not verified

**Water discharge quality – temperature**

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**% verified**

Not verified



**Water consumption – total volume**

**% verified**  
Not verified

**Water recycled/reused**

**% verified**  
Not verified

**W6. Governance**

**W6.1**

**(W6.1) Does your organization have a water policy?**

Yes, we have a documented water policy that is publicly available

**W6.1a**

**(W6.1a) Select the options that best describe the scope and content of your water policy.**

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations	The policy applies to all our operations, our staff, contractors and relevant business partners on a global level, unless any aspect of it is not permitted by local law or regulation. The policy recognises that water is a fundamental requirement of our operations and future development. It distinguishes Anglo American’s role and responsibility in water and its aim to be a responsible water steward by maximising the value from water resources while seeking to achieve no long-term net harm to the areas in which we operate. The policy recognises that Anglo American operations are a member of the larger community. Where possible, we strive to go beyond regulatory requirements to improve water access to our communities and lead sustainable water management

	<p>Description of water-related standards for procurement</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Company water targets and goals</p> <p>Commitment to align with public policy initiatives, such as the SDGs</p> <p>Commitments beyond regulatory compliance</p> <p>Commitment to water-related innovation</p> <p>Commitment to stakeholder awareness and education</p> <p>Commitment to water stewardship and/or collective action</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>within our regions. Stakeholders are one of five fundamental principles that underpin the policy. As such, it is recognised that water is an environmental and human right that requires the identification, development and implementation of collaborative solutions with our stakeholders. The policy specifies responsibilities to be implemented so that Anglo American can achieve its strategic water ambition. These responsibilities include:</p> <ul style="list-style-type: none"> <li>- Buffering operations against external water demand, costs and potential climate change</li> <li>- Developing and investing in technology and innovation to further water management performance</li> <li>- Proactively engaging with all stakeholders to build capacity for effective water partnerships by sharing knowledge, building capacity and establishing common outcomes</li> </ul> <p>The policy references standards including the UN SDG's, ICMM's water management and reporting standards, ISO 14046, GRI 303.</p> <p>The Sustainable Mining plan states our water stretch targets: by 2020 we will reduce the abstraction of fresh water in water-scarce regions by 20%, increase water recycling levels to 75% and have no Level 3 or greater water incidents.</p> <p>By 2030, we will reduce the abstraction of freshwater in water-scarce regions by 50%.</p>
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## W6.2

**(W6.2) Is there board level oversight of water-related issues within your organization?**

Yes

### W6.2a

**(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.**

Position of individual	Please explain
Board-level committee	<p>The Sustainability Committee of the Board has ultimate responsibility for water and has the highest decision-making authority within the company. The Committee oversees, on behalf of the Board, material policies, processes, and strategies designed to manage sustainability risks and opportunities. The Committee meets quarterly and comprises the chairman; chief executive; Group technical director and non-executive directors. Matters relating to water are included in each quarterly report to the Committee, and as stand-alone items on the agenda. The Chair of the Sustainability Committee provides a summary of the Committee’s discussions at the Board, which addresses the most material issues raised by the Committee</p> <p>As the highest-ranking executive, tasked with making major corporate and managerial decisions, water issues form part of the CEO’s responsibility of ensuring strong operational performance and the sustainability of Anglo American’s business. Key Performance Indicators related to the achievement of Anglo American’s water targets are embedded into the CEO’s Performance contract which reaffirms the significant role water plays in our business.</p>

### W6.2b

**(W6.2b) Provide further details on the board’s oversight of water-related issues.**

Frequency that water-related issues are a	Governance mechanisms into which water-related issues are integrated	Please explain
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	scheduled agenda item		
Row 1	Scheduled - all meetings	<p>Monitoring implementation and performance</p> <p>Overseeing acquisitions and divestiture</p> <p>Overseeing major capital expenditures</p> <p>Providing employee incentives</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding strategy</p> <p>Reviewing and guiding corporate responsibility strategy</p> <p>Reviewing innovation/R&amp;D priorities</p> <p>Setting performance objectives</p>	<p>Matters relating to water are included in each quarterly report to the Sustainability Committee of the Board, and also feature periodically as stand-alone items on the agenda. The Group Technical Director will brief the Sustainability Committee of the Board, depending on the issue at hand. In addition to the discussions at the Sustainability Committee, the Audit Committee reviews the company's material risks, including water, twice a year. The Remuneration Committee takes into account financial as well as sustainability indicators in its decision-making process.</p> <p>The governance mechanisms in place at Anglo American ensure that the most senior leaders within the business are regularly and accurately informed of the most important water related risks and opportunities. The responsibility for water management is delegated down into the organisation. For example, as part of the new water management standard being implemented within Anglo American, every site is appointing a water manager to co-ordinate multi-disciplinary implementation of the water standard and water-management plan in alignment with the Anglo American strategy. Anglo American also has regional water-management co-ordinators. This assists in driving proactive water management throughout the business.</p>

