BUILDING 2019 ON STRENGTH

Water Report



About Freeport-McMoRan

Freeport-McMoRan Inc. (Freeport-McMoRan, FCX or the company) is a leading international mining company with headquarters in Phoenix, Arizona. The company operates large, long-lived, geographically diverse assets with significant proven and probable reserves of copper, gold and molybdenum. FCX is one of the world's largest publicly traded copper producers. FCX's portfolio of assets includes the Grasberg minerals district in Indonesia, one of the world's largest copper and gold deposits; and significant mining operations in North America and South America, including the large-scale Morenci minerals district in Arizona and the Cerro Verde operation in Peru. By supplying responsibly produced copper, FCX is proud to be a positive contributor to the world well beyond its operational boundaries.

This report is intended to be a companion to our 2019 Annual Report on Sustainability, our 2019 Climate Report and the Sustainability section of our website at www.fcx.com/sustainability. The report focuses primarily on the operations of FCX's subsidiaries: Freeport Minerals Corporation (FMC) in the Americas, Atlantic Copper in Spain and PT Freeport Indonesia (PT-FI) in Indonesia for the period January 1, 2019, to December 31, 2019, unless otherwise indicated. All data is effective as of December 31, 2019, unless otherwise noted.

WATER AND COVID-19

Freeport-McMoRan supports the ambitions of the United Nations Sustainable Development Goal 6: Ensure availability and sustainable management of water and sanitation for all. Access to clean water is a human right. The importance of supporting water security for our stakeholders has been heightened further during the global COVID-19 crisis as clean water and sanitation is essential to practicing good hygiene and minimizing the spread of the virus.

At our El Abra operation in Chile, we delivered 10 thousand liters of water to the neighboring communities of Ayquina and Cupo located in the El Loa Province, Antofagasta Region, in early 2020. This is a region where water scarcity historically has been high and many of these communities do not have access to potable drinking water. These communities have high elderly populations that have been required to stay in their homes as a measure of care and prevention rather than seek additional potable water resources. The municipality of Calama delivers water once a month to the communities. However, during the pandemic, the need for additional water availability for cooking and cleaning has been heightened to support the basic hygiene requirements.

At our Safford and Morenci operations in Arizona, we donated 72,288 bottles of water – more than 3,000 cases – in July and August 2020 – to the San Carlos Apache Tribal Emergency Response Commission, to support the needs of the San Carlos Apache Tribe and White Mountain Apache Tribe. The typical summer water shortage experienced in Arizona was amplified by the COVID-19 crisis and the need to wash hands more frequently to help prevent the spread of the virus. In remote locations, tribal members haul water for everything from cooking and drinking to showering.





RICHARD C. ADKERSON Vice Chairman of the Board, President & Chief Executive Officer



December 2020

Letter to Stakeholders

Dear Stakeholders,

Freeport-McMoRan is dedicated to responsibly managing our water resources. Water is a shared resource, essential to the well-being of our communities and the environment and is necessary for our mines, smelters, processing facilities, and reclamation projects which span the globe across multiple geographies and climates.

We believe that environmental protection and stewardship are critical to ensuring the long-term viability of our business, including maintaining necessary support from our host communities and governments. Water stewardship is a fundamental component of this effort. We recognize the importance of working collaboratively with stakeholders to maintain access to water in a socially and environmentally responsible manner, and we are dedicated to continuous improvement of our water programs.

Many of our operations in the Americas are in arid environments where competition for water supply is high. On the other hand, at our PT-FI operations in Indonesia, management of excess water is the primary water challenge. The unique circumstances at each of our operations reinforce the critical importance of managing the impacts of our activities on water availability and quality, optimizing our water utilization and efficiency, and respecting the rights of others.

Maintaining high utilization rates of reused and recycled water is a critical component of our stewardship strategy. Simply stated, the more we recycle and reuse water at our operations, the less freshwater we need. Water reuse and recycling to support our own water requirements reduces our reliance on local water supplies, aquifers and rivers, so they may be available for our stakeholders and the ecosystem. I am pleased to share that we used four times more reused and recycled water than new freshwater across our operations globally in 2019, achieving an 87% average water-use efficiency rate for the year.

There is no doubt that climate change is impacting the environment and ecosystems around the world, including global water availability and quality. In June 2020, we published our inaugural Climate Report and we have committed to aligning our climate disclosures with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

To support this effort, we have initiated a comprehensive scenario analysis to better understand the risks and opportunities our business may face due to a changing climate. This analysis will aim to identify the physical and policy-related risks at our sites related to potential future severe weather events, changing weather patterns and excessive drought, among others. Water risks are prominently featured in this critical work and we look forward to updating you on the findings.

We believe managing our water interactions responsibly will contribute to the resilience of our operations, stakeholder relationships and ecosystems over the long term. This work is fundamental to our intention to contribute positively to the world by supplying responsibly produced copper.

Freeport: Foremost in Copper.

PAtterson



OUR APPROACH

Freeport-McMoRan believes effective water stewardship means maximizing our water use efficiency and minimizing our use of freshwater. This includes shifting our water supplies to more sustainable sources, minimizing negative impacts from our operations on water quality and availability in a local catchment and supporting the development of access to water resources that were previously unknown, unavailable or undeveloped.

In addition to focusing on our own water-related risks to support our operations with the necessary water to continue producing reliably, water stewardship also means we are focused on promoting long-term water security for all. We recognize the importance of working collaboratively with our stakeholders in order to secure access to water in a socially and environmentally responsible manner, and we are dedicated to improving our water programs over time.

Governance

The Freeport-McMoRan Board of Directors (Board) has four standing committees, each comprised of entirely independent directors who are responsible for providing oversight to the company's management team on specific matters. The Corporate Responsibility Committee (CRC), on behalf of the Board, is responsible for providing oversight on environmental and social matters, including water management across our business.

