Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W0.1

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

Gold Fields Limited is a globally diversified gold producer with nine operating mines (including our Asanko Joint Venture) and projects in Australia, Chile, Ghana, Peru and South Africa, and total attributable annual gold-equivalent production of 2.2Moz. Gold Fields had attributable gold-equivalent Mineral Reserves of 52.1Moz and Mineral Resources of 116.0Moz at end-December 2020. The company has a primary listing on the Johannesburg Stock Exchange (JSE) Limited, with a secondary listing (and American depositary shares trading) on the New York Stock Exchange (NYSE). Gold Fields had a total workforce of 18,412, including 12,771 contractors and 5,641 employees, during the reporting year. Gold Fields is reporting on the following mining operations:
1. South Deep (South Africa)
2. Damang (Ghana)
3. Tarkwa (Ghana)
4. Cerro Corona (Peru)
5. Agnew (Australia)
6. Granny Smith (Australia)
7. St Ives (Australia)
8. Gruyere (Australia)

The following operations are excluded, Salares Norte (in Chile) is in a project phase and Asanko (Ghana) is non-Gold Fields managed.

Foreword by Naseem Chohan, EVP: Sustainable Development: Managing our water resources is critical to Gold Fields, as water is a vital resource for our ore processing activities and essential to our host communities, particularly where agriculture is an important economic activity. Managing our impacts on water catchment areas, by ensuring that we do not reduce the quality or volume of water in the areas surrounding our mines, is therefore key to maintaining our social licence to operate.
Our Ghanaian operations and the Cerro Corona mine in Peru have ample water supply through rainfall in the country, while the other remaining countries we operate in – South Africa, Chile

and Australia – are water stressed. This is exacerbated by climate change, which affects our operations and communities in several ways, including prolonged droughts, severe rainfall and general changes in weather patterns.

We continue to implement the Group's 2020 – 2025 Water Stewardship Strategy, which is supported by detailed regional water management plans. This strategy comprises the following key pillars:

• Security of supply: We focus on understanding and securing water resources for the life-of-mine, as well as embedding water planning into operational management and updating water security risk profiles to support the sourcing of water.

• Water efficiency: We continually reduce demand for freshwater and optimise the use of water resources due to potential water supply shortfalls and competition from communities.

• Catchment area management: We manage external water risks to the business and our stakeholders, particular impacted communities, in the water catchment areas in which we operate. While our initial assessments indicate that our operations do not have significant negative impacts on these stakeholders, we are implementing formal water stewardship partnerships with stakeholders in their catchments, as the impacts of Climate Change are experienced broadly across all regions. . We hope to complete these, where applicable, by 2025.

Building on the Water Stewardship Strategy, as part of the launch of our 2030 ESG targets in 2021, we set two overriding water management targets: reducing our freshwater usage by 45% from a 2018 baseline and recycling and reusing at least 80% of the water our mines use. These long-term targets are aligned to the strategy and have been translated into annual targets building up to 2030.

In line with our approach to catchment area management, we also invest in water infrastructure which benefits our host communities. This is most pronounced at our Cerro Corona mine in Peru where, since 2010, the mine has invested almost US$5m in water-related projects, mostly in the nearby city of Hualgayoc. We seek to ensure that, in the long-term, all residents of our district have access to permanent, potable water supply.

For small-scale farmers in the district, we have commenced agricultural water infrastructure work with a focus on constructing 2,000 micro-reservoirs to benefit approximately 16,000 people living in 39 hamlets and three villages.

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 Gold
Processing	Copper Gold

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, 2021	December 31, 2021

W0.3

(W0.3) Select the countries/areas in which you operate.

Australia
Ghana
Peru
South Africa

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 financial control is exercised

W0.6

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

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	We have a ticker symbol: GFI

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	Vital	Primary use of freshwater used in: - Direct operations/value chain: Freshwater is an important part of multiple stages in the mining and milling process, including: • Mining • Milling • Tailings removal • Dust suppression • Ore washing and processing • Underground cooling • Employee health and sanitation - Indirect operations/value chain: freshwater is used in the production of electricity in South Africa and the production of cyanide and diesel used on site, which is critical for the mines. Freshwater is also used in the downstream gold refining process. The importance rating of freshwater for both direct and indirect operations is deemed to be vital. This is because: - In direct operations: sufficient volumes of fresh water are vital during nearly every stage of mine life. Alternative sources of sufficient quality are not readily available or viable. E.g, freshwater is critical for employee health and sanitation onsite, especially in light of the recent COVID-19 pandemic, Thus, freshwater sources are vital to direct operations at Gold Fields. - In indirect operations: Gold Fields's operations rely on material inputs and resources that are dependent on fresh water supplies. E.g., South Africa's coal-fired electricity is highly dependent on freshwater along with the hydro-powered grid at Cerro Corona in Peru. Therefore, freshwater is vital for indirect operations and in the indirect value chain as insufficient supplies can affect supply chain and, in

			turn, production. A further example is the crucial requirement for freshwater supplies to Gold Fields' host communities. Gold Fields has accordingly intensified its engagement activities around water in 2020, including the Bambamarca municipality and Hualgayoc community near its Cerro Corona operations in Peru. Future water dependency: the need for sufficient amounts of freshwater will remain vital for direct and indirect operations as alternative water sources of sufficient quality are generally not available.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	Primary use of recycled, brackish and/or produced water is used in: - Direct operations: the Australian operations use brackish/saline to hypersaline water. The majority of operational water needs, e.g. mining and milling; transporting tailings, dust suppression, ore washing, underground cooling and processing, are supplemented by recycled water, displacing some of the mines' needs for large quantities of freshwater. - Indirect operations: in the production of electricity from coal, such as in South Africa, recycled water can also be very important. Electricity is a vital mining input. Importance rating determined as: - Vital in direct operations: for example, the sufficient supply of recycled/brackish/produced water is vital at the Cerro Corona mine as it relies completely on recycled water for production during the dry season. In addition, Granny Smith and St Ives withdraw brackish (hypersaline) water as freshwater is not readily available in the area. - Important to indirect operations: for example, the sufficient supply of recycled/brackish/produced water is important for the South Deep mine where electricity is purchased from Eskom, which desalinates polluted mine water for use at power plants. This is done by Eskom to reduce the amount of freshwater used for electricity production. Future water dependency: expected to remain vital in direct operations/value chain and import in indirect

			operations/value chain, as Gold Fields operates in water stressed areas and there is a need to source alternative non-fresh water sources.

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%	Scope of monitoring: all operations owned by Gold Fields (100%) are required to measure, monitor and report the total volume of water withdrawn. Gold Fields defines operations as its mines. Reason for monitoring: monitoring water withdrawals is required to ensure that the withdrawal volumes fall within the water use licence boundaries. All water withdrawal volumes are verified and available online. Monitoring withdrawals also assists Gold Fields in measuring performance against water targets. Frequency of monitoring: volumes are continuously monitored. Withdrawal volumes are recorded in the detailed water balances at each mining site. Reporting occurs on a monthly basis. Method/s for measurement: third party invoices and meters at withdrawal sources. Withdrawal volumes are recorded in the detailed water balances at each mining site. Gold Fields' total water withdrawals are reported using the GRI Standards reporting guidelines under Standard 303-1, as well as, the ICMM guidelines.
Water withdrawals – volumes by source	100%	Scope of monitoring: Gold Fields measures and monitors all withdrawals (100% of operations) per abstraction source. Gold

		Fields' operations are mines. All operations withdraw renewable groundwater. St Ives and Granny Smith withdraw brackish groundwater. Tarkwa, Damang and Cerro Corona withdraw fresh surface water. Third-party water is withdrawn by South Deep, Tarkwa and St Ives. Reason for monitoring: monitoring water withdrawals per source is required to ensure that the withdrawal volumes fall within the water use licence boundaries. Monitoring withdrawals per source also assists Gold Fields measure performance against water targets. Frequency of monitoring: volumes are continuously monitored. Reporting occurs on a monthly basis. Method/s for measurement: third party invoices and meters at withdrawal sources. Withdrawal volumes are recorded in the detailed water balances at each operation.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	100%	Scope of monitoring: Gold Fields measures and monitors the moisture content in the mined ore at its Cerro Corona mine (operation) before the ore is processed. The nature of the ore at Gold Fields' other operations, namely mines, does not require the group to monitor entrained water at these mines. Reason for monitoring: monitoring the moisture levels of the ore is required to determine drying and other ore treatment measures, and it also helps in accounting for water that goes into processing. Frequency of monitoring: volumes are periodically sampled, as required. Method/s for measurement: sampling of the mined ore, using moisture meters.

Water withdrawals quality	100%	Scope of monitoring: all of Gold Fields' operations require water of certain quality. Gold Fields defines operations as its mines. Thus, Gold Fields measures and monitors the quality of all withdrawals (100% of operations). Reason for monitoring: monitoring water quality is required to ensure the suitability of the water for its intended use in the group's mining and processing activities. Gold Fields is also aligned with the ICMM Water Reporting Guideline, which requires the monitoring of water withdrawals by quality (low and high quality). Water may be treated accordingly where the quality is deemed to be insufficient for certain activities. Frequency of monitoring: volumes are continuously monitored and reported monthly. Method/s for monitoring: meters at withdrawal sources.
Water discharges – total volumes	100%	Scope of monitoring: Gold Fields measures and monitors the total discharge volumes across all operations (100%) that discharge water. Gold Fields defines operations as its mines. Reason for monitoring: measurement and monitoring of discharges are required to ensure that each operation's discharged water falls within the required qualitative and quantitative parameters stipulated in its water use permit. All water withdrawal discharges are verified and available online. Additionally, total discharge volumes are tracked to ensure that water balances are accurate and updated regularly.

		Frequency of monitoring: volumes are continuously monitored. Reporting occurs on a monthly basis. Method/s for measurement: meters at discharge destinations.
Water discharges – volumes by destination	100%	Scope of monitoring: Gold Fields requires all of its operations (100%) that discharge water to measure and monitor the water volume discharged to each discharge destination. Gold Fields defines operations as its mines. Reason for monitoring: This is done to ensure that sufficient treatment of the discharged water is maintained and that volumes discharged to each source do not exceed the licensing boundaries and regulations. Frequency of monitoring: volumes are continuously monitored. Reporting occurs on a monthly basis. Method/s for measurement: meters at discharge destinations.
Water discharges – volumes by treatment method	100%	Scope of monitoring: Gold Fields requires all of its mining operations (100%) that discharge water to measure and monitor the water volume discharged by treatment method. Gold Fields defines operations as its mines. Reason for monitoring: This is done to ensure that the quality and volume of the discharged water meet the licensing requirements of each operation. In addition, the volume per treatment method is measured and monitored to ensure the maintenance of an accurate water balance between all processes. Frequency of monitoring: volumes are continuously monitored.

		Method/s for measurement: meters at discharge destinations.
Water discharge quality – by standard effluent parameters	100%	Scope of monitoring: Gold Fields requires all of its operations (100%) that discharge water to measure and monitor the water quality – by standard effluent parameters. Gold Fields' operations are mines. Reason for monitoring: to ensure that the quality of the water which is discharged is kept within the range permitted by the licensing requirements. Frequency of monitoring: periodic sampling, as determined by the licence conditions of the operation. Method/s for monitoring: sampling at discharge destinations.
Water discharge quality – temperature	100%	Scope of monitoring: Gold Fields requires all of its mining operations (100%) that discharge water to measure and monitor the water temperature. Gold Fields defines operations as its mines. Reason for monitoring: to ensure that the temperature of the water which is discharged is kept within the range permitted by the licensing requirements. Frequency of monitoring: periodic sampling, as determined by the licence conditions of the operation. Method/s for monitoring: sampling, using meters, at discharge destinations.
Water consumption – total volume	100%	Scope of monitoring: Gold Fields requires all of its mining operations (100%) that discharge

		water to measure and monitor the water consumption. Gold Fields defines operations as its mines. Reason for monitoring: Water consumption per ounce of gold produced is a performance metric that Gold Fields utilises continually to ensure that its operations are running as efficiently as possible. Frequency of monitoring: volumes are continuously monitored. Method/s for measurement: withdrawal volumes are measured using third party invoices and meters at sources. Discharge volumes are measured using meters at sources. Withdrawal and discharge volumes are recorded in the detailed water balances at each site and used to calculate water consumptions.
Water recycled/reused	100%	Scope of monitoring: Gold Fields measures and monitors the total volume of water recycled at each of its mining operations (100% of operations). Gold Fields defines operations as its mines. Reason for monitoring: The amount of water recycled provides vital information regarding the environmental impact of the operations as well as providing information on water savings due to the lowering of the water withdrawals required. Monitoring also allows Gold Fields to track progress against its group and operation-level recycling targets. Frequency of monitoring: volumes are continuously monitored. Reporting occurs on a monthly basis. Method/s for measurement: onsite meters.

		Recycled/Reused volumes are recorded in the detailed water balances at each site
The provision of fully-functioning, safely managed WASH services to all workers	100%	Scope: Gold Fields monitors the provision of fully-functioning, safely managed WASH services to all workers at 100% of its mining operations. Gold Fields defines operations as its mines. Reason for monitoring: At Gold Fields, employee health is considered to be a vital aspect of business. This water aspect is therefore monitored to ensure that all employees are provided with sufficient volumes and adequate access to clean and potable wash water for drinking and sanitation services. Furthermore, the licence conditions of all Gold Fields' operations require the provision of such services to all workers. Frequency of monitoring: volumes are continuously monitored. Method/s for measurement: Health and safety-based processes and policies, such as those related to WASH facilities, are monitored by the Board. In addition, the Health and Safety Manager at each operation ensures on a continuous basis that fully-functioning, safely managed WASH services are provided to all workers.