### W6.3

**(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).**

**Name of the position(s) and/or committee(s)**

Chief Operating Officer (COO)

**Responsibility**

Both assessing and managing water-related risks and opportunities

**Frequency of reporting to the board on water-related issues**

More frequently than quarterly

**Please explain**

Water is the management responsibility of the Group’s technical director (equivalent to the COO), who is a member of the Board and the Group Management Committee (GMC). The GMC is comprised of the chief executive, business unit CEOs, Group directors of corporate functions and the Group general counsel. The Group technical director is supported by the Group head of safety and sustainable development and the head of environment. The GMC is supported by corporate, operational and investment sub-committees. The Group Technical Director is responsible for assessing water risks, water security, opportunities, policy implementation to mitigate risks and related opportunities for the Group and provides the Sustainability Committee of the Board with a quarterly report on water management and an annual detailed review. Material operational water issues or incidents are reported to the executive and Board on a risk basis and can occur more frequently than quarterly.

### W6.4

**(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?**

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	



## W6.4a

**(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?**

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Chief Executive Officer (CEO)	Reduction of water withdrawals Reduction in consumption volumes	The CEO scorecard is compiled every two months and is the basis for the CEO's performance reporting to the Board. Each business unit CEO has a scorecard that is aligned with what is in the Group CEO scorecard and include water targets. The Anglo American chief executive and business unit CEO's scorecards include performance on water. In 2017, the Board approved the inclusion of our 2020 and 2030 water targets within the executive. These targets are focussed around ensuring water security for our operations and ultimately driving towards our goal of a waterless mine. Our short-term target is to reduce absolute freshwater intake by 20% by 2020 using 2015 as the baseline year. The indicators for incentivised performance are thus directly linked to these long-term water targets. A scaled weighting is applied to the achievement of these indicators which influences the quantum of the monetary reward that each individual receives during that year. SHE related targets, including water withdrawal reduction, make up 10% of the CEO's performance weighting, which directly informs the CEO's annual bonus and long-term incentive plan bonus. Water managers on site are also subject to a scaled weighting which is applied to the achievement of water reduction indicators which influences the quantum of the monetary reward that each individual receives during that year.
Non-monetary reward	Other, please specify Operational Staff	Reduction of water withdrawals Implementation of water-related community project Other, please specify	Anglo American's Platinum Division have an Environmental Champion of the Quarter Award. Previously, a Water Awareness Quarter was created as part of this award to create and increase awareness of the importance of conserving and protecting, specifically from pollution, our water resources. Our ultimate goal is to develop a culture of environmental protection among Amplats employees. As part of the Water Awareness Quarter we developed an annual water guideline document that was distributed to all employees. Each operation was then required to submit their response towards the criteria in the guideline. The Environmental Champion competition was

		Behaviour change related indicator	launched to acknowledge and recognise the outstanding contributions made by the Amplats operations in helping to preserve the environment. Not only does the competition provide a platform to showcase innovative solutions for the efficient use of natural resources, it promotes an understanding of the need to preserve these resources for future generations. The winner of the competition receives a non-monetary award consisting of a floating trophy and a framed certificate. This incentive is linked to the extent of new environmental-sector related activities and data implemented by operation, over the period of a year.
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## W6.5

**(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?**

Yes, direct engagement with policy makers

## W6.5a

**(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?**

In 2017, Anglo American started implementing and embedding a new water-management standard and associated reporting requirements. The standard guides a risk-based, regional approach to water management, in line with global best practice and ICMM water guidelines. The standard also ensures that all activities, including public policy engagement, is done consistently. At Anglo American Platinum, the water management standard is championed by the Safety & Sustainable Development Committee, whose role is to ensure the company operates in a sustainable manner. This Committee also oversees all direct and indirect activities that aim to influence water-related policy. This ensures that there is consistency and alignment between external and internal water-related activities.

As an integral part of Anglo American’s strategy, the new 2020 targets will support enhanced business performance through cost reduction and aligns with the environmental value pillar objectives of water management. Should any inconsistency in policy engagement be observed by Anglo American Platinum this will be raised at the Safety & Sustainable Development Committee. Appropriate actions will be recommended and implemented depending on the level of inconsistency.