Our Chief Executive Officer (CEO) has ultimate responsibility for the company's sustainability performance. The company's Sustainability Development Leadership Team (SDLT) includes members of the management team tasked with defining the sustainability strategy broadly – including water stewardship – and implementing our policies, systems and programs across the business. The SDLT regularly reports to executive leadership, including our CEO and Chief Financial Officer, and members of the SDLT report to the CRC on key Environmental, Social and Governance (ESG) matters throughout the year. The SDLT is sponsored by our Senior Vice President and Chief Administrative Officer and is led by our Vice President and Chief Sustainability Officer. Other members of the SDLT include our Chief Operating Officer – Americas, business unit Presidents, and Vice Presidents or senior representatives from groups including safety, security, supply chain, human resources, sales, legal, compliance, sustainability land and water, and finance functions. The SDLT reviews, discusses and addresses performance against responsible production frameworks, including water stewardship.

Water is essential to the well-being of our communities and the environment and is necessary for our mines, smelters, processing facilities and reclamation projects

Our Climax operations in Colorado reclaimed this area of the Arkansas river by restoring the river channel and revegetating the area from historical mining structures, and today, we continue vegetation monitoring to help inform future reclamation projects

OUR APPROACH

Freeport-McMoRan maintains a dedicated corporate land and water team and a technical services team which together are responsible for coordinating with and supporting our operational water teams at each of our sites. The corporate land and water team coordinates closely with our community engagement teams to support our engagement with community stakeholders and with our legal department to support our engagement with our various regulatory stakeholders. This team evaluates all sources of water and is responsible for ensuring adequate water resources are available to the operations in a sustainable manner. The technical services team supports general operational water management and the tailings stewardship group, which is responsible for the safe design, construction and operation of tailings storage facilities (including the water recovery and recycling aspects of those facilities).

The operational water teams at each of our mining sites, supported by corporate policy and technical experts, are responsible for developing site-specific goals by identifying and managing water resources, communicating and coordinating with key stakeholders, monitoring, managing and analyzing water data, reporting and accounting for water use and consumption, and developing forecasting tools to support future mine operation and closure scenarios.





Policies & Programs

Our Environmental Policy serves as the overarching framework for the protection of natural resources, including water, in the regions where we live and work. The policy is based on our objective to be compliant with laws and regulations and to minimize environmental impacts using risk management strategies based on valid data and sound science. All of our mining and mineral processing operations and technology centers also maintain an Environmental Management Systems (EMS) certification to ISO 14001:2015.

While implementation varies depending on the site-specific circumstances of each operation, Freeport-McMoRan also maintains an extensive global water management program designed to balance the needs of our operations with the needs of our communities and the long-term sustainability of the environment and ecosystem.

Ultimately, our goal is to identify, manage and mitigate both our current and future water-related risks to secure the necessary water resources vital to support our operations over the long term, while equitably supporting the rights and well-being of our local community partners and ecosystems.

Below are our global water management program goals:

- 1. Improve water use efficiency in our processes
- 2. Minimize use of freshwater at our operations
- 3. Reduce our water footprint by transitioning to renewable or recycled water sources
- 4. Continually review our water supplies and future requirements and our impacts on the surrounding communities, environment and ecosystems

We support, and are in the process of implementing, the **International Council on Mining and Metals (ICMM) Water Position Statement**, which outlines our commitment to responsible water use and public reporting, including commitments to apply strong and transparent water governance, manage water at operations effectively, and collaborate to achieve responsible and sustainable water use.

Our ENVIRONMENTAL POLICY

serves as the overarching framework for the protection of natural resources, including water, in the regions where we live and work



UNDERSTANDING OUR WATER RISKS

As a leading global responsible copper producer, we understand that access to freshwater is vital to human development, to the conservation of global ecosystems and to our own business. We recognize the quantity and quality of water that we withdraw and discharge at each of our operations can affect these shared water sources. Waterrelated risks are rapidly increasing in scale and scope ranging from physical risks, regulatory risks, legal risks and reputational risks.

Our global operations are in geographically and climatically diverse locations that range from arid deserts in Arizona, USA to extremely arid and high altitudes in the Atacama Desert in Calama, Chile to one of the wettest places on earth in Papua, Indonesia. Our operations vary from remote locations with sparse populations, to areas with more densely populated cities or towns. In many instances, we share a freshwater source or catchment with other users, such as with local communities, municipalities, agricultural or industrial organizations.

The number of water risk regions, where water quality is poor or supply is scarce, also is increasing globally. In some regions, water stress is increasing due to growing populations in communities where multiple new regional users are accessing limited freshwater sources. Climate change is expected to exacerbate these trends.

In order to effectively manage our water-related risks, we seek to understand the various and continually changing physical environments, hydrological systems and sociopolitical and regulatory contexts of each of our operations. The context and near-term water supply risks that exist near our operations are summarized in the table on page 8. These factors include climate conditions, water sources, baseline water stress, excess water and access challenges.

This water risk assessment is an iterative process that we will aim to update periodically. Over time, we also plan to assess and, when appropriate, integrate additional critical risks to our water supply risk analysis – such as water quality, reputational risks and shared water resource management – and in due course, the potential longer-term impacts associated with climate change.

Enhancing our resilience to the potential impacts of water-related risks is a critical part of our daily work

UNDERSTANDING OUR WATER RISKS

WATER SUPPLY RISKS

	CLIMATE CONDITIONS ¹	WATER SOURCES ²	WATER SUPPLY RISKS			
OPERATION			WATER STRESS ³	EXCESS WATER	ACCESS CHALLENGES ⁴	
Bagdad <i>Arizona</i>	Arid; Semi-desert	Groundwater Surface water Stormwater Third-party⁵	Low-Med			
Cerro Verde <i>Arequipa, Peru</i>	Arid; Desert	Groundwater Surface water Stormwater Third-party⁵	High		x	
Chino <i>New Mexico</i>	Arid; Semi-desert	Groundwater Stormwater Third-party⁵	Low-Med			
Climax <i>Colorado</i>	Snow; Fully humid	Groundwater Surface water Stormwater	Low-Med	Х		
El Abra <i>Calama, Chile</i>	Arid; Desert	Groundwater Stormwater	Extremely High		Х	
Henderson <i>Colorado</i>	Snow; Fully humid	Groundwater Surface water Stormwater	Med-High	Х		
Miami <i>Arizona</i>	Arid; Semi-desert	Groundwater Surface water Stormwater Third-party⁵	Med-High	Х	х	
Morenci <i>Arizona</i>	Arid; Semi-desert	Groundwater Surface water Stormwater Third-party⁵	Med-High		х	
PT-FI <i>Papua, Indonesia</i>	Tropical; Fully humid	Groundwater Surface water Stormwater	Low	Х		
Safford <i>Arizona</i>	Arid; Semi-desert	Groundwater Stormwater	Med-High		Х	
Sierrita <i>Arizona</i>	Arid; Semi-desert	Groundwater Stormwater	Med-High		Х	
Tyrone <i>New Mexico</i>	Arid; Semi-desert	Groundwater Surface water Stormwater	Low-Med			

1 Climate conditions based on the Köppen-Geiger climate classification terminology.

2 Water sources can include groundwater, surface water, stormwater, sea water, or third-party sources (including effluent).