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	18,536	Lower	Change from previous year: Total water withdrawals decreased by 14% in 2021 compared to the previous reporting year. Gold

			Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. The main contributors to this decline in water withdrawals were decreasing water withdrawals at the Tarkwa (Ghana) and South Deep (South Africa) mines. Tarkwa installed a micro-filtration unit on a clarifier return line to the carbon-in-leach plant, increasing its water recycling and reuse. Additionally, process water is now reused for cooling at the power plant and for mixing explosives and some chemicals at Tarkwa. South Deep continued to recycle treated sewage effluent, which was previously discharged. The mine also upgraded its potable water pipeline to reduce water losses. Notably, water withdrawal per ounce produced decreased from 9.3kl in 2020 to 7.5kl in 2021, thanks to successful interventions such as those described above. Future volumes: It is anticipated that ongoing and future water efficiency projects will reduce future demand for fresh surface water volumes.
Total discharges	3,894	Much higher	Change from previous year: The total water discharged increased by 108% in the 2021 reporting year when compared to the previous reporting period. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. The 108% increase in water discharge volumes is mostly due to a significant increase in discharge at the Cerro Corona mine. Cerro Corona experience unseasonably high rainfall which increased the amount of discharge recorded. Future volumes: It is anticipated that ongoing

			and future water efficiency projects will reduce future discharge volumes.
Total consumption	14,643	Lower	Change from previous year: The net effect of the water withdrawal and discharge resulted in consumption levels being lower than in the previous year, decreasing by 26%. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. The consumption is calculated as per the CDP guidance on a company-wide basis. Therefore, the total consumption = total withdrawals - total discharge. The significant increase in discharge (due to unseasonably high rainfall) led to a reduction in the consumption in the reporting year. Future volumes: The water consumed is largely determined by the efficiency of the various processes used in the gold production process. As both the withdrawals and discharges are expected to decrease, the consumption is expected to remain about the same.

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	About the same	WRI Aqueduct	Five out of eight of Gold Fields’ operations are situated in, and withdraw water from, water stressed catchment areas, as determined using the WRI Aqueduct tool. These are the facilities located in South Africa and Australia.

					Company specific explanation of how the selected tool was applied to evaluate whether the water has been withdrawn from stressed areas: The water data sets for the Gold Fields' group were inputted into the WRI Aqueduct tool to determine whether the specific site is situated in a water stressed catchment area. For example, the WRI Aqueduct Tool considers baseline water stress with a rating equal to/greater than 'High' (40-80%), as areas where there is competition among water users. Accordingly, the catchment area in which the South African operation (South Deep) is located is categorised as a medium-high water stress area. In addition, the catchment areas in which the Australian operations (Granny Smith; St Ives; Agnew and Gruyere) are located are categorised as high water stress area. The WRI Aqueduct assessment of the Peruvian (Cerro Corona) and Ghanaian operations (Tarkwa and Damang) indicates that the water catchment areas, from which the mines withdraw water, are not water stressed. Hence, the Peruvian and Ghanaian operations are excluded from the proportion of water stressed areas, from which Gold Fields' mines withdraw water. The water withdrawn from water stressed areas remained about

					the same, only decreasing slightly from 64% of the group's total withdrawals in 2020 to 62% of the group's total withdrawals in 2021. This is due to fairly constant levels of operations at the Gold Fields' mines during the year. As per the Gold Fields definition, the year on year comparison is 'about the same'. Gold Fields defines "about the same" to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher.

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	5,790	About the same	Relevance: Gold Fields withdrew 31% of its water from fresh surface water sources, including surface, groundwater, purchased water and rainwater sources, making this a material source. Fresh water is vital to the mining processes, including milling, washing ore, cooling and more. Volumes are sourced from direct measurements.

				Change from previous reporting year: The total fresh surface water withdrawals remained about the same, only decreasing by 9%. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Notable changes include significant decreases in withdrawals at Tarkwa (Ghana) due to increased recycling, whilst Cerro Corona (Peru) had a significant increase in withdrawals due to heavy rains. These changes were of similar magnitude. It is anticipated that new and ongoing water efficiency projects and targets will reduce future demand for freshwater.
Brackish surface water/Seawater	Relevant	1,631	About the same	Relevance: This source is relevant as Gold Fields withdraws brackish surface water at two Australian mines (Granny Smith and St Ives). Brackish surface water is used for processing ore. The quantities withdrawn were relatively small (9% of total withdrawals) but contribute a large portion of the water withdrawn at these two mines (44%). Volumes are sourced from direct measurements.

				Change from previous reporting year: The group experienced a 2% decrease in brackish water withdrawn in 2021. As such, “about the same” was selected in accordance with Gold Fields’ definition. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. It is anticipated that future withdrawals from brackish surface water sources will decrease due to new water efficiency measures, such as the commissioned seepage transfer station at the Gruyere TSF to capture and recycle seepage water.
Groundwater – renewable	Relevant	9,424	Lower	Relevance: This source is the largest contributor to Gold Fields’ total withdrawals (51%). All operations draw water from renewable groundwater sources. This water source is vital to the mining processes, including milling, washing ore, cooling and more. Volumes are sourced from direct measurements. Change from previous reporting year: The overall withdrawal of renewable groundwater decreased by 21%. Therefore, lower was selected. Gold Fields defines

				"about the same" to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher The main contributors to this decline were the Granny Smith and Gruyere mines in Australia, both reducing withdrawals by approximately 1,000 ML due to water efficiency measures, e.g. the transfer station at the Gruyere TSF to capture and recycle seepage water. It is anticipated that future renewable ground water withdrawals will decrease due to increased water efficiency initiatives.
Groundwater – non-renewable	Not relevant			None of Gold Fields' operations make use of non-renewable groundwater. This trend is expected to remain the same in the future.
Produced/Entrained water	Not relevant			None of Gold Fields' operations make use of produced/entrained water. This trend is expected to remain the same in the future.
Third party sources	Relevant	1,691	About the same	Relevance: This source is relevant despite it only providing 9% of Gold Fields' water demand. This is because this water source (e.g. local municipal water provision) is shared with host communities. The water sources are used in the mining processes, milling, washing ore, cooling and

				more. Volumes are sourced from direct measurements. Change from previous reporting year: The use of municipal water remained about the same, decreasing by 1%. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. This decrease is largely due to reductions in withdrawals at South Deep (South Africa) and Tarkwa (Ghana). Tarkwa installed a new micro-filtration unit, improving recycling, while South Deep upgraded potable water pipelines, reducing losses. It is anticipated that future third party water withdrawals will decrease due to increased efficiency measures and targets.

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	3,894	Much higher	Relevance: This destination is relevant as all of Gold Fields’ discharge water is to fresh surface water. Volumes are sourced from

				direct measurements. Change from previous reporting year: Discharges to fresh surface water were 106% higher than in the previous year. As such, much higher was selected in accordance with Gold Fields' definition. Gold Fields defines "about the same" to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. A significant contributor to the elevated discharges was the unseasonably high rainfall at Cerro Corona (Peru). Rain water passing through Gold Fields' storm water management systems is recorded as a discharge. It is anticipated that increased recycling will reduce future water discharge volumes.
Brackish surface water/seawater	Not relevant			No discharges were made to brackish surface water/seawater discharge destinations by any of Gold Fields' operations. As such, not relevant is selected. This trend is expected to remain the same in the future.
Groundwater	Not relevant			No discharges are made to groundwater discharge destinations by any of Gold Fields' operations. As such, not relevant is selected. This trend is expected to remain the same in the future.
Third-party destinations	Not relevant			None of Gold fields' operations discharged water to municipal facilities for treatment. None of

				Gold Fields' operations discharged water to another organisation. As such, not relevant is selected. This trend is expected to remain the same in the future.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	1,840	Higher	100%	Tertiary treatment is applied to discharges in areas where the environment is considered to be sensitive to discharges and/or here it is a legal requirement. A significant contributor to the increased amount treated relate to increased activity at the Australian facilities. This includes: • Gruyere Mine

					installed another wastewater treatment plant and additional sprayfield • Granny Smith Mine increased village occupancy • Cerro Corona - uses CO2 treatment process Facilities in Ghana and Australia treat water to this level as required. This includes reverse osmosis and chlorination.
Secondary treatment	Relevant	1,900	Higher	11-20	Discharge products from the primary treatments, such as pre-filtration (drum screen technology) and ultra filtration screens, then feeds into the secondary treatments, such as reverse osmosis units for deionization.

					In some cases, pH control is also applied through the injection of carbon dioxide.
Primary treatment only	Relevant	100	Higher	81-90	Water that undergoes primary treatment has a low potential to harm the environment (thus only requires limited treatment). Primary treatment typically involves the separation of solids and oil/grease/lighter fluids from the water stream. The settled and floating materials are removed. When required, remaining liquid is then subjected to secondary treatment.
Discharge to the natural environment without treatment	Relevant	0	About the same	Less than 1%	Gold Fields does not discharge to the natural environment without

					treatment under normal operations. All discharges to the environment undergo some form of treatment before being discharged
Discharge to a third party without treatment	Relevant	0	About the same	Less than 1%	Gold Fields does not discharge to a third party without treatment under normal operations.
Other	Not relevant				

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	4,195,200,000	18,534	226,351.570087407	The total water withdrawal efficiency is expected to improve going forward, due to several programs to improve water use efficiency and reduce the total amount of water withdrawals. For example in 2021, Tarkwa installed a micro-filtration unit on a clarifier return line to the carbon-in-leach plant, increasing its water recycling and reuse.

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
Gold	Total water withdrawals	Ounce of final product	Lower	Change from previous year: 19% decrease, due to reduction in water intensity of produced gold from 9.3 kL/oz down to 7.5 kL/oz. Thus, 'lower' comparison selected. Gold Fields defines "about the same" to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. The decrease is due to the combined effect of reducing total water withdrawals company-wide by 14% whilst increasing the amount of gold produced by 5%. Reduced water withdrawals are due to the implementation of water efficiency initiatives. How the metric is used internally: Gold Fields uses the water intensity metric to understand the relationship between how much our operations are producing and how much water the production process requires. Changes in the metric give an indication of an increase or decrease in water withdrawals as well as changes in process efficiency. This information is used to make informed management decisions. The metric forms part of the key sustainability indicators reported in our annual internal and external reports.

				Future anticipated trends: The intensity metric is expected to decrease slightly, as the water withdrawal demand and dependency are expected to reduce, and production is expected to increase. Strategy in place to reduce water intensity: The strategy to reduce water intensity includes ongoing water efficiency projects. Some of the projects are the following: • Micro-filtration unit on a clarifier return line to the carbon-in-leach plant, increasing its water recycling and reuse at Tarkwa. • South Deep continues to recycle treated sewage effluent, which was previously discharged. Potable water pipeline also upgraded to reduce water losses. These water efficiency initiatives also assist Gold Fields to achieve its 2030 water targets: - 45% reduction in freshwater withdrawals relative to 2018 baseline - Recycling/reuse 80% of the water used.

W1.4

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

Yes, our suppliers

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

Less than 1%

% of total procurement spend

1-25

Rationale for this coverage

Gold Fields engaged with key suppliers and contractors in 2021 on water-related issues. These include suppliers of cyanide, lime, cement, grinding media, steel manufacturers, mobile equipment providers and explosives.

Why these suppliers were selected:
Gold Fields prioritised engagement with suppliers/contractors who are critical to Gold Fields' operations.

How suppliers are incentivized to report:
Gold Fields incentivizes its suppliers to report on water related matters by explaining the importance of the requests and personalising the requests made by senior managers. Furthermore, in the Material Stewardship Policy, which deals with Suppliers, Gold Fields encourages its suppliers to adopt their good practices.

Impact of the engagement and measures of success

Details of the type of information requested from suppliers:
Gold Fields requests that its suppliers report on where they draw their water from, if any of these sources are located in water stressed regions, if they have targets to reduce their water intake, how much of their water intake is reused/recycled and if they have a water stewardship strategy in place.

How the information is used within the company:
Gold Fields makes use of this information in assessing its water-related risks along its supply chain. This enables Gold Fields, in conjunction with the supplier/contractor, to develop appropriate responses to the identified risks that enable both parties to manage the identified water-related risks.

Details of how success is measured:
The success of the supplier engagement is currently measured as the percentage of requested responses that are received. i.e. if all suppliers that were requested to respond did respond, then the measure of success is 100%.

Comment

W1.4b

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

Type of engagement

Onboarding & compliance

Details of engagement

Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number

Less than 1%

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Gold Fields engaged with key suppliers and contractors in 2021 on water-related issues. These include suppliers of cyanide, lime, cement, grinding media, steel manufacturers, mobile equipment providers and explosives.

Why these suppliers were selected:
Gold Fields prioritised engagement with suppliers/contractors who are critical to Gold Fields' operations. These suppliers are Requirement to adhere to our code of conduct regarding water stewardship and management. For example, Gold Fields' Material Stewardship Policy, which deals with Suppliers, encourages its suppliers to adopt good water practices.

Gold Fields also incentivizes its suppliers to report on water related matters by explaining the importance of the requests and personalising the requests made by senior managers.

Impact of the engagement and measures of success

The beneficial outcomes of requiring our key suppliers to adhere to our code of conduct regarding water stewardship and management include mitigation or reduction of water related incidents onsite Gold Fields operations, as well as within the operations and value chains of these key suppliers.

This enables Gold Fields, in conjunction with the supplier/contractor, to mitigate water risks and increase resilience to climate change impacts that have associated water-related impacts.

Details of how success is measured:
The success of integrating water issues into supplier onboarding is measured by the number of related water incidents onsite, that are attributes to these suppliers.

Comment

W2. Business impacts

W2.1

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

No

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?

No

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

South Africa
Orange

Number of tailings dams in operation

1

Number of inactive tailings dams

2

Comment

Country/Area & River basin

Australia
Other, please specify
Western Plateau

Number of tailings dams in operation

7

Number of inactive tailings dams

14

Comment

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Number of tailings dams in operation

5

Number of inactive tailings dams

3

Comment

Country/Area & River basin

Peru

Other, please specify

Tingo

Number of tailings dams in operation

1

Number of inactive tailings dams

0

Comment

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)

Australian National Committee on Large Dams (ANCOLD)

Canadian Dam Association (CDA)

Ghana Minerals Commission (LI 2182)

South Africa (SANS) 10286

Company-specific guidelines
Other, please specify
Global Industry Standard on Tailings Management (GISTM), August 2020

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

Some, not all, TSFs are classified as hazardous/equivalent.