The Sustainable Mining Plan was developed with extensive internal and external engagements across a broad range of stakeholders.




## W6.6

**(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?**

Yes (you may attach the report - this is optional)

 aa-sustainability-report-2019-v1.pdf

 aa-sustainability-report-2019-v1.pdf

## W7. Business strategy

### W7.1

**(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	> 30	Anglo American aspires to be a global leader in sustainable mining and have subsequently developed a Sustainable Mining Plan to inform their business strategy. The strategy is guided by our FutureSmart Mining™ program (Anglo American’s innovation-led approach to sustainable mining) and is upheld by three pillars. Water is identified within the Healthy Environment pillar with the specific objective being to: “operate waterless mines in water-scare catchments”. The strategy is being implemented through the development of 5-year, tailored site plans that are flexible and integrate group, business unit and local priorities. Specific issues and key focus areas that are integrated into Anglo American’s long-term business objectives include: reduction of new water usage; reuse and recycling; water use efficiency; partnership to address local community water needs; mine dewatering and stormwater management and discharge management. 2020 BAU targets and 2030 stretch goal targets have been set to ensure the integration of these objectives into

			<p>the business strategy. For example, by 2020 we aim to 1) reduce abstraction of fresh water by 20% 2) Increase water recycling levels to 75% and 3) have no Level 3 or greater water incidents. By 2030, the goal is to reduce the abstraction of freshwater in water-scarce regions by 50%.</p>
<p>Strategy for achieving long-term objectives</p>	<p>Yes, water-related issues are integrated</p>	<p>&gt; 30</p>	<p>To achieve our long-term objectives, a water management strategy has been developed. We are well on our way to finalising the implementation of new reporting guidelines and delivery of all water balances (a record of the flow of water in and out of a system) from all our sites. This will help us understand site specific issues and take the actions required to meet their needs. We are improving operational water performance through infrastructure improvements, water treatment and recovery technologies, and managing environmental impacts. Progress in implementing our water strategy is driven by our water management programme, which is supported by a mandatory group water standard and delivered via operational water action plans. Key objectives include: minimising use of higher grade water and finding lower grade sources, maximising water reuse; ensuring no spillage of contaminated storm and process water; ensuring no spillage of groundwater and promoting its beneficial use.</p> <p>To ensure that these water issues are integrated into the long-term business objectives, we have started investing in technology to reduce water consumption with the aim of operating a waterless mine. Our work towards a waterless mine includes evaporation measurement and dry tailings disposal, exploring innovative approaches to dry separation, and non-aqueous processing. A long-term time horizon of more than 30 years has been chosen as this aligns with the life of mine plans and long-term nature of mining.</p>
<p>Financial planning</p>	<p>Yes, water-related issues are integrated</p>	<p>&gt; 30</p>	<p>Future financial plans cater for the needs of water infrastructure which considers the needs and availability of water at each facility to inform our growth strategy. Our water strategy is embedded in our business plan and considers predicted water demand by all other users and potential supply. We are involved in partnerships with stakeholders in various infrastructure and development projects to improve water security for their operations and to help supply the needs of communities. We financially assist the projects throughout their life cycles. As an example, our Los Bronces site is currently developing a water-recovery scheme to recycle tailings water via horizontally drilled wells which has the potential to reduce water consumption by 20%. The overall project cost is estimated at \$30-\$75 million, with the first trial wells scheduled for the first quarter of 2020. A long-term time</p>

			<p>financial planning horizon of more than 30 years is used as this aligns with the life of mine plans and long-term nature of mining. The 2020 budgets and beyond will reflect the detailed water priorities and financial commitments to reaching long-term water targets and will be based on the outcome of climatic water balances and prioritized on a site by site basis. In 2018 we classified water security risk as a principal risk, therefore it is anticipated that water-related capital expenditure will increase as we work towards mitigating our water security risks.</p>
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## W7.2

**(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

Row 1

**Water-related CAPEX (+/- % change)**

10

**Anticipated forward trend for CAPEX (+/- % change)**

100

**Water-related OPEX (+/- % change)**

10

**Anticipated forward trend for OPEX (+/- % change)**

10

**Please explain**

Water OPEX is estimated as Anglo American does not have completely accurate data for all its operations. Opex costs have increased as Anglo American implements additional monitoring systems, appoints more water-focussed staff and increases maintenance on water infrastructure. The anticipated forward trend is set to increase as Anglo American continues with additional preventative water-related maintenance.