3 Water stress is baseline water stress as defined on page 9.

4 Access challenges can include legal challenges and / or potential changes in law or regulations that could impact our access to certain water supplies

 $5 \quad \mbox{Third-party water sources are primarily sourced from wastewater effluent.}$

Water Supply Risks Defined:

- **Climate conditions:** Different climatic conditions influence the availability of water and the way water interacts with the physical environment. We operate in a range of climate zones, including arid both semi and full desert snow and tropical as noted in the table on page 9. Climate conditions are defined based on the Köppen-Geiger climate classification terminology.
- Water sources: The water sources we extract from and discharge to vary across each of our operations and influence the exposure we have to particular water sources. We define our water sources as groundwater, surface water, stormwater, sea water and third-party sources (which predominantly is sourced from industrial or municipal effluent). For more information on our water sources, please refer to page 15 of the Performance section.
- Water stress (baseline water stress): Baseline water stress ratings are defined by a combination of the World Resources Institute's (WRI) Aqueduct tool and its associated descriptors for baseline water stress as well as our own qualitative assessments and local knowledge of the site-specific circumstances of withdrawal at each operation.

The WRI aqueduct tool measures baseline water stress as the ratio of total water withdrawals to available renewable surface and groundwater supplies. Per the tool, water withdrawals include domestic, industrial, irrigation, and livestock consumptive and non-consumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher ratios indicate more competition among users. The potential classifications are as follows: Low (<10%); Low to medium (10–20%); Medium to high (20–40%); High (40–80%); Extremely high (>80%); Arid and low water use; and no data.

In some cases, we have overridden the Aqueduct tool where the outcomes do not reflect our on-theground knowledge or circumstance for a site. For example, the Aqueduct tool identifies El Abra as "Arid and low water use" which maps to the lowest baseline stress level. Given what we know about El Abra's location in the Atacama desert and the local and regional water shortages, we have increased El Abra's rating to "Extremely High." Conversely, our Climax mine in Colorado is rated as "High Risk" by Aqueduct, while our on the ground assessment is Low-Medium given its location on top a watershed where we maintain senior access rights and the site has an abundance of precipitation for much of the year.

Based on the WRI's Aqueduct Water Risk Atlas and our own localized knowledge of our operational analysis, approximately 17% of our operations are located in regions of "high" or "extremely high" water stress.

- Excess water: Normal, and less frequent extreme precipitation events, can result in excess water at our operations. Effective management is necessary to reduce risks to infrastructure, the environment and our host communities. Past extreme weather events at some of our sites have presented challenges. Through site-wide water balances, we work to better understand and manage water levels.
- Access challenges: Legal challenges and changes in law or regulations have the potential to impact our access to certain water supplies. The regions where we operate have reasonably mature regulatory systems for water extraction, use and discharge, although their approach, requirements, and resolution of ongoing water rights claims can vary by operated asset and region. Typically, we are granted a permit, right or other authorization to extract a prescribed quantity of water, in some cases for a defined period of time. We may also receive authorization to discharge water that meets applicable quality standards. Monitoring and reporting requirements may be in place to support compliance with these conditions.

Water Resilience In The Near-Term

Some of our operations are in challenging environments where enhancing resilience to the impacts of water risks is a critical part of our daily operations. Some examples include the health, safety and production risks of heavy rains, arid environments or heat-related occupational illness. In order to prepare our operations for potentially severe weather-related events in the future, we strive to take a holistic approach to risk management and preventive planning.

Company-wide processes to address climate-related risks and opportunities cover the full life cycle of our assets – from a pre-project sustainability review process to resiliency planning for reclamation and closure.

Each of our sites use water balance models with robust precipitation forecast mechanisms, including long-term historical weather patterns at the regional level to estimate the potential climate patterns that could impact operational plans and environmental stewardship efforts. These models consider the effects of short-term extreme weather events as well as prolonged wet and dry seasons and provide the teams the ability to adjust for specified climate scenarios. For example, our sites have used water balance modeling to simulate prolonged wet years together with an extreme high precipitation event to test the response of a tailings storage facility to contain the water runoff volume and return it back to safe operating levels.

Each of our active mining and metals processing facilities also evaluate current climate-related risks and opportunities through our Sustainable Development Risk Register (the Risk Register) process. This includes reviewing the potential for physical or other climate-related risks that could jeopardize the resiliency of our operations such as water availability and impacts from extreme precipitation events, regulatory matters that could have direct or indirect financial impacts, and trends in regional electricity grids that could affect our greenhouse gas emissions and operating cost structure. For more information on the Risk Register process, please refer to our **2019 Annual Report on Sustainability**.

Preparing for the Long-Term

In June 2020, we published our inaugural **Climate Report**, which outlines our climate change strategy. We support and are committed to aligning our climate disclosures with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). As part of our climate change strategy and commitment to TCFD conformance, we recently initiated a comprehensive climate change scenario analysis with support from an external third-party consultant to identify potential climate-related risks and opportunities across the business out to 2050. We are evaluating the risks and opportunities across three different 2050 climate scenarios: no climate action (mostly unconstrained greenhouse gas emissions), middle of the road (moderately constrained emissions) and aggressive mitigation (in line with Paris Agreement goals of limiting global temperature rise to below 2 degrees Celsius by the end of this century).

In the first phase of the analysis, we are conducting climate-related risk and opportunity identification. In the second phase, we intend to analyze the identified potential risks and opportunities and prioritize actions to address the impacts identified. In the third phase, we will work to integrate mitigation measures into the business where appropriate. The graphic on the next page from TCFD's Scenario Analysis recommendations issued in 2017 provides an overview of the process from analysis to action and disclosure.