Rationale for choice of selected guidelines: these are the best practice guidelines that assist in managing tailings risks. They provide classifications/ranking in terms of Consequence Categories; set out company specific governance requirements and are aligned with ANCOLD, the ICMM Tailings Position Statement and the GISTM.

Frequency of evaluation: Quarterly inspections and TSF update reports are carried out by The Engineers of Records. Independent external audits are undertaken triennially or more frequently. Consequence assessments consider hypothetical failure scenarios and resulting impacts on society, especially potential loss of life, the natural environment and business impacts. The severity of impact along with the population at risk are then used to determine the TSF Consequence Category.

Examples of min hazard level classification:
- Ghana's LI 2182: "Class C"-potential to affect 1-20 people with moderate environmental damage.
- ANCOLD: "High C".

How classifications inform management procedures: TSFs that are classified as highly hazardous (or with higher consequence categories) are subjected to more stringent design criteria and frequent inspection regimes. The TSF classifications assist Gold Fields in managing risks. Risks are identified and recorded formally through risk assessments at various stages of the design and operational processes. Including closure and post-closure management plans.

W-MM3.2b

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

Tailings dam name/identifier

Granny Smith 1

Country/Area & River basin

Australia
Other, please specify
Western Plateau

Latitude
-28.492248

Longitude
122.243594

Hazard classification
High B (ANCOLD); High (GISTM)

Guideline(s) used
Australian National Committee on Large Dams (ANCOLD)
Other, please specify
Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity
Inactive

Current tailings storage impoundment volume (Mm3)
26

Planned tailings storage impoundment volume in 5 years (Mm3)
26

Please explain
Under Gold Fields' control.

Tailings dam name/identifier
Granny Smith 2

Country/Area & River basin
Australia
Other, please specify
Western Plateau

Latitude
-28.490587

Longitude
122.24548

Hazard classification
High B (ANCOLD); High (GISTM)

Guideline(s) used
Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

24

Planned tailings storage impoundment volume in 5 years (Mm3)

24

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Granny Smith 3

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

-28.493858

Longitude

122.240942

Hazard classification

High B (ANCOLD); High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

12

Planned tailings storage impoundment volume in 5 years (Mm3)

18

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Gruyere IWL TSF

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

-27.585658

Longitude

123.520866

Hazard classification

High B (ANCOLD); High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

6

Planned tailings storage impoundment volume in 5 years (Mm3)

22

Please explain

Under Gold Fields’ control.

Tailings dam name/identifier

Damang ETSF

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.304798

Longitude

-1.495483

Hazard classification

•High B (ANCOLD); Class A (Ghana LI 2182) ; High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Ghana Minerals Commission (LI 2182)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Inactive

Current tailings storage impoundment volume (Mm3)

57

Planned tailings storage impoundment volume in 5 years (Mm3)

57

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Damang FETSF

Country/Area & River basin

Ghana

Other, please specify

Latitude

5.301456

Longitude

-1.500608

Hazard classification

High C (ANCOLD); Class A (Ghana (LI 2182) ; High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Ghana Minerals Commission (LI 2182)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

14

Planned tailings storage impoundment volume in 5 years (Mm3)

26

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Tarkwa TSF 1

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.202157

Longitude

-2.013173

Hazard classification

High C (ANCOLD); Class C (Ghana (LI 2182); High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Ghana Minerals Commission (LI 2182)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

51

Planned tailings storage impoundment volume in 5 years (Mm3)

55

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Tarkwa TSF2

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.210535

Longitude

-2.015479

Hazard classification

Extreme (ANCOLD) ; Class B (Ghana (LI 2182) ; Extreme (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)
Ghana Minerals Commission (LI 2182)
Other, please specify
Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

58

Planned tailings storage impoundment volume in 5 years (Mm3)

67

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Tarkwa TSF3

Country/Area & River basin

Ghana
Other, please specify
Ankobra

Latitude

5.215361

Longitude

-2.014636

Hazard classification

High A (ANCOLD) ; Class B (Ghana (LI 2182) ; Very High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)
Ghana Minerals Commission (LI 2182)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Inactive

Current tailings storage impoundment volume (Mm3)

25

Planned tailings storage impoundment volume in 5 years (Mm3)

25

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Tarkwa TSF5

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.204548

Longitude

-2.010705

Hazard classification

High C (ANCOLD); Class C (Ghana (LI 2182) ; High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Ghana Minerals Commission (LI 2182)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

9.7

Planned tailings storage impoundment volume in 5 years (Mm3)

42

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

Cerro Corona TSF

Country/Area & River basin

Peru

Other, please specify

Tingo

Latitude

-6.455565

Longitude

-78.382806

Hazard classification

Extreme (ANCOLD); Extreme (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

60

Planned tailings storage impoundment volume in 5 years (Mm3)

90

Please explain

Under Gold Fields’ control.

Tailings dam name/identifier

South Deep Doornpoort

Country/Area & River basin

South Africa

Orange

Latitude

-26.274538

Longitude

27.385411

Hazard classification

High C (ANCOLD) ; High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Active

Current tailings storage impoundment volume (Mm3)

60

Planned tailings storage impoundment volume in 5 years (Mm3)

90

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

South Deep South Shaft

Country/Area & River basin

South Africa

Orange

Latitude

-26.245277

Longitude

27.403643

Hazard classification

High B (ANCOLD); High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Inactive

Current tailings storage impoundment volume (Mm3)

15

Planned tailings storage impoundment volume in 5 years (Mm3)

15

Please explain

Under Gold Fields' control.

Tailings dam name/identifier

South Deep Twin Shaft

Country/Area & River basin

South Africa

Orange

Latitude

-26.250626

Longitude

27.401387

Hazard classification

High C (ANCOLD); High (GISTM)

Guideline(s) used

Australian National Committee on Large Dams (ANCOLD)

Other, please specify

Global Industry Standard on Tailings Management (GISTM), August 2020

Tailings dam's activity

Inactive

Current tailings storage impoundment volume (Mm3)

23.81

Planned tailings storage impoundment volume in 5 years (Mm3)

21.9

Please explain

Under Gold Fields' control.

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
Operating plan	An operating plan that is aligned with your established acceptable risk levels and critical controls framework	Operating plans follow the recommendations of the Australian National Committee on Large Dams (ANCOLD); Ghana Minerals Commission (LI 2182) and the Global Industry Standard on Tailings Management (GISTM). These guidelines and the Group Tailings

	An operating plan that includes the operating constraints of the dam and its construction method An operating plan that considers the consequences of breaching the operating constraints of the dam An operating plan that includes periodic review of the foundations and slope materials An operating plan that evaluates the effectiveness of the risk management measures and whether performance objectives are being met	Storage Facility Management Guideline are applied across all Gold Fields' operations. Operating plans are drafted at Group level and approved by the Board once a year. The operating plans guide the development of the tailings management plans. Gold Fields has actively participated with the ICMM, PRI and the UN, in formulating the newly launched Global Industry Standard on Tailings Management (GISTM). Gold Fields has committed to ensuring that all TSFs with "extreme" or "very high" consequence category ratings comply with the GISTM by 5 August 2023. Gold Fields' aim is to prevent any incidents related to these facilities, especially catastrophic failures. High competence levels of the staff implementing the procedures is required. All Gold Fields' TSFs, as well as associated pipeline/pumping infrastructure, are subject to independent audits undertaken at least on a triennial basis, or more frequently e.g., in the case of facilities with "extreme" consequence rating. Also, regular inspections and formal annual Engineer of Record reviews are required at all facilities. Gold Fields has implemented the following: • Approved Group TSF Management Policy Statement in 2020 • TSF Incident Reporting Standard • Considered international seismicity design requirements in all jurisdictions • Appointments of an Engineer of Record for all Gold Fields'-managed TSFs • Undertaking or updating dam break assessments • Updating operating maintenance and surveillance manuals and emergency response plans • TSF seepage management and control Gold Fields has also embarked on a programme to further improve operational safety of its TSFs. Sustainable and integrated mine closure also continues to be one of Gold Fields' sustainability focus areas. Gold Fields has progressively implemented several technical improvements at its TSFs, including: • Considering leading practice assessments of static and seismic liquefaction

		• Installing real-time information monitoring and database storage systems • Minimum requirements for tailings surveillance • Cross-discipline interaction for every TSF design or modification
Approval	The operating plan and the life of facility plan are approved by a C-suite officer	A company-wide process is used which allows for a consistent management approach through standardised quality assessments and checks. Gold Fields' operating plans and life of facility plans are approved by executive management. These plans consider the respective mines' tailings management plans. The plans are reviewed internally every quarter and independent audits are undertaken at least on a triennial basis. Gold Fields is continually striving to ensure that its Tailings Storage Facilities do not negatively impact the environment or society. For example during 2020, the company-wide Environment Health and Safety scorecard was launched to ensure that regional and operational management teams are held accountable. Approval of the life of facility plans by senior management ensures that each operation is accountable for the governance of the respective Tailings Storage Facilities. It also ensures that the operations are held to the highest internal standard. To further support high standards of tailings storage management, Gold Fields aligned its group-wide procedures with the GISTM to show their commitment to preventing catastrophic failure of Tailings Storage Facilities. Such procedures ensure a high-level of accountability for the management of Tailings Storage Facilities across the group. All Gold Fields' senior management are required to have high competence levels. In addition, Gold Fields is developing a new internal TSF Standard.

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.

Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established 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

Tools on the market
Enterprise risk management
Databases

Tools and methods used

WRI Aqueduct
WWF Water Risk Filter
ISO 31000 Risk Management Standard
Other, please specify
ICMM's Mining Climate Assessment Tool (Mica Tool)

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level
Other, please specify

River basin management authorities; statutory special interest groups at a local level.

Comment

Gold Fields uses the WRI Aqueduct and WWF Water Risk Filter Tools; an Enterprise-wide Risk Management process (aligned with ISO 31000); the ICMM's Climate Data Viewer Tool and internal company methods. Internal methods are aligned to the risk management requirements of the King IV Code. Each operation implements an ISO14001 certified Environmental Management System to ensure that all identified risks have the necessary control measures and mitigating strategies in place.

Value chain stage

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established 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

Tools on the market
Enterprise risk management
Databases

Tools and methods used

WRI Aqueduct
WWF Water Risk Filter
ISO 31000 Risk Management Standard

Other, please specify

ICMM's Mining Climate Assessment Tool (Mica Tool)

Contextual issues considered

Other, please specify

Gold Fields, endeavours to engage with the supply chain on some of these contextual issues, but this can be challenging due to the limited oversight

Stakeholders considered

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Other, please specify

River basin management authorities; statutory special interest groups at a local level.

Comment

Gold Fields uses the WRI Aqueduct and WWF Water Risk Filter Tools; an Enterprise-wide Risk Management process (aligned with ISO 31000); the ICMM's Climate Data Viewer Tool and internal company methods. Internal methods are aligned to the risk management requirements of the King IV Code. Each operation implements an ISO14001 certified Environmental Management System to ensure that all identified risks have the necessary control measures and mitigating strategies in place.

Value chain stage

Other stages of the value chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established 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

Tools on the market

Enterprise risk management

Databases

Tools and methods used

WRI Aqueduct

WWF Water Risk Filter

ISO 31000 Risk Management Standard
Other, please specify
ICMM's Mining Climate Assessment Tool (Mica Tool

Contextual issues considered

Other, please specify
Gold Fields, endeavours to engage with the other stages of the value chain on some of these contextual issues, but this can be challenging due to the limited oversight

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level
Other, please specify
River basin management authorities; statutory special interest groups at a local level

Comment

Gold Fields uses the WRI Aqueduct and WWF Water Risk Filter Tools; an Enterprise-wide Risk Management process (aligned with ISO 31000); the ICMM's Climate Data Viewer Tool and internal company methods. Internal methods are aligned to the risk management requirements of the King IV Code. Each operation implements an ISO14001 certified Environmental Management System to ensure that all identified risks have the necessary control measures and mitigating strategies in place.

W3.3b

(W3.3b) 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.

Gold Fields uses the WRI Aqueduct and the WWF Water Risk Filter tools; the ICMM's Climate Data Viewer Tool as well as internal company methods to identify and respond to risks. Each operation implements an ISO14001 certified Environmental Management System to ensure that all identified risks have the necessary control measures and mitigating strategies in place. These tools are applied and implemented at all Gold Fields' assets. The risk and vulnerability assessments for each asset consider water risks across Gold Fields' direct operations, supply chain and broader network. A scale of Level 1 (most minor) is used to 5 (most severe) to assessing environmental incidents.

In 2021, Gold Fields' group risk assessment identified water, particularly pollution, security, and reduction in freshwater use, as one of the top 20 material group-risks. The risk response includes strict and focused compliance with environmental management regulations; ISO 14001 certification of all operations and expansion of water management plans to include post-closure water management. Gold Fields developed and integrated three-year regional water management plans with the 2021 business plans at all operations. These include requirements water recycling, reuse and conservation practices are in place in all regions, with targets achieved for 2020. Gold Fields' decision-making processes are aligned with the ICMM's SD Framework, Principles, Position Statements and Reporting Requirements, with additional reference to the ICMM's report on 'Adapting to a changing climate: implications for the mining and metals industry'. As part of the integrated reporting process, the group conducts comprehensive interviews with key management and external stakeholders. Gold Fields assesses water risks in the short, medium, and long-term, across its operations which inform the risk mitigation decisions. Decisions are incorporated into short-term (1-year) Operations Plans; medium-term Business Plans (3-years) and Strategic Plans (5-years) and long-term end-of-life plans (over 5 years).

Gold Fields considers all contextual issues from water availability and quality through to stakeholder conflicts and WASH services for our direct operations. Where possible, Gold Fields, endeavours to engage with the supply chain and other stages of the value chain on some of these contextual issues, but this can be challenging due to the limited oversight. Gold Fields considers all stakeholders from customers and employees, to investors, local communities, suppliers, and regulators for our direct operations. At this stage it is not feasible for Gold Fields to engage with the stakeholders of our supply chain or other stages of the value chain.