Like OPEX, water related CAPEX is also estimated as there is no clear definition for water-related CAPEX. CAPEX has again increased as Anglo implements water saving projects at its facilities and neighbouring municipalities to ensure secure water supply for its operations. CAPEX is also anticipated to increase significantly as Anglo American ensures there is sufficient supply of water for all its operations and continues to work toward its long-term goal of a waterless mining.

### W7.3

**(W7.3) Does your organization use climate-related scenario analysis to inform its business strategy?**

	Use of climate-related scenario analysis	Comment
Row 1	Yes	None.

### W7.3a

**(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?**

Yes

### W7.3b

**(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?**

	Climate-related scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	RCP 2.6	Anglo American completed studies with Imperial College London and the UK Met. Office, to rank the vulnerability of all Group Operations and projects to long-term climate change. For the South African Platinum operations, the study indicated the earliest	The resulting climate scenario data from the in-depth CSIR analysis will be used in regional water-catchment models, and in mine water-balance simulations to inform water supply security and storm drainage design parameters. Furthermore, we are

		<p>statistical signal, (above weather variability range) to emerge beyond 2048. This analysis was followed by a low-resolution regional climate study of the Olifants River Catchment Basin. The high-level regional analysis identified climate risks with regard to water availability and extreme flood events. Anglo American Platinum also undertook an in-depth exercise with the CSIR to understand the vulnerability of operations and host communities to physical climate change. The analysis, which extends to beyond 2050, is the first such high-resolution study on the African continent. The review and predictive modelling indicate that rising weather volatility as well as highly variable and interchangeable periods of droughts and floods are likely to exacerbate water stress at our operations, particularly in the Limpopo region.</p>	<p>implementing an integrated water plan (conservation and demand management) to mitigate related security risks. This includes a focus on shifting further to non-potable process water; investing in water-treatment and relevant technology innovation to improve operational water efficiencies; constructing on-site storage at certain facilities; rolling out the regional water strategy development for Limpopo; and ensuring strategic alignment, partnership and technical support to local and regional water authorities.</p> <p>Water security is a particular risk for our platinum operations in Limpopo, especially during prolonged drought and rising community and municipal demand as well as our operations in Chile. We are increasingly reducing fresh-water consumption at our operations, and partner in several regional bulk-water resource and water-efficiency initiatives. This is part of a collaborative water strategy for Limpopo, launched in 2017, in partnership with government, regional water providers and other mining houses. While the province is expected to be severely water-stressed between 2022 and 2025, studies have identified several opportunities for source-water options to augment regional water supply.</p>
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## W7.4

**(W7.4) Does your company use an internal price on water?**

Row 1

**Does your company use an internal price on water?**

No, but we are currently exploring water valuation practices

**Please explain**

We will be investigating options around water pricing in the next 2 years

## W8. Targets

### W8.1

**(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.**

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	<p>Previously Anglo American set operational water targets through the implementation of a water efficiency target tool (WETT). The tool forecasted the projected business-as-usual (BAU) water demand of individual operations and established a register of water-saving projects, linking the two to deliver future performance targets. With the implementation of Anglo American’s Water Management Technical Standard, the reporting program has been rendered inconsistent with the ICMM reporting methodologies, Anglo American’s goals and the Standard itself. Accordingly, 2018 was considered the transitional year as Anglo American initiated the process of replacing the previous WETT targets with more robust and consistent water targets.</p> <p>In the previous reporting year sites started developing detailed, dynamic operational water balances, supported by regional water balances that are linked to regional climatic data. These site-wide water balances will enable the simulation of water management alternatives, options and trade-offs. By the end of 2020 all sites should have completed operational water balances which will enable the identification of water opportunities, risks and projects. The long-term water targets can then be formulated based on the finalised capital projects and long-term water security positions of each site. To date, we have set Business Unit level targets towards achieving the 2020 and 2030 Company Level targets, while site-specific targets have been set for those operations which have completed their operational water balances.</p> <p>We will review the water targets of the Sustainable Mining Plan in the next reporting year to ensure we balance possible increases in production against water withdrawals, ensuring we improve efficiency and ultimately decrease our water intensity.</p>



			<p>Until 2020, we will report water performance under the definitions we used in 2015. In 2020 we will re-baseline all data and introduce improved ICMM aligned definitions, to measure progress against our 2030 goals.</p>
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## W8.1a

**(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.**

**Target reference number**

Target 1

**Category of target**

Water recycling/reuse

**Level**

Company-wide

**Primary motivation**

Water stewardship

**Description of target**

Our water targets are focused around ensuring water security for our operations and ultimately driving towards our goal of a waterless mine. Our short-term target is for 75% of our total operational water requirements to be met by recycling/re-using water by 2020, using 2015 as the baseline year.