Climate change can be considered a potential amplifier of existing water risks. Potential direct water-related impacts resulting from climate change may include changes in precipitation patterns, rising sea levels, increased storm intensities, higher temperatures and increased frequency and severity of natural disasters (such as floods or droughts). Indirect potential impacts of these changes may include coastal erosion, storm tide inundation, and, over the longer term, reduced rainfall can create water security issues while increasing the need to manage excess water for others.

In 2021, we look forward to reporting on our progress on our scenario analysis and next steps for the business to move towards enhanced resilience.

CLIMATE-RELATED RISKS, OPPORTUNITIES, AND FINANCIAL IMPACT



Source: Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017

STORMWATER MANAGEMENT

Preventing on-site and off-site impacts to water resources is core to our water management program. Stormwater is captured, managed and contained on-site for operational use through various diversions, containment structures and dams. We are reviewing the potential for more frequent and intense precipitation events that could result in impacts to on-site and off-site water resources. This information will help us evaluate our capacity to route on-site water to areas with adequate storage capacity. In 2019, we had one significant weather event that occurred at our El Abra operations in Chile when record rainfall in the nearby Andes Mountains caused flooding throughout the normally arid region. The floods resulted in a 21-day closure of our mine and significant damage to the communities throughout the Alto El Loa region. Following the event, the El Abra relief team first worked with the communities to clear and repair roads and help rebuild damaged infrastructure. The team then worked on proactive measures to help the operation better weather future storms, including construction of a second access road to the mine.



PERFORMANCE

In order to efficiently manage our water resources, we must understand our water requirements. We have developed groundwater and predictive hydrologic models to understand water availability at each of our sites. We also apply operational-based models to understand our utilization and inventory management requirements. With this information, we can identify opportunities to minimize water loss (such as evaporation or seepage), maximize recycled and reused water, and manage our overall water quality impacts. Taken together, these ongoing studies inform our efforts to reduce our overall water utilization – including requirements for freshwater – where operational efficiencies and production requirements allow.

Water Balance

Our company-wide water balance demonstrates how much water we withdraw, consume and discharge. We obtain new water through permits, legal rights and leases for groundwater, including the dewatering of our mines, rainfall and surface water sources, such as lakes or rivers. At some of our operations, water also is sourced from stormwater and third-party sources (predominantly effluent). New water withdrawn from these sources, together with reused and recycled water from our ore processing plants, water treatment plants, and tailings facilities, makes up the total water used across our global operations.

Each of our sites conduct regular water balance analyses to assess their water use, consumption and discharge quantities. These analyses are used to track performance and understand our water balance. Our company-wide water balance is complex due to the variability of operational processes and natural factors related to the location of the operation, such as rainfall, snowmelt and the diversity of the climates and geological conditions. We integrate our understanding of the amount of water that we withdraw, consume and discharge into our business planning and operational performance objectives on a regular basis. Understanding our water balance is key to improving our water management practices and to enabling better decision-making. The graphic on page 14 provides an overview of our global water balance in 2019.



We recognize the quantity and quality of the water we withdraw and discharge at each of our operations can affect shared water sources

Communities near El Abra mining operations in Chile

2019 WATER BALANCE (THOUSAND M3)



Water recycle/reuse rate = total water reused + recycled / Total water utilized Water use efficiency = total water reused + recycled / (Total water utilization – Discharged Water)

Water Balance Terminology

New water withdrawal: new water that is received or extracted by operation and used for the first time. New water withdrawals include high quality freshwater and lower quality water and are categorized by type: groundwater, surface water, stormwater, sea water or third-party water. Water withdrawals exclude water diverted away from operational areas without use.

Water discharge: water removed from an operation and returned to the environment or a third party after meeting all required treatment and discharge standards.

Water consumption: water that is no longer available for use within an operation. Consumed water could include evaporated water, water entrained products, tailings or other operational losses. Water consumed is approximately equal to new water withdrawn less water discharged plus change in water storage balance. **Water utilization:** total water used for mining or operational processes, such as for mineral processing, cooling, dust control or tailings management. Water utilization includes:

- New water withdrawals: water that is used for the first time (includes both high quality freshwater of lower quality water)
- **Reused water:** water that is reused without being treated between uses
- **Recycled water:** water that is treated within the operation between uses

Water storage: at some operations, water is stored on-site to manage water utilization requirements or excess water capture. The change in the stored water volume at our operations equates to the difference between water inputs and water outputs. A positive number indicates water accumulation and a negative number indicates decreased storage volumes.



Water Withdrawal Sources

While our water withdrawal sources depend on the local and geographical circumstances and unique water requirements at our different operations, most water withdrawals are sourced from groundwater, surface water or stormwater. However, over the past five years, our reliance on these sources has decreased as we have transitioned to other supplies. Low-quality sea water is predominately used for non-contact cooling purposes at our Atlantic Copper refinery in Spain, where we are able to ensure no deterioration of the water quality occurs.

Increasingly, municipal and company-operated water treatment facilities supply a significant amount of our water needs (noted as third-party sources in the graphics), notably at our Cerro Verde operation in Peru and at many of our operations in Arizona. The effluent supplied by these water treatment facilities is of lower quality and primarily used for processing purposes. Often, the third-party supplier has previously used this water prior to its reuse by our operational processes.

Types of Water

- **Surface water:** water from a river, lake, wetland, drainage basin or other sources considered to be surface water including water from surface waterbodies that may be located within an operation's boundaries.
- **Groundwater:** water from beneath the earth's surface that collects or flows in the porous spaces in soil and rock that is not diverted around the operation and that is not otherwise designated as surface water by a regulatory agency.
- **Stormwater:** water from precipitation and runoff that is not diverted around the operation.
- Sea water: water obtained from a sea or ocean.
- **Third-party sources:** water supplied by an entity external to the operation such as from a municipality or effluent from a wastewater treatment plant.