Gold Fields recognises that clean water is a basic human right and a vital company resource. Gold Fields' Water Stewardship Policy Statement, approved in 2019, aims to ensure security of water supply to operations without compromising access for other users or the environment. Identifying, assessing, and responding to water-related risks occur at group and asset levels. Risk mitigations are included in the annual Group Performance Scorecard and the performance scorecards of management at regional and asset levels. Governance at an asset level is important because all the mines are relatively autonomous regarding decisions on local water issues. Water-governance at asset level provides insights that may be missed at group level where local knowledge may not be as proficient as at the company or country-levels.

Key risks and mitigating actions are identified and classified using an Enterprise-wide Risk Management process (ISO 31000 aligned) and South Africa's King IV governance code. Strategic risks and macro-trends are identified and analysed at management's annual strategic planning sessions, where the group's risk register, and mitigating actions are developed. These are updated quarterly and presented to the Board's Risk Committee twice a year for verification. This committee also determines the severity and probability of risks and ranks risks per region. Risks with high severity and probability ratings are ranked as top risks. Mitigation decisions are made by the Board based on the risk assessments. Material sustainability issues are assessed and prioritised according to the GRI Standards. A common, quantitative scoring framework is used to draw on a range of internal and external sources, as well as detailed engagement with senior executives and external stakeholders. All assets have detailed climate risk vulnerability assessments. Stakeholder engagement has commenced regarding water-related issues, which will feed into the process of assessing risks along the value chain.

Water risks are classified and assessed on a quarterly basis by the operations and management teams. The Group Risk Manager is responsible for risk management at an asset (company) level.

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?

Gold Fields defines risks that have ‘substantive financial impact’ as any change in the business that will cause one or more day’s loss of revenue, in line with the ISO 31000 risk management standard. This definition is set the by the business at the corporate level and is applied to the categorisation of water-related risks.
The quantifiable indicator for ‘substantive financial impact’ has been calculated for the reporting year to be approximately USD 14.4 million. This metric represents the average daily revenue across the group, assuming all mines were operational for 80% of the year. Changes that exceed this threshold are thus considered to have a substantive financial impact.
The coverage or scope of the definition includes direct operations, such as the mining and milling of gold ore and dust suppression, and activities occurring further along the value chain, like the production of cyanide and diesel. To show substantive financial impact, an example related to water is considered:
Water security and quality are critical to the success of Gold Fields mining and processing activities. Gold Fields’ recent group climate change risk and vulnerability assessment has identified various potential risks to the Cerro Corona mine in Peru, related to water. The risks relate to both the direct operations and the mine’s value chain. For example, risks to the mine’s direct operations include risks of extreme precipitation events that may cause pit flooding, compromising the pumping systems and threatening the quality of water being discharged, and also impact the slope stability and integrity of the mine’s tailings storage facilities. Both these risks carry a ‘high’ vulnerability rating. As such, the impacts of such events could lead to environmental impacts or scenarios where the health and safety of staff and communities is compromised. These events could disrupt mining operations and lead to temporary shutdowns, until remediation activities are complete. Disruptions to the operations would lead to production losses. The loss of production at the Cerro Corona operation, resulting in financial loss of USD 14.4 million, would be considered as substantive to Gold Fields’ business.

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	8	100	The facilities included are : • Cerro Corona; • Damang; • Tarkwa; • South Deep; • Granny Smith; • St Ives; • Agnew; and • Gruyere. These facilities are exposed to different water risks, depending on the different regions. Water is essential to Gold Fields' operations. Water supply and quality risks pose significant threats to the operations, productivity and ultimate continuity of Gold Fields' mines. These risks have been amplified in the current reporting period due to the outcome of the recent group-level climate change risk and vulnerability assessments.

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

Orange

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

523,800,000

% company's total global revenue that could be affected

11-20

Comment

Security of water supply and quality are considered to be substantive risks for the South Deep operation located in South Africa.

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Number of facilities exposed to water risk

4

% company-wide facilities this represents

26-50

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

1,842,300,000

% company's total global revenue that could be affected

41-50

Comment

Droughts and water stresses are considered to be substantive risks for the St Ives, Agnew, Granny Smith and Gruyere operations located in Australia.

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Number of facilities exposed to water risk

2

% company-wide facilities this represents

1-25

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

139,400,000

% company's total global revenue that could be affected

31-40

Comment

Extreme precipitation events are considered to be substantive risks for the Tarkwa and Damang operations located in Ghana.

Country/Area & River basin

Peru

Other, please specify

Tingo

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

434,800,000

% company's total global revenue that could be affected

1-10

Comment

Unpredictable and extreme precipitation events are considered to be substantive risks for the Cerro Corona operation located in Peru.

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.

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Type of risk & Primary risk driver

Chronic physical

Precipitation and/or hydrological variability

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

The outcome of Gold Fields' updated Climate Change Risk and Vulnerability Assessment, undertaken in 2021, reiterated that the Tarkwa and Damang operations in Ghana are exposed to the chronic risk of increased precipitation variability. Two main sources of data were analysed for climate forecasting, namely national climate projections and site-specific data related to the region in which the mining operations are located (from onsite weather stations). The ability to cross-check different models further increases the reliability of the climate projections.

How the impact identified will affect direct operations:
Both the Ghanaian operations engage in open pit mining. The precipitation variability in Ghana, which includes heavy rainfall events, therefore exposes the operations to high flood risks, extremely high risk of untreated water and wastewater discharge, high risk of drinking water shortage, extremely high risk of unimproved/no sanitation as well as high risk of tailings and infrastructure failures. These risks pose significant risk to the integrity of the Tarkwa and Damang mines. Heavy rains and floods impact the ability to operate and also pose risks to infrastructure, which would require financial expenditures to avoid or mitigate negative impacts on the mines' operations. For example, pit flooding will increase the pumping and extraction of water from the pit before safe operations may recommence. Pumping and extraction activities require time and resources, which may ultimately disrupt the mining operations. Disruption to the mining operations will have associated loss of revenues.

A secondary impact of the chronic risk of precipitation variability in Ghana relates to the need to mine deeper at Tarkwa and Damang over time. The risk of haul trucks slipping along the access roads, into both mines, increases as the mines' depths increase. Gold Fields places crushed waste and sheet rock along the roads to increase traction and mitigate risks of trucks slipping along the road. However, with increased rainfall that results in pit flooding, the crushed waste and sheet rocks have the potential to become lubricated, which can result in the tearing of truck tyres. Thus, damaged tyres would require immediate replacement, halting work and resulting in increased operational costs and disruptions to 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, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

4,800,000

Potential financial impact figure - maximum (currency)

134,000,000

Explanation of financial impact

Approach employed to calculate the potential financial impact figure:
The impact of the risk of unpredictable precipitation patterns in Ghana could result in reduced productivity or downtime, resulting in reduced revenues for the group. The average financial loss of revenue for 1 day's production loss in Ghana is approximately USD 4.8 million, which is the main input in calculating the potential financial impact. Such a loss would be due to a loss in production of ounces of gold and thus reduced revenue. This figure has been calculated using the 2021 financial results.

Expected time scale of the risk:
The extent of the downtime would trigger the significance of the impact. 28 days is currently the longest period of consecutive days of rainfall recorded at the Ghanaian operations. The downtime could therefore be the equivalent of this period, which would be approximately USD 134 million (USD 4.8 million x 28 days). A financial impact of USD 14.4 million or more would be classified as a significant impact.

Assumptions the figure is dependent on:
The figure is based on the approximate average value for one day's lost production at the Tarkwa and Damang mines in Ghana, assuming that the facilities operated 80% of the total days in the year.

Primary response to risk

Improve maintenance of infrastructure

Description of response

The risk of precipitation variability and severe weather events on Gold Fields' Ghanaian operations continues to feature in the group's top risks. Gold Fields continues to implement a range of measures to mitigate this risk on an ongoing basis.

For example, Gold Fields has updated the Climate Change Vulnerability Assessment related to operations at the Tarkwa and Damang mines in Ghana. A resulting climate change adaptation strategy has been identified, focussed on improving maintenance of infrastructure at the Tarkwa and Damang mines, to mitigate the risk that severe weather events may result in possible downtime. The strategy includes:
• Undertake mine wide flood risk assessment and modelling to assess hotspots/flush points for planning

• Continue to mine deeper in dry season to compensate for wet season limitations
• Increase stockpiling to ~28 days, as per longest period of consecutive days of rainfall
• Divert excess run-off water away from pit
• Upgrade pumps and secure back ups
• Drainage channels enhancement
• Continued on-site water quality testing and permitting for discharge.

Timeframe expected for the response strategy to be implemented:
The response is underway. These initiatives will be investigated further and will be implemented if deemed necessary. Hence, the progress for lowering the residual risks of downtime and production losses will be assessed on an ongoing basis as the strategy is implemented.

The difference the response is expected to make:
The measures are expected to reduce unnecessary operational costs associated with the risk driver, unpredictable precipitation patterns. In addition, it the measures are also expected to keep workers safe during severe weather events. The measures are therefore expected to improve Gold Fields' resilience at both the corporate level and at the level of the Ghanian operations, by mitigating future financial, operational or strategic impacts associated with downtime and infrastructure damage associated with changing precipitation patterns such as heavy rains or floods.

Furthermore, the response is expected to contribute to the progress of the 9th UN Sustainable Development Goals: Industry, Innovation and Infrastructure, as the response aims to build resilient infrastructure.

How the risk has impacted strategic and/or financial planning:
More comprehensive assessments are planned for Tarkwa in 2022 to support measures to mitigate flood risks.

Cost of response

36,632

Explanation of cost of response

Approach employed to calculate the cost of the response strategy: Gold Fields sent out requests for proposals from various specialists to update the Climate Change Vulnerability Assessment related to operations at the Tarkwa and Damang mines in Ghana. A specialist was appointed in 2021 and completed the specified studies in 2021.

The costs for the study were derived from the specialist's invoices.

Country/Area & River basin

South Africa

Orange

Type of risk & Primary risk driver

Acute physical

Heavy precipitation (rain, hail, snow/ice)

Primary potential impact

Loss of license to operate

Company-specific description

Gold Fields initiated the first regional assessment of the tailings storage facility (TSF) of the South Deep mine in South Africa in 2021, with the assistance of external specialists. The assessment continued the recent regional risk and vulnerability assessment and the 2019 dam break assessment. The assessment is based on a climate change scenario of an increase in the mean temperature, a decrease in rainfall and an increase in rainfall variability.

Heavy precipitation events at Gold Fields' Doornpoort TSF have been identified as potential acute physical risks to the mine's operations. Heavy rains could result in TSF failures, such as uncontrolled release of tailing and water, which could result in environmental damage and harm to local communities.

How the impact identified will affect direct operations:
The two main hazards in connection with TSF failure are slope instability and overtopping, which could lead to the uncontrolled release of tailings and water, in the form of a flow slide. These flow failures, in turn, could lead to serious environmental impacts and potential impacts on nearby residential settlements. Such local incidents could cause communities and shareholders to question Gold Fields' corporate reputation as a leader in health, safety and water stewardship. Damage to Gold Fields' reputation in this regard could impair the group's licence to operate in South Africa, which is a region already characterised by high levels of host community activism, especially related to health, safety and environmental matters.

A secondary impact of the risk:
Failures at the Doornpoort TSF in South Africa could also result in fines, penalties or enforcement orders. This could result in litigation, which would likely further damage the Gold Fields' brand as a well-run organisation and leader in environmental stewardship. This could result in a loss of shareholder confidence, which could cause the Gold Fields' share price to dimmish. Reduced share prices could impair the group's ability to borrow capital to finance growth opportunities.

Timeframe

Current up to one year

Magnitude of potential impact

High

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

1,800,000

Potential financial impact figure - maximum (currency)

14,400,000

Explanation of financial impact

Approach employed to calculate the potential financial impact figure:
The impact of loss of licence to operate in South Africa could result in reduced productivity or downtime, resulting in reduced revenues for the group. The average financial loss of revenue for 1 day's production loss in South Africa is approximately USD 1.8 million, which is the main input in calculating the potential financial impact. Such a loss would be due to a loss in production of ounces of gold and thus reduced revenue. This figure has been calculated using the 2021 financial results.

Expected time scale of the risk:
Community activism related to TSF failures in South Africa could result in temporary mine closures or reduced operating times. The extent of the downtime would trigger the significance of the impact. For example, if the temporary closure or downtime ran over 8 days, the financial impact would result in a potential impact of USD 14.4 million (USD 1.8 million x 8). This would be classified as a significant impact.

Assumptions the figure is dependent on:
The figure is based on the approximate average value for one day's lost production at the South Deep mine in Ghana, assuming that the facilities operated 80% of the total days in the year.

Primary response to risk

Improve monitoring

Description of response

Gold Fields is pursuing two broad strategies to further strengthen the technical management and governance of the group's TSFs. Improved monitoring is key at these levels:
- Industry level: As a member of the ICMM, Gold Fields has been integrally part of the development of the Global Industry Standard on Tailings Management (GISTM). This global best practice standard sets out how companies can ensure that TSF risks are managed appropriately, consistently and transparently.

- At a company level: Gold Fields has publicly endorsed and committed to conforming to the GISTM. The group has aligned the tailings management practices to the ICMM position statement on tailings management. In 2021, Gold Fields launched a review of each of the major water management structures, including TSFs, to evaluate their status, identify opportunities for improvement and assess the potential impact of climate change on their integrity. This study was supplemented by an updated Climate Change Risk and Vulnerability Assessment for the South Deep Mine in South Africa.

Timeframe expected for response strategy to be implemented:
The response is underway. Hence, the progress for lowering the residual risks of downtime and production losses will be assessed on an ongoing basis as the strategy is implemented.

The difference the response is expected to make:
The measures are expected to reduce the risks and impacts associated with TSF failures. In addition, the measures are also expected to keep workers safe during severe weather events. The measures are expected to improve Gold Fields' resilience at both the corporate level and at the level of the South African operation, by preventing future financial, operational or strategic impacts associated with TSF failures and resulting stakeholder activism.

The response is expected to contribute to the progress of the 6th UN SDG: Clean Water and Sanitation, as the response aims to ensure sustainable management of water and sanitation.