**Quantitative metric**

% increase in water use met through recycling/reuse

**Baseline year**

2015

**Start year**

2016

**Target year**

2020

**% of target achieved**

80

**Please explain**

Anglo American has already achieved approximately a 70% recycling/re-using rate versus its target of 75%. This represents a 93% achievement. Baseline data is to be reset in 2020 for future referencing, based on new water definitions aligned with ICMM requirements for water accounting. The improvements to water-accounting data, however, put our ability to meet the 2020 milestones at risk.

---

**Target reference number**

Target 2

**Category of target**

Water withdrawals

**Level**

Company-wide

**Primary motivation**

Water stewardship

**Description of target**

Our water targets are focused around ensuring water security for our operations and ultimately driving towards our goal of a waterless mine. Our short-term target is to reduce absolute freshwater intake by 20% by 2020 using 2015 as the baseline year.



**Quantitative metric**

Absolute reduction in total water withdrawals

**Baseline year**

2015

**Start year**

2016

**Target year**

2020

**% of target achieved**

35

**Please explain**

Anglo American has already achieved a 7% reduction in absolute freshwater intake versus its target of 20%. This represents a 35% achievement. Baseline data is to be reset in 2020 for future referencing, based on new water definitions aligned with ICMM requirements for water accounting. The improvements to water-accounting data, however, put our ability to meet the 2020 milestones at risk.

**W8.1b**

**(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.**

---

**Goal**

Other, please specify  
Water withdrawals

**Level**

Company-wide

### **Motivation**

Water stewardship

### **Description of goal**

A key feature of our water strategy is to reduce our dependency on high quality water through water switching and the use of lower quality water. This will reduce costs and allow more water to be available in the communities in which we operate. Our goal, therefore, is a 50% reduction in abstraction of freshwater from water-scarce regions by 2030. This will assist us in reaching our ultimate goal of achieving a waterless mine which is part of our overarching sustainability strategy.

The goal will be achieved through the implementation of our Group Water Management Standard which utilises a catchment-based approach to water management. The first step in the implementation process requires all operations to complete a self-assessment and gap analysis against the standard. This was completed at several sites in 2018 and 2019 and will be finalised in 2020. The development of new technologies also forms part of group water policy with specific R&D projects including evaporation measurement and dry tailings disposal, exploring innovative approaches to dry separation, and non-aqueous processing.

### **Baseline year**

2015

### **Start year**

2016

### **End year**

2030

### **Progress**

The indicator used to measure this is the absolute volume reduction in freshwater withdrawals.

Anglo American has already achieved a 7% reduction in absolute freshwater intake versus its target of 50% by 2030. This represents a 14% achievement and is considered an acceptable threshold for success. Baseline data is to be reset in 2020 for future referencing, based on new water definitions aligned with ICMM requirements for water accounting, which may have a positive impact with regards to achieving the goals.

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### **Goal**

Other, please specify

Record no Level 3 (or above) incidents

**Level**

Company-wide

**Motivation**

Risk mitigation

**Description of goal**

Anglo American seeks to minimise the adverse effects of mining activities on surrounding surface and ground water to avoid affecting the water security of stakeholders. Poor quality water is harmful to the environment and human health, can affect mining and processing equipment, and present closure liabilities.

Reporting, investigating and sharing lessons learnt from water incidents (actual and potential) forms an essential part of improving controls to prevent repeats and of integrating environmental consciousness into core business processes. Anglo American reports five levels of environmental incident severity. Level 3-5 incidents (ranging from moderate to high impact) are featured in the chief executive's report to the Board. Anglo American has set a goal of no Level 3-5 water incidents by 2020.

**Baseline year**

2015

**Start year**

2016

**End year**

2020

**Progress**

The indicator is measured based on the number of reported level 3 – 5 water incidents.

In 2018, the stricter classification process contributed to a slight increase in Level 3 incidents reported compared with previous years. In 2018, we recorded one Level 4 (major) and five Level 3 (moderate impact) environmental incidents. In 2019, we only reported one Level 3 incident.

Our progress towards this goal improved in the reporting year due to the decrease in reported level 3 - 5 incidents in 2019.



## W9. Verification

### W9.1

**(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?**

No, we do not currently verify any other water information reported in our CDP disclosure

## W10. Sign off

### W-FI

**(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### W10.1

**(W10.1) Provide details for the person that has signed off (approved) your CDP water response.**

	Job title	Corresponding job category
Row 1	Director: Technical & Sustainability	Chief Procurement Officer (CPO)

### W10.2

**(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].**

No



## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

**Please confirm below**

I have read and accept the applicable Terms