Environmental monitoring of Tailings Storage Facilities and Reclamation area at Climax operations in Colorado

NEW WATER UTILIZATION BY SOURCE¹ (THOUSAND M3)



1 Water utilization shown in thousand cubic meters to align with SASB reporting guidelines (shown in million cubic meters in 2019 Annual Report on Sustainability)

Developing Alternative Water Sources

Historically, our water supply has been developed from local sources such as pumping water from underground sources (groundwater) or surface water from nearby rivers and streams. In most regions, surface water use is regulated by either local or regional governments and generally includes a priority system for water rights. In South America, communities, agriculture and municipal uses have priority access to water use ahead of mines. Alternatively, in the southwestern United States, the priority system is based on prior appropriation, or "first in time, first in right." As many of our mines in the Southwest have been operating for multiple decades, we generally claim senior water rights.

In order to improve the reliability of our current water supply, we have been focused on developing both surface reservoir storage and underground long-term storage to support water supply levels that can meet operational demands and provide backup availability when water supply is limited due to drought or other infrastructurerelated disruptions.

As we seek to develop new sources of water supply, our strategy has shifted to prioritizing alternative sources of water such as effluent or municipal wastewater, when available. Developing alternative or "non-traditional" water sources supports our goal to reduce our water footprint by transitioning to renewable or recycled water sources, which in many cases is more sustainable and reliable than relying on local groundwater or surface water supplies.

Freeport-McMoRan currently uses effluent, or municipal wastewater, to support our water supply requirements at several of our operations, including Morenci, Miami, and Bagdad in Arizona, at Chino in New Mexico and at Cerro Verde in Peru. We also are currently exploring the potential for using effluent at our Sierrita mine in Arizona. By using effluent to support our water requirements, we can reduce the strain on traditional, freshwater sources in our local catchments, which often are shared with our neighboring communities.

CERRO VERDE - VIRTUOUS CYCLE OF WATER

Cerro Verde is the world's largest copper concentrating facility located in the arid Arequipa region in Southern Peru. To support water requirements for mining and processing and to support our local communities, Cerro Verde has made significant investments in local water infrastructure:

- 1. Co-financed the construction of dams to increase water storage capacity from the Chili River
- 2. Built a water treatment system for potable drinking water
- 3. Supported improved lines for potable drinking water through Arequipa
- 4. Completed building a new Wastewater Treatment Plant (WWTP) in 2016 to treat waste water

The construction of the WWTP treatment and collection facility has improved the quality of the Chili River, benefitting more than 1 million people in Arequipa. Prior to the WWTP, the city of Arequipa, estimated to be over a million people, discharged most of its raw sewage into the Chili River, leaving it contaminated by human waste. Today, the WWTP infrastructure intercepts the sewage and pipes it to the WWTP. Cerro Verde sources approximately 50% of its process water from the treated effluent produced by the WWTP. The remaining half of the treated effluent that Cerro Verde does not use is discharged back into the Chili River for agricultural uses, such as irrigation and other benefits to the community. Cerro Verde operates the plant, paying for the costs of water treatment, and under an agreement with the local government, Cerro Verde will continue to operate the plant for another 20 years.

COLORADO RIVER SUPPLY EXCHANGE

In recent years, our Arizona operations have shifted away from traditional water sources of groundwater and local rivers to sourcing water from the Colorado River water supply exchange. Both our Morenci and Miami mines in Arizona have been sourcing water from the Colorado River exchange since the mid-1990s. Starting in 2020, our Sierrita mine also began using Colorado River water. This critical and important shift to an alternative water source enables us to limit local groundwater and river systems utilization that directly benefit our local host communities and the surrounding ecosystem.

While this shift to an alternative water source has been a success, we do recognize that the water supply from the Colorado River is not guaranteed and availability may be impacted by drought and other conditions arising from climate change. To address this risk, Freeport-McMoRan uses artificial underground storage, or "recharge," of our water supplies to ensure availability in times of water shortage.

Water is delivered to a storage facility and stored in the local aquifer. The underground storage system is regulated by the Arizona Department of Water Resources. The agency provides long-term storage credits to Freeport-McMoRan that are protected from other water users through the state water management programs. When traditional water supplies are not available during a drought or other system disruptions, Freeport-McMoRan can redeem its water credits to access the stored supplies and provide uninterrupted delivery of water to our operations. In addition, the water credits managed by the agency can be exchanged with other water users, providing flexibility to potentially support other impacted stakeholders.

Turning what was wastewater into a **REUSABLE AND RELIABLE RESOURCE**

is good water management, is good for the people of Arequipa and is fundamentally good for our business



Water Reuse, Recycle & Efficiency

Our objective is to achieve high rates of recycled or reused water as a proportion of our total water utilization requirements. This in turn supports our goal to minimize new water withdrawal requirements.

Our recycle/reuse performance has exceeded 80% over the last 5 years, despite the increasing water utilization requirements across our operations. In 2019, Freeport-McMoRan's mining operations used four times more reused and recycled water than freshwater, making us an industry leader in water management.

In 2019, we used 1,711,077 thousand cubic meters of water at our operations globally, including new water withdrawals of 302,564 thousand cubic meters and recycled/reused water of 1,408,513 thousand cubic meters. This reflects an 82% water recycle/ reuse rate. By accounting for discharged quantities of 95,885 thousand cubic meters, our water use efficiency was 87% for 2019.

Our recycle/reuse performance **EXCEEDED 80%** each of the last 5 years, despite the increasing water utilization requirements across our operations

RECYCLED WATER VS. NEW WATER USE (THOUSAND M3)



WATER PERFORMANCE TREND DATA 2015 - 2019

THOUSAND CUBIC METERS ¹	2015	2016	2017	2018	2019
Total New Water Withdrawn	270,569	302,464	275,037	310,620	302,564
Total Water Recycled/Reused	1,164,179	1,399,835	1,285,206	1,377,971	1,408,513
Total Utilized Water (Withdrawn + Recycled)	1,434,748	1,702,299	1,560,243	1,688,591	1,711,077
Percent Reused of Total Water Utilized	81%	82%	82%	82%	82%
Total Water Discharged (off-site) ²	-	-	-	106,183	95,885
Water Use Efficiency (%) ²	-	-	-	87%	87%

1 Water utilization shown in thousand cubic meters to align with SASB reporting guidelines (shown in million cubic meters in 2019 Annual Report on Sustainability)

2 We started calculating water discharged and water efficiency % in 2018, in line with ICMM reporting guidance

Note: Following sale of TFM in November 2016, all data now excludes TFM in 2015/2016. As a result of methodology changes or corrections, prior year data may be updated. All financial figures are quoted in U.S. dollars, unless otherwise noted. Some figures and percentages may not add up to the total figure or 100% due to rounding.