How the risk has impacted strategic and/or financial planning:
TSF management is a strategic imperative at Gold Fields. The group is committed to following the ICMM Tailings Best Practice Guide in relation to TSF design for climate change. The actions to achieve this include improved monitoring measures to:
• Ensure that the hydrological parameters are current
• Estimate the potential changes in Annual Exceedance Probability and Probable Maximum Precipitation events due to climate change at each operation.

Cost of response

11,543

Explanation of cost of response

Approach employed to calculate the cost of the response strategy: Gold Fields sent out requests for proposals from various specialists to update the Climate Change Vulnerability Assessment related to the South Deep mine in South Africa. A specialist was appointed in 2021 and completed the specified studies in 2021.

The costs for the study were derived from the specialist's invoices.

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Type of risk & Primary risk driver

Chronic physical

Water scarcity

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

The outcome of Gold Fields' updated Climate Change Risk and Vulnerability Assessment, undertaken in 2021, reiterated that the Australian region is particularly water scarce and is expected to become more so in future as the impacts of climate change increase. Gold Fields' Australian operations (Granny Smith; St Ives; Agnew and Gruyere) mostly engage in underground mining, with some surface mining, in remote, arid and mostly hot areas with high evaporation. The groundwater ranges from saline to hypersaline.

The updated Climate Change Risk and Vulnerability Assessment utilised two main sources of data for climate forecasting, namely national climate projections and site-specific data related to the region in which the mining operations are located (from onsite weather stations). The ability to cross-check different models further increases the reliability of the climate projections.

How the impact identified will affect direct operations:
The risks of increased water scarcity at the Australian operations were identified as declining availability of process water and restrictions by government to freshwater withdrawals. Freshwater is vital for the direct operations of the mines, as it is an important part of multiple stages in the mining process, including:

- Mining
- Milling
- Tailings removal
- Dust suppression
- Ore washing and processing
- Underground cooling
- Employee health and sanitation

Constraints on freshwater supplies, due to water scarcity in the region, may therefore impact one or more of the processes listed above, thereby reducing or disrupting the production capacity of the affected operations in Australia. Such impacts would negatively impact the revenue of the operations as well as Gold Fields' profitability at a corporate level.

A secondary impact of the risk:

Water scarcity at the Australian operations is linked to devastating bushfires in the region. The risks of bushfires include damage to infrastructure, disruptions to the supply of critical mining inputs, for example diesel, as well as risks to the health and safety of employees.

Timeframe

1-3 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

6,300,000

Potential financial impact figure - maximum (currency)

19,000,000

Explanation of financial impact

Approach employed to calculate the potential financial impact figure:
The impacts of the risk of water scarcity in Australia could result in reduced productivity or downtime, resulting in reduced revenues for the group. The average financial loss of revenue for 1 day's production loss in Australia is approximately USD 6.3 million, which is the main input in calculating the potential financial impact. Such a loss would be due to a loss in production of ounces of gold and thus reduced revenue. This figure has been calculated using the 2021 financial results.

Expected time scale of the risk:
The extent of the downtime would trigger the significance of the impact. For example, if the downtime ran over 3 days, the financial impact would result in a potential impact of USD 19 million (USD 6.3 million x 3). This would be classified as a significant impact.

Assumptions the figure is dependent on:
The figure is based on the approximate average value for one day's lost production at the four Australian operations (Granny Smith; St Ives; Agnew and Gruyere), assuming that the facilities operated 80% of the total days in the year.

Primary response to risk

Develop drought emergency plans

Description of response

The risk of water scarcity on Gold Fields' operations is a top group risk. Gold Fields adaptation response measures form part of drought emergency plans at the Australian operations. The adaptation measures currently being implemented include:

In relation to mineral processing:
• Life of mine water risk assessments for all sites
• Water included into strategic plans
• Water source and capacity studies at all operations

In relation to health and safety risks associated with cooling of equipment and workplaces, which typically require water as a critical input:
• Align the sites to ISO 50001
• Energy management plans for all sites, inclusive of a focus on energy efficiency
• Implement technology strategy to reduce heat loading
• Transition energy sources to renewable energy

In relation to health and safety risks associated with bushfires:
• Review site critical hazard standards to ensure appropriate coverage of bushfire risk
• Review site-based fire management plans
• Identify at risk infrastructure
• Mutual aid agreements at all sites to ensure regional responses
• Participation in Goldfields Voluntary Regional Organisation of Councils work on climate change

Timeframe expected for the response strategy to be implemented:
The response is underway. Hence, the progress for lowering the residual risks of downtime and production losses due to water scarcity impacts will be assessed on an ongoing basis as the adaptation measures are implemented.

The difference the response is expected to make:
The measures are expected to reduce the risks and impacts associated with water scarcity. In addition, the measures are also expected to keep workers safe during droughts and bushfires. The measures are therefore expected to improve Gold Fields' resilience at both the corporate level and at the level of the Australian operations, by mitigating future financial, operational or strategic impacts associated with water scarcity in the region.

Furthermore, the response is expected to contribute to the progress of the following UN SDGs:
• #6: Clean Water and Sanitation, as the response aims to ensure sustainable management of water and sanitation.
• #9: Industry, Innovation and Infrastructure, as the response aims to build resilient infrastructure.

How the risk has impacted strategic and/or financial planning:

Reducing freshwater withdrawals and dependency on water supplies is a key strategic priority for Gold Fields.

Cost of response

0

Explanation of cost of response

Approach employed to calculate the cost of the response strategy: the costs of the response strategy is integrated into the operational expenditures related to the Gold Fields' Australian operations: Granny Smith; St Ives; Agnew and Gruyere. These response costs cannot be disaggregated and hence are reported as 0.

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.

Country/Area & River basin

Peru

Other, please specify

Tingo

Stage of value chain

Other, please specify

Local Stakeholder

Type of risk & Primary risk driver

Acute physical

Rupture of tailings dams and toxic spills

Primary potential impact

Loss of license to operate

Company-specific description

Climate change is predicted to increase the frequency of severe weather events in Peru, in which Gold Fields' Cerro Corona mine and the Salares Norte project are located. Specifically, increased frequency of severe rainfall events and corresponding floods, as articulated in Peru's NDC, pose acute physical risks. The impacts of such events can have severe impacts on the Peruvian operations, notably on the integrity of the tailings storage facilities (TSF), which have the potential to impact partners within the company's value chain. TSF failures can lead to environmental damage and risks to the health and safety of host communities.

Gold Fields' host communities are an important stakeholder group as their support underpins social licence to operate at a corporate level which, in turn, impacts the

group's ability to generate and distribute enduring value.

How the impact identified will affect the value chain:
The Cerro Corona TSF has a hazard rating of "Extreme" with regards to the consequence of failure, as per the local TSF guideline, ANCOLD 2012. This is because the local Hualgayoc community lives directly downstream of the facility. Failure of the TSF could cause flash flooding immediately downstream of the facility which could have severe impacts on the local community, such as polluting shared water resources with the toxins contained in the failed TSF. Polluted water sources can have significant impacts on the health, safety and livelihoods of the people living in the local community. These negative impacts, due to a TSF failure, would raise concerns regarding Gold Fields' ability to responsibly manage the group's assets and operations. The impact of such concerns could result in the loss of Gold Fields' social licence to operate, not just at the Cerro Corona facility level, but at a corporate level. Resulting social unrest could prevent or disruption operations. Disruptions to the operations would impair the expected revenues of the Cerro Corona mine as well as the profitability of the group at a corporate level.

A secondary impact of the risk:
Resulting social unrest - preventing or disruption operations - could extend well beyond the actual failure and remediation of the TSF. A catastrophic failure of the storage facility could therefore lead to longer term shutdown in operations. This would also negatively impact productions and revenues at both the level of the Cerro Corona operation and at the corporate Gold Fields level.

Timeframe

More than 6 years

Magnitude of potential impact

High

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

1,500,000

Potential financial impact figure - maximum (currency)

15,000,000

Explanation of financial impact

Approach employed to calculate the potential financial impact range:
The impacts of severe weather events, leading to TSF failures, in Peru could result in social unrest and loss of licence to operate that could result in reduced productivity or downtime, resulting in reduced revenues for the group. The average financial loss of revenue for 1 day's production loss at Cerro Corona is approximately USD 1.5 million, which is the main input in calculating the potential financial impact. Such a loss would be due to a loss in production of ounces of gold and copper, thus reduced revenue. This figure has been calculated using the 2021 financial results.

Expected time scale of the risk:
The extent of the downtime would trigger the significance of the impact. For example, if the downtime ran over 10 days, the financial impact would result in a potential impact of approximately USD 15 million (USD 1.5 million x 10 days). This would be classified as a significant impact.

Assumptions the figure is dependent on:
The figure is based on the approximate average value for one day's lost production at the Cerro Corona operation, assuming that the facilities operated 80% of the total days in the year.

Primary response to risk

Downstream
Improve pollution abatement and control measures

Description of response

Gold Fields recognises that the company's operations, such as TSFs, may be impaired by natural disasters such as floods or severe storms. Damage and failures, particularly with regards to TSFs, have the potential to negatively impact the water resources shared with host communities in Peru. Such incidents pose threats to Gold Fields' social licence to operate. Gold Fields is therefore implementing pollution abatement and control measures to ensure the full compliance of the Peruvian operations (Cerro Corona mine and Salares Norte project) with the group's TSF Management Policy and Tailings Management Guideline, as well as international guidelines for TSFs (e.g. ANCOLD). The measures include:
- Annual Independent Geotechnical and Tailings Review Board at Cerro Corona; and
- Use of dry-stack tailings at Salares Norte project, recognised as one of the most environmentally responsible tailings solutions.

Also, Gold Fields is in the process of implementing the Global Industry Standard on Tailings Management (GISTM) with timing in accordance with ICMM targets.

Timeframe expected for the response strategy to be implemented:
The response is underway. Hence, the progress for lowering the residual risks of downtime and production losses due to TSF failure impacts will be assessed on an ongoing basis as the adaptation measures are implemented.

The difference the response is expected to make:
The measures are expected to reduce the risks and impacts associated with TSF failures. The measures are therefore expected to improve Gold Fields' resilience at both the corporate level and at the level of the Peruvian operations, by mitigating future financial, operational or strategic impacts associated with TSF failures in the region.

Furthermore, the response is expected to contribute to the progress of the following UN SDGs:
• #6: Clean Water and Sanitation, as the response aims to ensure sustainable management of water and sanitation.
• #9: Industry, Innovation and Infrastructure, as the response aims to build resilient infrastructure.

How the risk has impacted strategic and/or financial planning:
Gold Fields views TSF management as a critical matter at a corporate level. The group's strategic and financial planning has been impacted to category for the inclusion of the following 2030-ESG targets:
· Conformance to the GISTM
· Reduce number of active upstream raised TSFs from 5 to 3.

Cost of response

31,188

Explanation of cost of response

Approach employed to calculate the cost of the response strategy: Gold Fields sent out requests for proposals from various specialists to update the Climate Change Vulnerability Assessment related to the Cerro Corona mine in Peru. A specialist was appointed in 2021 and completed the specified studies in 2021.

The costs for the study were derived from the specialist's invoices.

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.

Type of opportunity

Resilience

Primary water-related opportunity

Increased supply chain resilience

Company-specific description & strategy to realize opportunity

Gold Fields has identified a substantive opportunity to increase the water and climate related resilience of grid-electricity supplies, by developing renewable energy facilities in Australia and South Africa. The opportunities are considered substantive and strategic because they have the potential to increase the resilience of the operations in these regions to the impacts of climate change.

This is because the Australian and South African operations rely heavily on the supply of grid-based electricity, much of which is generated by coal-fired power stations. These power stations typically require large amounts of freshwater supplies for cooling purposes. Both Australia and South Africa are water scarce regions, making the supply of grid-electricity to the respective operations vulnerable droughts and other water stresses. Disruptions to electricity supplies could cause substantive losses in revenues, where the losses are USD 14,4 million or more.

Why this opportunity is considered strategic:
Security of both renewable electricity and water supplies are critical components of Gold Fields' long-term sustainability strategy. The development of renewable energy facilities has multiple benefits. They increase electricity security by suppling renewable, clean energy to the operation and they also save regional water supplies because the renewable energy facilities do not require freshwater sources for cooling.

Actions to realize opportunity:
The group has set 2030 ESG targets related to decarbonisation (2050 net-zero target) and water stewardship. E.g., the 50 MW solar PV facility in construction at the South Deep mine in South Africa will provide 24% of South Deep's electricity needs and will save +/-110 ktCO2e/yr. The PV plant will be commissioned in 2022. The solar PV plant will significantly reduce South Deep's reliance on electricity provided by the national utility Eskom, which continues to battle to meet electricity demands. Furthermore, many of Eskom's water intensive, coal-fired power stations are located in particularly water-stressed areas. The PV plant will save South Africa +/-134 000 kL of water per annum. Therefore, by sourcing more electricity from PV, South Deep may improve its resilience to disruptions in Eskom-electricity supply that could be caused by a lack of water to some of Eskom's power plants.

This opportunity has impacted strategic and financial planning: all Gold Fields' mines are building or evaluating renewables plants.

Estimated timeframe for realization

1 to 3 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)

16,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Approach employed to calculate the figure:
Electricity is a vital supply required by Gold Fields' operations. The impact of a disruption to this supply, for example due to water scarcity or extreme water events such as storms and floods, could result in reduced productivity or downtime at the South African and Australian operations, resulting in reduced revenues for the group. The financial impact has therefore been calculated as the avoidance of loss of revenues due to downtime that results from disruption of electricity supplies.

The average financial loss of revenue for 1 day's production loss across both the South Africa and Australian regions (geographic scale) is approximately USD 4 million. This is the main input in calculating the potential financial impact. Such a loss would be due to a loss in production of ounces of gold and thus reduced revenue. This figure has been calculated using the 2021 financial results, assuming that the facilities operated 80% of the total days in the year.

Magnitude:
The extent of the downtime would trigger the magnitude of the impact. For example, if the downtime ran over 4 days, the financial impact would result in a potential impact of approximately USD 16 million (USD 4 million x 4 days). This would be classified as a high magnitude impact, which is aligned with Gold Fields' definition of "substantive financial impact". Gold Fields' defines "substantive financial impact" as an impact that is equal or greater than one-day's loss of revenue across the entire group. In 2021 this was approximately USD 14.4 million.

The risks of revenue losses due to disruptions in critical electricity supplies could be mitigated in part by increasing the resilience of the national electricity supplies.

Type of opportunity

Markets

Primary water-related opportunity

Strengthened social license to operate

Company-specific description & strategy to realize opportunity

Gold Fields is committed to reducing the group's carbon footprint, as part of the group commitment to lower greenhouse gas (GHG) emissions. Accordingly, Gold Fields has identified a substantive opportunity to purchase renewable energy certificates (RECs) related to the electricity generated by the Kallpa hydropower plant in Peru. As a result, 100% of the Cerro Corona mine's electricity was classified as renewable in 2021. This opportunity demonstrates Gold Fields' commitment to contributing to the achievement of the mitigation goals set by the Paris Agreement, which contributes to strengthening the group's social licence to operate not just in Peru but globally as well.

Why this opportunity is considered strategic:
Gold Fields has identified decarbonisation as one of the key strategic components of the group's 2030 environmental, social and governance (ESG) targets. These targets demonstrate the group's commitments to sustainable development through shared value opportunities. One of the key impacts of shared value opportunities relates to increases in the group's social licence to operate.

The shared value framework inherent in the purchase of the RECs originating at the Kallpa hydropower plant includes:
- Value to direct operations: Cerro Corona has 0 GHG emissions associated with purchased electricity, hence contributes to Gold Fields' overall decarbonisation strategy
- Value to wider community:
o Development of Peru's green economy through the purchase of RECs
o Increased energy security in Peru, through diversification of the energy mix
o Reduced air pollution in Peru, due to displacement of fossil fuel based electricity with renewable electricity from hydro sources, which increases respiratory health of community

Actions to realize opportunity:
The group has set 2030 ESG targets related to decarbonisation (2050 net-zero target). Accordingly, the group purchased enough RECs to offset the 2021 electricity emissions at the Cerro Corona mine: 151,999 RECs.

This opportunity has impacted strategic and financial planning, the group plans to continue to purchase RECs in future, supporting Gold Fields's plans to implement a mix of strategic solutions to ensure we meet commitment to the goal of shifting from compliance to sustainable value delivery to all stakeholders.

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, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

6,700,000

Potential financial impact figure – maximum (currency)

21,600,000

Explanation of financial impact

Approach employed to calculate the figure:
While Gold Fields does not utilise an official group-level cost of carbon, the potential financial impact has been calculated based on estimates referenced by the World Bank range in the 'State and Trends of Carbon Pricing 2020', for reference purposes. The World Bank estimated that carbon prices of at least US$50–100/tCO2 by 2030 are required to cost-effectively reduce emissions in line with the temperature goals of the Paris Agreement. The potential impact figure was therefore calculated by multiplying the estimated costs of carbon (100/tCO2) by the Cerro Corona electricity emissions in 2021 (26,554 tCO2e). This provided a figure of approximately USD 6.7 million. This value was further extrapolated for a further 8 years (assuming constant grid electricity purchases as Cerro Corona), to be aligned with Gold Fields' 2030 ESG targets, where the decarbonisation target features prominently. Therefore, the upper end of the financial impact range is approximately USD 21,6 million (USD 6.7 million x 8).

Magnitude:
The extent of the impact would trigger the magnitude of the impact. For example, the financial impact over USD 14.4 million would be classified as a high magnitude impact, which is aligned with Gold Fields' definition of "substantive financial impact". Gold Fields' defines "substantive financial impact" as an impact that is equal or greater than one-day's loss of revenue across the entire group. In 2021 this was approximately USD 14.4 million.

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)

South Deep

Country/Area & River basin

South Africa
Orange

Latitude

-26.39802

Longitude

27.695503

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,607

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

232

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1,375

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)

1,607

Comparison of total consumption with previous reporting year

Higher

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the South Deep mine in South Africa is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at South Deep by source/destination. Volumes are sourced from direct measurements from meters and water samples.

The consumption increased by 12% from the previous year. The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher.

The change in consumption is due to the decrease in water discharges to nearly zero. This is due to a combination of initiatives to reduce water withdrawals, increase water recycling and improve efficiency. For example, at South Deep, treated sewage effluent, which was previously discharged to the Leeuspruit, is now re-routed to the old return water dam and is utilised in the process. The mine has also upgraded its potable water pipeline to reduce water losses.

Type of freshwater withdrawal sources: none.

Third party water withdrawal source: Municipal.

Facility reference number

Facility 2

Facility name (optional)

Tarkwa

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.249448

Longitude

-2.004898

Located in area with water stress

No

Total water withdrawals at this facility (megaliters/year)

4,657

Comparison of total withdrawals with previous reporting year

Much lower

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

1,180

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

476

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1

Total water discharges at this facility (megaliters/year)

1,846

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

1,846

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)

-189

Comparison of total consumption with previous reporting year

Much lower

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the Tarkwa mine in Ghana is not located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Tarkwa by source/destination. Volumes are sourced from direct measurements from meters and water samples.

The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. The water withdrawals were lower (-45%) and water consumption was much lower (-109%) than in the previous year.

The decrease in consumption was due to increased recycling measures, e.g. installation of a micro-filtration unit on a clarifier return line to the carbonin-leach plant, increasing its water recycling and reuse. Additionally, process water is now reused for cooling at the power plant and for mixing explosives and some chemicals. High rainfall also led to high discharge volumes. The total discharges exceeded total withdrawals as the rainwater received is never accounted for as a withdrawal, but is accounted for as a discharge when it passes through the storm water management system. This leads to a negative consumption.

Type of freshwater withdrawal source: rainwater which collects in the pit and is then pumped out for use.

Third party water withdrawal source: Municipal.

Facility reference number

Facility 4

Facility name (optional)

St Ives

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

-31.208691

Longitude

121.663284

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,491

Comparison of total withdrawals with previous reporting year

Lower

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

0

Withdrawals from brackish surface water/seawater

82

Withdrawals from groundwater - renewable

1,095

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

313

Total water discharges at this facility (megaliters/year)

5

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

5

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)

1,486

Comparison of total consumption with previous reporting year

Lower

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the St Ives facility is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at St Ives by source/destination. Volumes are sourced from direct measurements from meters and water samples.

The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals, discharges and consumption were all lower relative to the previous year (-39% for withdrawals, -24% for discharges and -39% for consumption). Initiatives, such as the implementation of underground paste fill which saves +/- 160 ML p/a, have helped Gold Fields to reduce withdrawals and discharges.

Type of freshwater withdrawal source: None.

Third party water withdrawal source: Municipal.

Facility reference number

Facility 5

Facility name (optional)

Agnew

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

-27.905845

Longitude

120.704727

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

1,516

Comparison of total withdrawals with previous reporting year

Lower

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

1,516

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)

35

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

35

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)

1,481

Comparison of total consumption with previous reporting year

Lower

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the Agnew facility is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Agnew by source/destination. Volumes are sourced from direct measurements from meters and water samples.

The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals and water consumption were both lower (both -24%), whilst the discharge was about the (6%). Gold Fields continues to make use of recycled water to reduce the amount of water withdrawn at Agnew.

Type of freshwater withdrawal source: None.

Third party water withdrawal source: None.

Facility reference number

Facility 6

Facility name (optional)

Cerro Corona

Country/Area & River basin

Peru

Other, please specify

Tingo

Latitude

-6.776103

Longitude

-78.660736

Located in area with water stress

No

Total water withdrawals at this facility (megaliters/year)

3,745

Comparison of total withdrawals with previous reporting year

Higher

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

2,931

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

814

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)

1,900

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

1,900

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)

1,845

Comparison of total consumption with previous reporting year

Lower

Please explain

Gold Fields uses the WRI Aquaduct tool to determine that the Cerro Corona facility is not located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Cerro Corona by source/destination. Volumes are sourced from direct measurements from meters and water samples. The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals were higher (30%) and water discharges were much higher (262%) than in the previous year. Cerro Corona also experienced unseasonably high rainfalls, leading to discharges exceeding withdrawals as the rainwater received is not accounted for as a withdrawal, but is accounted for as a discharge when it passes through the storm water management system.

Type of freshwater withdrawal source is used: rainwater that collects in the pit and is pumped out.

Third party water withdrawal source: None.

Facility reference number

Facility 7

Facility name (optional)

Granny Smith

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

28.9833

Longitude

122.6833

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

2,208

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

1,548

Withdrawals from groundwater - renewable

657

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)

74

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

74

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)

2,135

Comparison of total consumption with previous reporting year

About the same

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the Granny Smith facility is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Granny Smith by source/destination. Volumes are sourced from direct measurements from meters and water samples. The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change

between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals, discharges and consumption remained about the same (-4%, -3% and -4%, respectively). Gold Fields continues to make use of recycling to ensure efficient water use at Granny Smith.

Type of freshwater withdrawal source: None.

Third party water withdrawal source: Purchased

Facility reference number

Facility 8

Facility name (optional)

Gruyere

Country/Area & River basin

Australia

Other, please specify

Western Plateau

Latitude

-27.59

Longitude

120.42

Located in area with water stress

Yes

Total water withdrawals at this facility (megaliters/year)

4,592

Comparison of total withdrawals with previous reporting year

Lower

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

4,592

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)

33

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

33

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)

4,559

Comparison of total consumption with previous reporting year

Lower

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the Gruyere facility is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Gruyere by source/destination. Volumes are sourced from direct measurements from meters and water samples. The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals and consumption were lower than in the previous year (both -18%), whilst discharges were higher (27%). Gold Fields has implemented water recycling measures. These have successfully reduced water withdrawals at Gruyere.

Type of freshwater withdrawal source: None.

Third party water withdrawal source: None.

Facility reference number

Facility 3

Facility name (optional)

Damang

Country/Area & River basin

Ghana

Other, please specify

Ankobra

Latitude

5.301456

Longitude

-1.500608

Located in area with water stress

No

Total water withdrawals at this facility (megaliters/year)

1,720

Comparison of total withdrawals with previous reporting year

About the same

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

1,679

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

41

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)

1,720

Comparison of total consumption with previous reporting year

About the same

Please explain

Gold Fields used the WRI Aquaduct tool to determine that the Damang mine in Ghana is located in a water stressed region.

Gold Fields monitors its withdrawals and discharges at Damang by source/destination. Volumes are sourced from direct measurements from meters and water samples.

The consumption is calculated as the difference between the withdrawals and discharges. Gold Fields defines “about the same” to be a change between 0 to ±10%. ±10% to ±40% change is considered lower/higher. > ±40% change is considered much lower/much higher. Water withdrawals decreased slightly (-5%) than in the previous year, likely on account of increased production values. Discharge also decreased back to zero (-100%)(due to complete recycle) to discharging 133 ML. This combination led to the consumption remaining about the same (3% increase). Initiatives, such as the recycling of pit water, have helped Gold Fields to reduce discharges from Damang.

Type of freshwater withdrawal source: rainwater which collects in the pit and is then pumped out for use.

Third party water withdrawal source: None.

W5.1a

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

Water withdrawals – total volumes

% verified

76-100

Verification standard used

Water withdrawals at all of the Gold Fields operations (mines) are assured by an independent third party.

The standard used: International Standard on Assurance Engagements (ISAE) 3000 (Revised).

The methodology: the assurance methodology of the third party auditor, ERM Certification and Verification Services', is used. This methodology is based on the ISAE 3000 (Revised).

The scope of methodology: Reviewing policies and procedures to ensure compliance with the ICMM sustainable development principles. Remote reviews to verify source data.

Water withdrawals – volume by source

% verified

Not relevant

Please explain

The assurance/verification of this water aspect is currently not relevant to Gold Fields because assurance/verification is not a requirement of any of our water use licences, or a requirement by any of our stakeholders.

Water withdrawals – quality by standard water quality parameters

% verified

Not relevant

Please explain

The assurance/verification of this water aspect is currently not relevant to Gold Fields because assurance/verification is not a requirement of any of our water use licences, or a requirement by any of our stakeholders.

Water discharges – total volumes

% verified

76-100

Verification standard used

Water withdrawals at all of the Gold Fields operations (mines) are assured by an independent third party.

The standard used: International Standard on Assurance Engagements (ISAE) 3000 (Revised).

The methodology: the assurance methodology of the third party auditor, ERM Certification and Verification Services', is used. This methodology is based on the ISAE 3000 (Revised).

The scope of methodology: Reviewing policies and procedures to ensure compliance with the ICMM sustainable development principles. Remote reviews to verify source data.

Water discharges – volume by destination

% verified

Not relevant

Please explain

The assurance/verification of this water aspect is currently not relevant to Gold Fields because assurance/verification is not a requirement of any of our water use licences, or a requirement by any of our stakeholders.

Water discharges – volume by final treatment level

% verified

Not relevant

Please explain

The assurance/verification of this water aspect is currently not relevant to Gold Fields because assurance/verification is not a requirement of any of our water use licences, or a requirement by any of our stakeholders.

Water discharges – quality by standard water quality parameters

% verified

Not relevant

Please explain

The assurance/verification of this water aspect is currently not relevant to Gold Fields because assurance/verification is not a requirement of any of our water use licences, or a requirement by any of our stakeholders.

Water consumption – total volume

% verified

76-100

Verification standard used

Water withdrawals at all of the Gold Fields operations (mines) are assured by an independent third party.

The standard used: International Standard on Assurance Engagements (ISAE) 3000 (Revised).

The methodology: the assurance methodology of the third party auditor, ERM Certification and Verification Services', is used. This methodology is based on the ISAE 3000 (Revised).

The scope of methodology: Reviewing policies and procedures to ensure compliance with the ICMM sustainable development principles. Remote reviews to verify source data.