PT-FI WATER MANAGEMENT

PT-FI maintains an extensive environmental monitoring program designed to monitor and manage the potential current and future environmental impacts from its controlled riverine tailings system. PT-FI spends approximately \$100 million annually to monitor and manage the controlled system.

The multi-discipline, multi-department team routinely measures surface and groundwater quality, air quality, biological, hydrological, sediment, and meteorological characteristics of the entire operations area. On average, PT-FI collects around 15,000 different types of samples annually (5-year average) for analysis that are used to develop the scientific information needed to make informed management decisions with a focus on eliminating, minimizing, or mitigating environmental impacts.

To support this effort, PT-FI established a dedicated laboratory (Timika Environmental Laboratory or TEL) located within our operational area in the lowland town of Timika. The lab is certified to ISO 17025 quality standards from the Indonesian National Accreditation Committee and serves as the main analytical lab for sample analyses used in our monitoring programs. TEL is registered with the Ministry of Environment and Forestry as a Referenced Environmental Laboratory.

We acknowledge that a portion of the surface water associated with the tailings transport seeps into the groundwater beneath and immediately adjacent to the riverine tailings deposition area. However, through our extensive monitoring, we have confirmed that drinking water from sources in the area is not impacted by the deposition area and meets Ministry of Health standards except where impacted by local, unrelated conditions (e.g. e-coli).

As predicted in the 1997 Environmental and Social Impact Assessment (AMDAL), estuarine and marine surface waters show increases in turbidity, however, these too, will return to normal levels once the tailings deposition ceases and the deposition area is closed. Offshore waters also are regularly monitored and meet the Indonesian sea water standards protective of marine biota.



Water Quality Management

Monitoring water quality is an important component of our water management program. We regularly monitor water quality upstream and downstream of our mines to identify water-related impact risks and opportunities. We collect thousands of water samples each year across our operations, consistent with our environmental stewardship practices and regulatory requirements. The samples are analyzed for various chemical and physical parameters either at our own certified laboratories or at independent laboratories. The results of the analyses are compared to historical data trends and applicable regulatory standards to determine how we are impacting overall water quality. The results help us prioritize our efforts to protect water resources and inform our water use and discharge decisions, so that we do not compromise the needs of watershed users nor the local ecosystems. During 2019, we collected and analyzed more than 19,000 water quality samples at our operations in the Americas and more than 8,000 water samples at our PT-FI operations.

In line with ICMM water reporting guidance, we differentiate the quality of water withdrawn and discharged into two categories: high quality and low quality. The ICMM water quality categories directly map to the widely recognized Minerals Council of Australia Water Accounting Framework (WAF), which defines three water quality categories. Quality category mappings between the two systems are summarized in the table below.



ICMM QUALITY CATEGORIES	MCA WATER ACCOUNTING FRAMEWORK (WAF) QUALITY CATEGORIES			
High Quality	Category 1 High-quality water that may require minimal and inexpensive treatment to raise quality to appropriate drinking water standard (e.g. near potable water quality).			
(Freshwater)	Category 2 Medium-quality water that would require a moderate level of treatment to meet appropriate drinking water standard (e.g. agricultural use).			
Low Quality	Category 3 Low-quality water that would require significant treatment to raise quality to appropriate drinking water standards (e.g. industrial and wastewater).			

High-quality water (also referred to as freshwater) typically has high socio-environmental value with multiple beneficial uses both internal and external to the catchment. Examples of high-quality water include water used for drinking, agriculture, food production and industry or ecosystem function requirements. Low-quality water typically has lower socio-environmental value as the poorer quality may restrict suitability for use by a wide range of other users outside of adapted ecosystem function.

Monitoring the quality of our withdrawals and discharge is a critical component to understanding our current performance and opportunities for improvement. Wherever possible, we seek to use the water category that is the lowest available quality for the required purpose while simultaneously considering other water users' needs. In 2019, the majority of our water withdrawals represent the water quality Category 2, followed by Category 1 and Category 3, whereas the majority of our discharged water was Category 3.



The majority of our mining operations are no-discharge facilities, meaning that we manage precipitation such as rain or snow contacting the leach circuits and other process facilities by containing it onsite and eliminate any potential surface impacts from our facilities. This water may be used onsite for consumption, reuse or recycling. We also divert unimpacted stormwater around leach circuits including runoff from storm events. We discharged 95,885 thousand cubic meters of water in 2019. When compared to our total water utilization of 1,711,077 thousand cubic meters, this represents just 6%.

Of the water quantities discharged during the year, approximately 49% was related to our Atlantic Copper Smelter in Spain where low-quality, highly saline river water (considered seawater) is used for cooling purposes, treated and returned to the source, and approximately 44% was associated with PT-FI where water is treated and discharged as part of the tailings in the controlled tailings management system. The remaining 7% was associated with discharge from our Climax and Henderson operations in Colorado. In all cases, water is monitored extensively and treated to safeguard that the water returned to the environment is of equal or higher quality than it was when it was extracted.

SAFFORD SOURCES LOWER QUALITY WATER

Over the course of the past several years, Freeport-McMoRan has studied the use of lower quality water at its Safford operation. Since the mine began producing in 2007, the company has been using a high-quality confined groundwater source. However, we identified a lower quality, briny water source located much deeper and separated by an extensive clay layer in the Lower Basin Fill Aquifer. This water source is not desirable for the local community or agricultural water users. As a result, in 2018, Freeport-McMoRan began transitioning the Safford mine to this lower quality water source.





STAKEHOLDER ENGAGEMENT & COLLABORATION

Water stewardship means we are focused not only on managing our own water-related risks to ensure our operations have the vital water resources available to reliably support our own operations, but also on mitigating our potential impact on water supplies and promoting long-term water security for all stakeholders.

Freeport-McMoRan continuously monitors and reviews our water supply, use and management with a focus on managing potential downstream impacts to the surrounding community, environment and ecosystem. Our dedicated community engagement employees at each of our mine sites work directly with local stakeholders on a variety of topics, including water management, to understand specific concerns, educate our partners on our ongoing or changing practices, problem solve issues and collect direct feedback.