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 standards for procurement Reference to international standards and widely-recognized water initiatives	A rationale for the scope selected: Gold Fields is an international business that works with diverse stakeholders in several water stressed regions. Water is a critical component across all of Gold Fields' businesses and is very important to many local stakeholders. Therefore, the 2019 Water Stewardship Policy Statement is applicable at a company-level, across all the regions in which Gold Fields operates and across all its processes. An overview of the policy content:

		Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	Gold Fields' Water Stewardship Policy recognises that its operations (mines) are critically dependent on water. This includes both its direct operations and further along its value chain. Gold Fields further recognises that water management at its facilities have social and environmental impacts. Accordingly, the Policy commits Gold Fields to continually improving its performance by applying strong and transparent corporate water governance, effectively managing water at our operations and ensuring consistent security of water supply and resilience to extreme weather events for our operations without compromising catchment users or the environment. Gold Fields acknowledges that water is a shared resource and therefore commits to achieving responsible and sustainable water use through collaborating proactively and inclusively with stakeholders, especially those in host communities, and by supporting water stewardship initiatives that promote better water use, effective catchment management and contribute to improved water security, sanitation and climate change resilience and vulnerability assessments. This collective action also extends to Gold Fields employees, where the company has committed to ensuring all employees have access to clean drinking water, gender-appropriate sanitation facilities and hygiene at their workplaces. The group further acknowledges that access to clean water is a fundamental human right and that water security is linked and related to climate change risks.

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
Director on board	How the responsibilities of the Directors on the board are related to water issues: water is a critical component of Gold Fields' business and therefore the highest level of direct responsibility for water sits with the Board and the respective directors, specifically with the Director who chairs the Board Safety, Health and Sustainable Development Committee. Example of water-related decision: Gold Fields' board was responsible for approving the group ESG target to 2030 in 2021. Group water priority outlined two new /long term water targets for the group: - Reduce freshwater withdrawals by 45% from 2018 baseline - Recycle/reuse 80% water These are the most ambitious water targets set by Gold Fields and will be underpinned by the Group 2030 Integrated Water Strategy.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans	How the governance mechanism(s) selected contribute to the board's oversight of water issues: The board via the SHSD subcommittee is ultimately responsible and accountable for the implementation of water policies, strategies and targets. As such, the board has oversight of water-related issues and is responsible for releasing water-related information. The board is equipped to oversee water-related issues through various governance mechanisms. For example, the board has access to the information it requires to make well-informed decision on how to move forward regarding water-related issues through the mandate to monitor and review performance against water-related metrics. How responsibility for water policies, strategy and information is delegated and how management is

		Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	held accountable and/ or incentivized for implementation of the organization's policies: The Gold Fields board is supported by the Executive Committee (Exco) which is responsible for developing the climate change and water strategies and policies for consideration and approval. Gold Fields' water strategy comprises three pillars: – Security of supply: example of action in 2021 includes improved water storage and reduced water consumption at the South Deep mine in South Africa, as well as upgrades to the mine's potable water pipeline to reduce water losses. – Water efficiency: example of action in 2021 includes the reuse of process water at the Tarkwa mine Ghana for cooling at the power plant and for mixing explosives and some chemicals. – Catchment management: example of action in 2021 includes the collaboration of South Deep mine in South Africa with a neighbouring mine to restore the Leeuspruit river, which forms part of the Leeuspruit catchment area. Exco carries out the board's mandate by ensuring the implementation of the company's water strategy, as well as related risk management plans. Exco also reviews the company's performances against set objectives and key performance indicators. The Sustainable Development (SD) Function and various working committees support the Exco in its duties. The SD function consists of multi-disciplinary experts covering overarching sustainability strategies, water, energy and climate change matters, stakeholder engagements, social license to operate, environmental management and performance and ESG reporting and assurance. The SD function at Group level provides strategic guidance and support to the regions. The SD function participates as members of various ICMM working groups including, biodiversity, mine closure, tailings, water and climate change. The Gold Fields Water Working Committee supports the Exco and comprises the Group Vice President of water management and regional and operational multi-disciplinary teams. It provides a platform for the sharing of experience and

			knowledge between the Group and regions. The Water Working Committee is subsequently supported by regional water managers.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	The Board of Directors is Gold Fields' highest governing body and is responsible for promoting the vision of the company while upholding sound principles of corporate governance, protecting the safety and wellbeing of employees, the interests of the group's host communities and acting as a responsible corporate citizen. Gold Fields' board is therefore committed to responsible environmental stewardship. In particular, the conservative use of water resources by the group's mines is not only critical for them to remain competitive, but also to limit the impact of the operations on neighbouring communities and the environment and also to become resilient to extreme weather events Country development programs in Peru with access to potable water with Government contributes to the local Human Rights initiatives and builds resilience to climate impacts and communities. The criteria used to assess competence of board members on water-related issues includes the requirement for strong competencies related to the environmental, social and governance (ESG) aspects, that are key to understanding and mitigating the impact of climate change on the operations, especially where those impacts are related to water. The board has demonstrated its high levels of competence in this regard. For example, in 2021 the board adopted an enhanced commitment to ESG as one of the group's three strategic pillars, to entrench the company's commitment to long-term sustainable growth. The board accordingly endorsed a comprehensive range of ESG targets for 2030, including the most ambitious water targets set by the company to date.

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)

President

Responsibility

Assessing future trends in water demand
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Position in the corporate structure: The President (known in Gold Fields as the Executive Vice President: Sustainable Development) reports to the CEO and is responsible for the effective management and running of the company's business.

Nature of the reports to the board on water-related issues: The Executive Vice President: Sustainable Development conducts quarterly assessments on business risks (including water risks and incidents) at operational and group level. These, and any other noteworthy events, are reported to the Board for the Board's consideration.

Water-related responsibilities:
The Executive President: Sustainable Development holds one of the highest levels of direct responsibility for water within the company. These responsibilities include monitoring water-related performance and allocating appropriate resources to water-related issues.

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	Corporate executive team Chief Executive Officer (CEO) Other, please specify Executive vice president sustainable development	Reduction of water withdrawals Improvements in efficiency - direct operations Implementation of water-related community project	Performance indicators chosen: - Group wide target to recycle/reuse 68% of water in the direct operations: exceeded in 2021 - 3% reduction in freshwater withdrawals: exceeded in 2021. This indicator is included in the performance review scorecard of the Executive Vice President of Sustainable Development and cascaded down through regional vice presidents to key personnel at site level. - Number of water-related community projects are also key performance metrics. Rationale for chosen indicators: - Recycle/reuse target is aligned with the commitment to the ICMM Water Position Statement. This represents an industry benchmark. It is also an easily measurable target. - Reduction of freshwater withdrawals is aligned with Gold Field's goal to reduce its overall burden on water resources. - Water-related community projects build the operation-specific social licences to operate as well as the group's overall reputation as a leader in environmental stewardship. Good relations with the local communities are key to the operations' success. Linkage between the selected water-related performance and the monetary incentive/s for a given timescale: water-related performance targets are tracked in the Business Scorecard along with other performance indicators. It is not possible to disaggregate these values. Performance bonuses are distributed on an annual basis.
Non-monetary reward	Corporate executive team Chief Executive Officer (CEO)	Reduction of water withdrawals	Performance indicators chosen: - Group wide target to recycle/reuse 68% of water in the direct operations: exceeded in 2021

	Other, please specify Executive vice president sustainable development	Improvements in efficiency - direct operations Improvements in efficiency - supply chain Implementation of water-related community project	- 3% reduction in water withdrawals: exceeded in 2021. This indicator is included in the performance review scorecard of the Executive Vice President of Sustainable Development and cascaded down through regional vice presidents to key personnel at site level. - Number of water-related community projects are also key performance metrics. Rationale for chosen indicators: - Recycle/reuse target is aligned with the commitment to the ICMM Water Position Statement. This represents an industry benchmark. It is also an easily measurable target whilst covering a significant portion of operation. - Reduction of freshwater withdrawals is aligned with Gold Field's goal to reduce its overall burden on water resources. - Water-related community projects build the operation-specific social licences to operate as well as the group's overall reputation as a leader in environmental stewardship. Good relations with the local communities are key to the operations' success. Linkage between the selected water-related performance and the non-monetary incentive/s for a given timescale: recognition incentives are provided for performance against the targets specified above on an annual basis.

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

Yes, trade associations

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?

Process to ensure consistency: Gold Fields' water policy has been encapsulated in the Water Stewardship Policy Statement and the 2020-2025 Water Stewardship Strategy. The

Environmental Policy Statement mandates, amongst others, that the Group undertakes environmental stewardship in line with ISO 14001. Gold Fields has a range of guidelines and policies that are applicable across our mines, projects and regions to ensure that the group's direct and indirect activities are consistent with the Group Water Management Guideline. For any external engagements with key stakeholders, Gold Fields' Stakeholder Engagement, Sustainable Development and Climate Change policy statements ensure alignment with the Group Water Management Guideline. Any public policy statement or other public engagements can only be carried out by senior executives as mandated by the Group's Corporate Affairs Department. These executives are familiar with all Group guidelines and ensure that the message is consistent and in line with our various Group guidelines and policy statements. Annual reviews ensure early detection of any inconsistencies. Action is taken if inconsistency is discovered: should any inconsistencies arise, these are immediately addressed by management.

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)

afs-2021.pdf

afs-2021.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	11-15	Our long-term business objectives are related to responsible stewardship and ensuring water security for the operations. Important long-term (11-15 yr) considerations include creating enduring value beyond mining by building on our ESG commitments which includes pursuing zero harm through sound water management practices and creating shared value initiatives for our stakeholders. Example of how water issues are integrated: Our long-term business objectives include sustainable development and growth of the operations and their

			host communities. We have therefore committed to ongoing Shared Value projects, like improving socio-economic conditions of host communities. E.g. improving access to water and youth employment initiatives that provide agricultural training. We continued to invest in water infrastructure and potable water provision in 2021 for the Hualgayoc City community in Peru, also extending to communities downstream (Bambamarca Munic.). We provide the majority of community households in Hualgayoc City with access to clean water. We have further committed to delivering 6 flagship projects by 2030 benefiting host communities. Why decisions were taken: high standards of water management and Shared Value projects related to solving community water problems solidify our social licence to operate. This affects reputation in regions such as South America and South Africa, where mining companies have experienced water-related conflicts with host communities.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Gold Fields' water strategy comprises three long-term (11-15 year) water issues (pillars), which are integrated into long-term business objectives: 1. Security of supply: focus is on understanding and securing water resources for the life of mine (LOM), embedding water planning into operational management, enabling informed management decisions and updating water security risk profiles to support sourcing of water over the life of operations. All operations have included LOM water security assessments in strategic and business plans. 2. Water efficiency: operations must reduce demand for fresh water and optimise the use of water resources due to potential water supply shortfalls and competition from communities. Good progress has been made in three regions to reduce freshwater withdrawal. 3. Catchment management: It is critical that Gold Fields manages external water risks to the business and to our stakeholders in the catchment. Recently, all regions assessed their impacts on catchment stakeholders in relation to water withdrawal, water discharges, and pollution sources. No negative impacts on catchment stakeholders were identified during the reviews

			conducted. Why decisions were taken: addressing water issues in long-term, shared value planning assists to identify and mitigate risks such as reduced supply due to water scarcity; water stresses, reduced water quality and increased water tariffs. These risks could negatively impact operating and capital expenses.
Financial planning	Yes, water-related issues are integrated	11-15	Gold Fields integrates the following long-term (11-15 year) water issues into long-term financial planning: • Water management financial provisions for post-closure of mines • Site level management plans informed by catchment level stewardship priorities • Budgets for research, technology and infrastructure to manage water quality, efficiency and opportunities for shared use • Operational water efficiencies: minimize, reuse, recycle (e.g. in 2021 Gold Fields increased water recycling/ reuse target to 80% by 2030) • Flood planning and protection • Long-term water balances to evaluate usage • Monitoring of quantity and quality of water discharges to minimize environmental impacts Example of how the business aspect was affected: Gold Fields' long-term planning (e.g. five-year strategic plans per operation) extends to post-mine life. Approved plans have budget allocations. Identifying financial requirements related to water management assists Gold Fields in allocating appropriate resources and helps to mitigate or avoid risks of non-compliance with regulations and best practice standards. Why decisions were taken: Gold Fields is required by law to make financial provisions for closure. The group has also committed to alignment with the ICMM's position statements on water and on tailings storage facility management.

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)

-57

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

10

Water-related OPEX (+/- % change)

34

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

10

Please explain

Year on year change: Gold Fields continued to invest in capital intensive projects in 2021. The decrease in water-related capex relates to capital expenditure cycles, where Gold Fields has invested substantially in water related infrastructure in the recent past. The material increase in opex spend from the previous reporting year is testament to Gold Fields commitment to continually investing in assets and infrastructure related to water management and improvements.