Hydrologic studies currently are underway in Arizona, New Mexico, Colorado, Chile and Peru to help us and our community stakeholders better understand our impacts on the local water sources. Enhancing the understanding of our impact on water availability and water quality supports our work with our local communities to establish and agree on sustainable water use levels and work together to protect the shared resources. In many instances, Freeport-McMoRan shares its modeling of local aquifers and river systems with our local community partners to support transparency, education and a clear understanding of all user impacts on local and regional water supplies. Likewise, we meter our water intake and report our consumption to the applicable water agencies.

GRIEVANCE MANAGEMENT

To support constructive engagement and resolution of issues that may arise, including in relation to water, we maintain site-level grievance mechanisms where community members can share their questions, concerns and complaints. Our community grievance mechanisms are available in local languages and tailored to local cultures, and allow us to document issues and concerns raised by local community members while responding in a timely manner. We recognize the importance of working collaboratively with our stakeholders in order to secure access to water in a socially and environmentally responsible manner

At PT-FI in Indonesia, plastic water bottle use went from almost 5 million bottles a year to nearly zero in 2019 thanks to the installation of potable water stations across our operations and a successful employee awareness campaign

Collaboration on Drought Contingency

The Colorado River provides water to over 40 million people and more than four million acres of farmland across Arizona, California, Nevada, Utah, New Mexico, Colorado and Wyoming, collectively known as the seven Colorado River "Basin States." Hydroelectric plants on the river generate nearly 13 billion kilowatt-hours of electricity annually. Because the river is vital to the economies of the southwestern United States and Mexico, it has become one of the most regulated and managed rivers in the United States. The Colorado River water supply in Arizona is managed through the operation of Lake Mead (Hoover Dam) by the United States Bureau of Reclamation. The risk of Lake Mead's water levels falling below critically low reservoir thresholds has tripled in the past decade, increasing the risk of large-scale reductions to Arizona's Colorado River supply and threatening the health of the river for all users.¹

In 2018 and early 2019, Freeport-McMoRan participated in a multi-stakeholder engagement process hosted by the State of Arizona which included nearly 40 other interested stakeholders. The process was meant to address potential future water shortages in the Colorado River Basin and to agree on strategies intended to increase the reliability of Colorado River supplies for all Arizona water users. Through this engagement process, a water sharing agreement was achieved amongst water users within Arizona and across the Basin States and Mexico.

Freeport-McMoRan's participation in this effort was instrumental in reaching the agreement through our commitment to supply a portion of our Colorado River supplies to farmers in central Arizona through 2022, if water shortages were to occur. This agreement would allow the impacted farmers time to transition to alternative water supplies and reduce their reliance on low priority water supplies without the risk of severe economic collapse.

On May 20, 2019, representatives from all seven Colorado River Basin States, the U.S. Department of the Interior and the Bureau of Reclamation signed the drought contingency plans for the Colorado River Basin. The plan is designed to help stabilize the river system and to help reduce the risk of the system reservoirs falling to critically low levels. This effort represents a tremendous degree of collaboration and compromise among the seven states, as well as by the system's water users.

Indigenous Peoples Engagement on Water

Freeport-McMoRan's local stakeholder engagement and social investment objectives include formal interactions with Indigenous Peoples in Papua, Indonesia; Native Americans in the United States; and the traditional communities of Alto El Loa in Chile.

Indigenous Peoples have been present for thousands of years in aboriginal territories around the world. These populations inhabit landscapes that collectively hold some of the world's most diverse people, languages, cultures and biodiversity. Freeport- McMoRan acknowledges that some Indigenous Peoples have historically occupied areas near our operations or have ancestral connections to these lands, and we are committed to engaging with these groups on many issues, including water-related topics, to establish and maintain longterm relationships built on transparency and trust that earns our social license to operate and supports their local needs.

Over the years, Freeport-McMoRan has entered into water agreements with many indigenous communities, including the Gila River Indian Community, the Tohono O'Odham Nation, the Hualapai Tribe and the San Carlos Apache Tribe. Understanding and recognizing the needs of our local community or tribal partners is integral to a successful partnership and effective agreement. We understand that working with our local stakeholders constructively on water-related topics can bring potable water, education and other important resources to their communities while simultaneously supporting critical water supply for our mines that operate near their ancestral lands.

In North America, in many instances, Native American tribes have senior or the highest priority water rights. However, these communities often lack the necessary resources to access their water supplies. Given these circumstances, our water-related engagement with the Native American tribes near our Arizona operations is focused on achieving a mutually beneficial outcome. Our objective is not only to obtain shortand long-term water supply contracts to support our own uninterrupted operations, but also to assist our tribal partners in their efforts to access clean, reliable and affordable water to support their social and economic development.

The Colorado River provides water to over **40 MILLION PEOPLE**

Water Education & Employee Engagement

At PT-FI in Indonesia, plastic water bottle use went from almost 5 million bottles a year to nearly zero in 2019 because of the implementation of drinking water stations and a successful employee awareness campaign.

Previously, PT-FI would import almost 5 million plastic bottles of water annually to Papua. In addition to the extensive cost, time and effort to ship the bottles to the island, the bottles were quickly filling up PT-FI's landfills.

PT-FI's award-winning employee awareness campaign known as #SaPuAir which means "My Water," was conceived and launched to educate the PT-FI community about the quality of its own pristine water and the need to eliminate plastic water bottle use.

#SaPuAir featured a series of informational print stories, posters, videos and television programs. The team conducted taste tests, held video competitions and other contests, and posted lab results at water refilling stations throughout the site.

PT-FI installed water tanks, dispensing stations and even stations for employees to wash the reusable bottles they were issued. Potable water systems were installed throughout operations, including in the underground work areas where water hadn't yet been piped and throughout the communities.

EL ABRA ASCOTÁN COMMUNITY SUPPORT

Some of our operations support access to water for our local communities by providing drinking water and sanitation facilities. Access to these services is site specific but can include treated water, drilling boreholes, upgrading or building treatment plants and water-related infrastructure such as pipelines.

At our El Abra operations in Northern Chile, the site has been supplying drinking water to a small indigenous community in Ascotán since 2009. El Abra built a reverse osmosis plant at the Ascotán makeup water booster station to produce and supply potable drinking water for the community. The makeup water is pumped out of the Ascotán wells field (saline water from the aquifer). The Ascotán community is the plant's formal owner; however, El Abra continues to operate the plant and the environmental team conducts routine chlorine monitoring to verify the drinking water fulfills the government water standards.



LOOKING AHEAD

Clean water is a fundamental societal, environmental and economic resource and a basic human right. It is essential for the communities where we operate and for our business. We strive to protect this critical natural resource through our global water management systems and processes. Moving forward, we aim to reduce the amount of high quality freshwater used where possible, and to maintain our industry-leading water reuse and recycle rates. We will also establish a formal water-related target for our business.

Freeport-McMoRan understands that using water responsibly is an important part of being a good partner in the communities where we work. Most of our operated assets share water resources with other parties, including our host communities, agricultural, and other industrial users. We must consider stakeholder concerns and expectations, cumulative impacts of all water users within a catchment, and the natural environment. This is an ongoing effort to build trust with our community partners and create shared value in the watersheds in which we operate.

Ultimately, Freeport-McMoRan's resilience is tied to our ability to successfully manage our water. Looking ahead, we are committed to enhancing our evaluation and disclosure of our global water program, including our evolving understanding of the water-related risks and opportunities across each of our operations. Being resilient to the climate-related challenges that lie ahead is crucial for all stakeholders in our host communities.

The global energy transition has underpinned the importance of copper to a sustainable, decarbonized future. As global demand for copper grows, we are committed to minimizing our impacts on the environment, creating shared value in the communities where we operate and delivering responsibly produced copper to global markets.

We understand that using water responsibly is an important part of being a good partner in the communities where we work over the long-term

Cerro Verde provides access to clean water for our local communities near Arequipa, Peru



APPENDIX & DATA TABLES

2019 WATER DATA

THOUSAND CUBIC METERS	HIGH QUALITY	LOW QUALITY	TOTAL	
Groundwater	83,439	15,885	99,323	
Surface water	60,475	-	60,475	
Sea water	-	48,578	48,578	
Stormwater	51,400	5,753	57,153	
Third-party sources (effluent)	29,617	7,416	37,034	
TOTAL NEW WATER WITHDRAWN	224,931	77,633	302,564	
To Surface	12,775	2,692	15,467	
To Sea, Ocean, or Estuary	3,044	77,355	80,399	
To Third-Party	16	3	19	
TOTAL WATER DISCHARGED (OFF-SITE) ^{1,2}	15,835	80,049	95,885	
Evaporation	79,755	-	79,755	
Entrainment	19,224	72,856	92,080	
Other	11,753	9,205	20,957	
TOTAL WATER CONSUMPTION	110,732	82,060	192,792	
Change in Water Storage Volume			13,887	
Total Water Recycled/Reused			1,408,513	
Water Use Efficiency (%)			87%	
Total Utilized Water (Withdrawn + Recycled)			1,711,077	
Percent Reused of Total Water Utilized			82%	

1 Approximately 49% of water quantities discharged were associated with our Atlantic Copper Smelter where sea water is used for cooling and then returned to source, 44% was associated with PT-FI's controlled riverine tailings management system and the remaining 7% with our Climax and Henderson mines in Colorado.

2 Utilizing the ICMM water reporting guidelines, this quantity of discharged water is categorized as low quality due primarily to a) the estuarine source water used at Atlantic Copper is already low quality due to salinity and b) the discharge water associated with the function of PT-FI's controlled riverine tailings system contains alkaline pH.



WATER PERFORMANCE TREND DATA 2015 - 2019

	2015	2016	2017	2018	2019	
WATER UTILIZATION (THOUSAND CUBIC METERS) ¹						
Groundwater	103,390	100,923	94,316	111,723	99,323	
Surface water	119,574	121,827	110,043	68,177	60,475	
Sea water	-	-	-	46,844	48,578	
Stormwater	44,086	49,032	43,864	52,750	57,153	
Third-party sources (effluent)	3,518	30,682	26,814	31,127	37,034	
TOTAL NEW WATER WITHDRAWN	270,569	302,464	275,037	310,620	302,564	
Total Water Recycled/Reused	1,164,179	1,399,835	1,285,206	1,377,971	1,408,513	
TOTAL UTILIZED WATER (Withdrawn + Recycled)	1,434,748	1,702,299	1,560,243	1,688,591	1,711,077	
Percent Reused of Total Water Utilized	81%	82%	82%	82%	82%	
Total Water Discharged (off-site) ²	-	-	-	106,183	95,885	
Water Use Efficiency (%) ²	-	-	-	87%	87%	

1 Water utilization shown in thousand cubic meters to align with SASB reporting guidelines (shown in million cubic meters in 2019 Annual Report on Sustainability).

2 We started calculating water discharged and water efficiency % in 2018, in line with ICMM reporting guidance.

Note: Following sale of TFM in November 2016, all data now excludes TFM in 2015/2016. As a result of methodology changes or corrections, prior year data may be updated. All financial figures are quoted in U.S. dollars, unless otherwise noted. Some figures and percentages may not add up to the total figure or 100% due to rounding.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements, which are all statements other than statements of historical facts. The words "anticipates," "may," "can," "plans," "believes," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "could," "to be," "potential," "assumptions," "guidance," "future" and any similar expressions are intended to identify those assertions as forward-looking statements.

Freeport-McMoRan (FCX) cautions readers that forward-looking statements are not guarantees of future performance and actual results may differ materially from those anticipated, expected, projected or assumed in the forward-looking statements. Important factors that can cause FCX's actual results to differ materially from those anticipated in the forward-looking statements include, but are not limited to, the factors described under the heading "Risk Factors" in FCX's Annual Report on Form 10-K for the year ended December 31, 2019, and subsequent Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, each filed with the U.S. Securities and Exchange Commission (SEC), as updated by FCX's subsequent filings with the SEC, and available on our website at fcx.com

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We Welcome Your Feedback

We would love to hear from you. Please contact us at ir@fmi.com or sustainability@fmi.com to ask questions and provide input to our company.

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