Description of water-related expenditures: CAPEX spend was related to Gold Fields' strategy to deliver permanent, high-quality water to the host communities of our Cerro Corona mine in Peru. Opex costs were largely related to water purchases.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	The following parameters are considered in climate change scenario analyses: - Technology: the World Gold Council believes the gold industry would be able to reduce emissions by up to 95% by 2050, through various measures, including increased renewable energy generation. This is because the current primary source of GHG emissions in the gold value chain – energy use in gold production – can transition towards a net zero pathway in a practical and cost-effective manner. Gold Fields has committed to a low carbon future and has therefore committed to developing 20% renewable energy generation over the life of mine of new projects and extensions - Price of key commodities/products: Gold Fields believes that the industrial application of gold has potential facilitate the transition to low-carbon economies. For example, in gold in nanoparticulate form can be used to enhance hydrogen fuel cell performance and improve photovoltaics in solar panels, thereby creating more energy Analytical choices - Scenarios: Gold Fields uses the IPCC global warming scenario to consider the impacts	The water-related outcomes associated with the climate scenarios include: - Americas: Water shortages during drier months; constraints in delivering concentrate for shipping during severe weather events. - South Africa: Variability in rainfall intensity increasing costs of alternate water sources; increased ambient temperatures will increase evaporative losses of water; Climate change-related regulatory uncertainty. -Australia: Variability in rainfall intensity increasing costs of alternate water sources; Water shortages during drier months; Water-intense supply chain - West Africa: Increased capital and operational costs linked to construction and maintenance of roads, more frequent replacement of tyres and increased dewatering; Increased volumes of	Gold Fields' response to the water-related outcomes has been embedded in the group water strategy, which is based on three pillars: - Security of water supplies: focus is on understanding and securing water resources for the life of mine (LOM), embedding water planning into operational management, enabling informed management decisions and updating water security risk profiles to support sourcing of water over the life of operations. All operations have included LOM water security assessments in strategic and business plans - Water efficiency: operations must reduce demand for fresh water and optimise the use of water resources due to potential water supply shortfalls and competition from communities. Gold Fields has therefore invested in water efficient technologies as well as renewable energy technologies to meet decarbonisation goals - Catchment management: It is critical that Gold Fields manages

		of temperature increases on operations as well as the international gold prices - Quantitative vs. qualitative: the scenario exercise was a mix of quantitative and qualitative approaches - Scope of application: the analysis applied to the whole value chain inputs, operations and markets - Climate models/data sets: IPCC climate data sets used, among others - Physical risks: when assessing physical risks, specific risks and their severity related to temperature increases, precipitation, flooding, water availability/ drought and others were considered. Gold Fields has assessed the physical impact to its full value chain, as aligned with the ICMM	contaminated water requiring treatment; Favourable conditions for vector borne diseases during high rainfall periods Disruptions to water supply and quality therefore have the potential to negatively impact operating and capital costs, and at worst can lead to work stoppages, which will negatively impact company revenues.	external water risks to the business and to stakeholders in the catchment. The creation of water initiatives that meet the principles of shared value are particularly important part of Gold Fields strategy Anticipated timescale of the response: Many of the actions that are driven by the strategy are currently underway. Future measures are also planned for the medium and long-term.

W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

Gold Fields' internal water prices vary per operation as the currency of water prices depends on the different regions. For example, the price of water in Australian operations is in Australian Dollars.

Based on the understanding of current costs of water and anticipating future price changes, the regional price of water can be established. Gold Fields incorporates water prices into its short, medium, and long-term plans. Once approved, Gold Fields allocates resources (such as finances) to the items required to achieve the plans.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, but we plan to address this within the next two years	Judged to be unimportant, explanation provided	Gold Fields is committed to water and environmental stewardship. Accordingly, the group has implemented and plans to implement a wide range of low water impact measures across its operations. The nature of our metals products precludes their labelling as low water impact products and hence is not applicable to our products. Work in this regard may be undertaken in future but is currently not an immediate business priority.

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 Country level targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Approach to setting company-wide targets/goals: Gold Fields's Group Policy Statement on Water Stewardship recognises that access to clean water is a fundamental human right and a vital resource for Gold Fields' mining and ore processing activities. Shortages or conflict over water supplies could disrupt operations, which would have a negative impact on revenues and long term sustainability. Gold Fields' water conservation and demand management are therefore key focus areas that are driving company and regional level water targets. Accordingly, managing impacts on water users and resources, particular in catchment areas, is essential to maintaining the group's social and regulatory licences to

			operate. Gold Fields has set both company-wide targets and well as regional targets. The identified water risks have driven target setting. Water scarce locations were identified using site specific water balance assessments; hydrological and hydrogeological models as well as the WRI Aqueduct tool, which ensure that targets are meaningful in terms of local context. 2021 Group targets were both exceeded: - Reduce freshwater withdrawals by 3% - Recycle/reuse 68% of water Ambitious 2030 Group targets are on-track: - Reduce freshwater withdrawals by 45% from 2018 baseline - Recycle/reuse 80% water Approach to setting basin specific targets/goals: This approach has been formalised the 2020-2025 Group Water Stewardship Strategy (finalised in early 2020), which includes regional water strategies and a three-year water management plan which are integrated with the operations' business plans. 2021 regional freshwater targets: - South Africa: max withdrawal of 1950 ML – target exceed by 344 ML - West Africa: max withdrawal of 5702 ML – target exceed by 2325 ML - Americas: max withdrawal of 4020 ML – target exceed 275 ML - Australia: does not withdraw freshwater 2021 regional (country) recycling targets: - South Africa: 70% target, exceeded by 10% - West Africa: 80% target, exceeded by 8% - Americas: 79% target, exceeded by 5% - Australia: No target set due to limit of recycling brackish water Gold Fields qualitative goals for basins are to: 1. Become a water efficient operator by reducing as much freshwater demand from catchment areas as possible. 2. Adopt a proactive and risk-based approach to water management. E.g. embed water planning into core operational management, empower informed management decisions and

			align water risks with resourcing over the life of operations. 3. Work with stakeholders in the catchment area surrounding the mines. This is both a basin and group level target.

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 withdrawals

Level

Company-wide

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

In 2021, Gold Fields launched two new medium/long term company-wide water targets amongst its suite of 2030 ESG targets. These two targets override all previous targets set by Gold Fields. The first of these two water targets is to reduce freshwater usage by 45% from a 2018 baseline, by 2030.

A main driver for setting this target is that Gold Fields recognises that water is a finite and shared resource. In particular, the group's mines in South Africa and Australia (as well as a project in Chile) are all located in water stressed regions. This target therefore contributes to water security in water stressed countries and regions and assists in addressing water security for host communities that share the common water resources.

From 2020 to 2021, Gold Fields reduced its freshwater withdrawals by 14% (i.e. from 21,651 ML to 18,536 ML). This brings the total reduction in freshwater withdrawals since 2018 to 35%. Thus, Gold Fields is well on its way to achieve its 2030 target.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2018

Start year

2021

Target year

2030

% of target achieved

77

Please explain

The new long term target set by Gold Fields in 2021 is to reduce total group freshwater withdrawals (i.e. including water withdrawals from projects as well as operations) by 45% by 2030 from the 2018 baseline. The baseline withdrawals were 14.5 GL in 2018, thus requiring an absolute reduction of 6.51 GL (45% of 14.57 GL).
Progress against the target:
The total withdrawals in 2021 were 9.44 GL, thus an absolute reduction of 5.03 GL (14.47 GL – 9.44 GL) was achieved when compared against the 2018 withdrawals. Therefore, progress against the 2018 absolute reduction target (6.51 ML) are on-track by 77%: 5.03 ML (actual reduction in 2021) / 6.51 ML (2018 absolute reduction target).

Target reference number

Target 2

Category of target

Water recycling/reuse

Level

Company-wide

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

The second medium/long term company-wide water target set by Gold Fields in 2021 is a target to recycle/reuse 80% of the group's water by 2030.
A main driver for setting this target is that Gold Fields recognises that water is a finite and shared resource. In particular, the group's mines in South Africa and Australia (as well as a project in Chile) are all located in water stressed regions. Climate change is likely to exacerbate the water stress in the regions. For example, in South Africa, it is predicted that climate change will be a driver that leads to increasing the dependency of host communities on Gold Fields for service provision, especially water provisioning. Thus, Gold Fields has increased its recycling targets beyond best-practice to ensure that there is sufficient water available to the host communities and other uses of the water resources.

Quantitative metric

% increase in water use met through recycling/reuse

Baseline year
2018

Start year
2021

Target year
2030

% of target achieved
64

Please explain
In the 2018 baseline year, Gold Fields met 66% of its water needs with recycled water. The new long-term target set by Gold Fields in 2021 is to recycle/reuse 80% of the group's water. Therefore, 14% more of the group's water demand needs to be met by recycled water to meet the 80% target.
In 2021, 75% of Gold Fields water needs were met with recycled water (9% more than the baseline year). Thus, 9%/14% = 64% of the target has been achieved.

Target reference number
Target 3

Category of target
Water withdrawals

Level
Company-wide

Primary motivation
Increase freshwater availability for users/natural environment within the basin

Description of target
Gold Fields has short-term, company-wide targets aimed at improving performance on a year-on-year basis. The 2021 company-wide target to reduce group freshwater withdrawals was a reduction target of 3%, compared to the quantity of withdrawals in the preceding year, 2020.
A main driver for setting this target is that Gold Fields recognises that water is a finite and shared resource. In particular, the group's mines in South Africa and Australia (as well as a project in Chile) are all located in water stressed regions. This target therefore contributes to water security in water stressed countries and regions and assists in addressing water security for host communities that share the common water resources.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2020

Start year

2021

Target year

2021

% of target achieved

100

Please explain

From 2020 to 2021, Gold Fields reduced its freshwater withdrawals by 6% (i.e. from 9.97 ML to 9.44 ML). Hence, Gold Fields has exceeded the 2021 company-wide target (3% reduction in freshwater withdrawals).

Target reference number

Target 4

Category of target

Water recycling/reuse

Level

Company-wide

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

Gold Fields has short-term, company-wide targets aimed at improving performance on a year-on-year basis. The 2021 company-wide water recycle/reuse target was to recycle/reuse 68% of the group's water, which is more ambitious than the 2020 target which was to recycle/reuse 65% of the group's water.

A main driver for setting this target is that Gold Fields recognises that water is a finite and shared resource. In particular, the group's mines in South Africa and Australia (as well as a project in Chile) are all located in water stressed regions. Climate change is likely to exacerbate the water stress in the regions. E.g., in South Africa, it is predicted that climate change will be a driver that leads to increasing the dependency of host communities on Gold Fields for service provision, especially water provisioning.

Thus, Gold Fields has increased its recycling targets to ensure that there is sufficient water available to the host communities and other uses of the water resources.

Quantitative metric

% increase in water use met through recycling/reuse

Baseline year

2020

Start year

2021

Target year

2021

% of target achieved

100

Please explain

In 2021 Gold Fields recycled/reused 75% of the group's water. Hence, Gold Fields has exceeded the 2021 company-wide target (68% recycle/reuse target).

Target reference number

Target 5

Category of target

Water withdrawals

Level

Country level

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

Gold Fields has short-term, country-level targets aimed at improving freshwater withdrawal performance on a year-on-year basis. The 2021 regional targets were:
- South Africa: max withdrawal of 1950 ML
- West Africa: max withdrawal of 5702 ML
- Americas: max withdrawal of 4020 ML
- Australia: no target as does not withdraw freshwater

A main driver for setting these targets is that Gold Fields recognises that water is a finite and shared resource, especially in water stressed regions. This target therefore contributes to water security in water stresses in countries and assists in addressing water security for host communities that share the common water resources.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2020

Start year

2021

Target year

2021

% of target achieved

100

Please explain

Gold Fields' 2021 country freshwater targets were all exceeded:
- South Africa: max withdrawal of 1950 ML – target exceed by 344 ML
- West Africa: max withdrawal of 5702 ML – target exceed by 2325 ML
- Americas: max withdrawal of 4020 ML – target exceed 275 ML

Target reference number

Target 6

Category of target

Water recycling/reuse

Level

Country level

Primary motivation

Increase freshwater availability for users/natural environment within the basin

Description of target

Gold Fields has short-term, country-level targets aimed at improving water recycling/reuse performance on a year-on-year basis. The 2021 regional targets were:
- South Africa: 70% target
- West Africa: 80% target
- Americas: 79% target
- Australia: no target set due to limit of recycling brackish water

A main driver for setting these targets is that Gold Fields recognises that water is a finite and shared resource, especially in water stressed regions. This target therefore contributes to water security in water stresses in countries and assists in addressing water security for host communities that share the common water resources.

Quantitative metric

% increase in water use met through recycling/reuse

Baseline year

2020

Start year

2021

Target year

2021

% of target achieved

100

Please explain

Gold Fields' 2021 country recycling targets were all exceeded:
- South Africa: 70% target, exceeded by 10%
- West Africa: 80% target, exceeded by 8%
- Americas: 79% target, exceeded by 5%

W8.1b

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

Goal

Engaging with local community

Level

Company-wide

Motivation

Shared value

Description of goal

One of Gold Fields' most pertinent water goals is the engagement of local communities on water matters, particularly in catchment areas around mines.

Engaging with stakeholders is an important goal because water is essential for both mining/processing activities and host communities. Community engagements around water matters assist Gold Fields drive Shared Value creation with impacted communities. Host communities are one of Gold Fields' most important stakeholder groups. Their support underpins social licence to operate which impacts the ability to generate sustainable value.

Gold Fields is implementing the goal through investments in water infrastructure. E.g., Gold Fields has invested US$5m in water-related, shared value projects in the Cerro Corona region since 2010. During 2021, drinking water was provided to +/- 2420 residents in Hualgayoc. 2nd phase is scheduled for mid-2022, after which all Hualgayoc residents should have access to clean, potable water in winter, when water restrictions are in place. Other 2021 water projects included the operation and automation of the drinking water system in the Pilancones area; preparation for a drinking water treatment plant and installation of 1,200 micro-reservoirs.

The timescale of this goal will continue for the life of mine for each operation. Mines that actively engage local communities around water matters have a better chance of achieving water security for both direct operations and host communities.

Baseline year

2012

Start year

2013

End year

2030

Progress

Indicator used to assess progress: Gold Fields measures shared value creation through social economic development investments. The indicator used is US dollars invested and the quantity of this spend that remains in host countries.

Threshold of success and progress against it:
In 2021, the percentage of value distributed to host communities of the total value created by Gold fields was 28%. A total of US$872m was reinvested into the local communities through host community employee wages (US$147m), host community procurement (US$709m) and socio-economic development (US$16m). The values indicate that the Gold Fields mines are delivering ongoing economic benefit to the communities that host them.

This is an ongoing goal for Gold Fields' operations. Gold Fields considers the progress to date regarding this goal to be good.

W9. Verification

W9.1

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

Yes

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain

W1 Current state	The company level water recycled data and water consumption, which is comprised of withdrawal and discharge, were verified by an external company. The intensity metric reported in W – MM1.3a has also been assured.	ISAE 3000	These data points have been verified as they provide important information on Gold Fields' production and environmental impact. The verification ensures that Gold Fields can safely and accurately make corporate decisions using the data.
W2 Business impacts	The number of environmental incidents, Level 3 and above, has been assured.	ISAE 3000	This data point has been verified as it provides important information on Gold Fields' environmental and social impacts.

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	The EVP Sustainable Development (CSO) is responsible for providing strategic leadership by working with the board and executive management to establish long-range goals, strategies, plans and policies	Chief Sustainability Officer (CSO)

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)].

Yes

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms