



2.3 WATER RESOURCE MANAGEMENT



Water Resource Utilization

2.3.1

Silvercorp strictly abides by relevant laws and regulations, including the *Water Law of the People's Republic of China*, *Water Pollution Prevention Law of the People's Republic of China*, *Environmental Protection Law of the People's Republic of China*, *Yellow River Protection Law of the People's Republic of China*, as well as the regulatory requirements of where it operates. The Company has formulated a robust internal water resource management system. The Silvercorp Environmental Protection Refined Management and Digital Transformation Handbook contains standardized management requirements that regulate the whole process of water resource utilization, from water withdrawal to water pollution control. In Fiscal 2024, Silvercorp formulated the *Water Stewardship Policy* to optimize its water resource management with specific requirements on water withdrawal and water use efficiency.

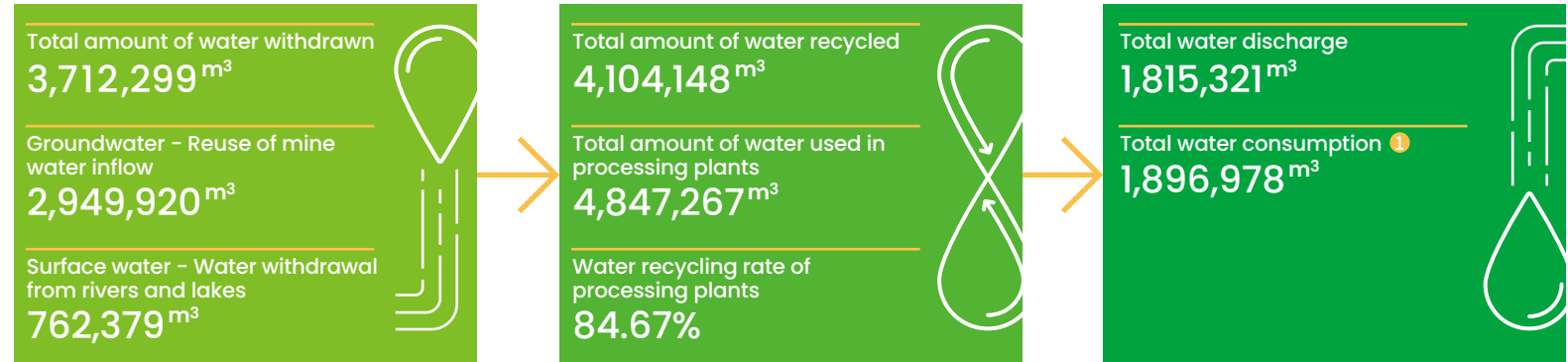
Policy Disclosure

Please click the link or scan the QR code to view the document

[Water Stewardship Policy](#)



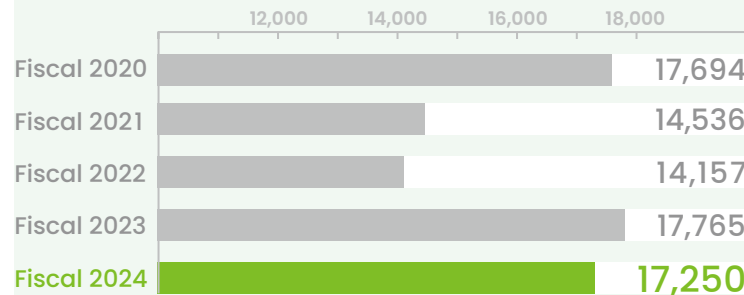
Silvercorp's water withdrawal mainly includes the withdrawal of surface water and the reuse of mine water inflow. All of the Company's water withdrawals have the required water withdrawal certificates and water resource taxes paid. Additionally, each withdrawal has undergone a thorough water resource analysis to mitigate the environmental impact and protect water resources. In Fiscal 2024, there was no non-compliance incident regarding water withdrawal standards and requirements in the Company's operation sites.



① Total water consumption includes water for office and domestic uses in mines, water supplies for local communities, water used in mining operations, water used in greening and dust suppression, and water used for water replenishment in the processing plant.

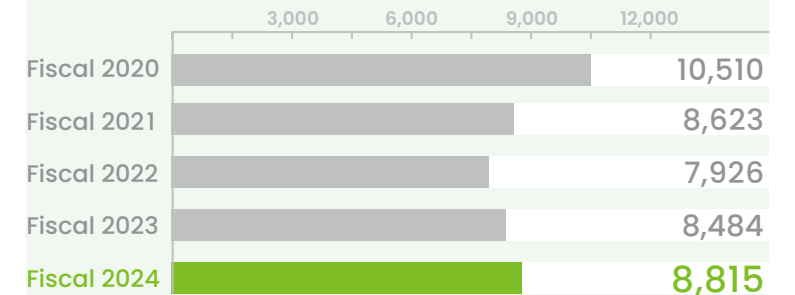
Fresh Water Withdrawal Intensity

Unit: m³ / million dollar revenue



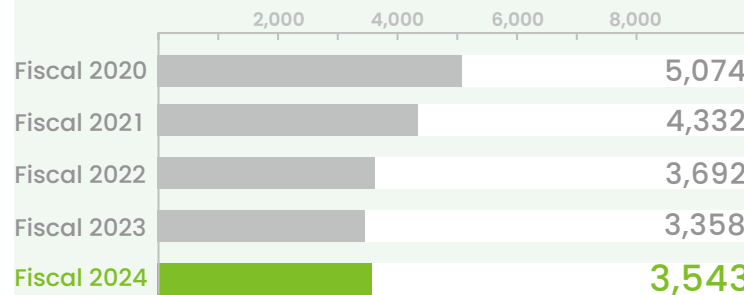
Fresh Water Consumption Intensity

Unit: m³ / million dollar revenue



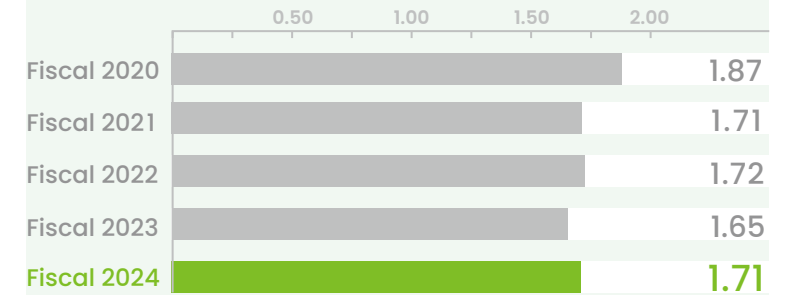
New Water Withdrawal Intensity

Unit: m³ / million dollar revenue



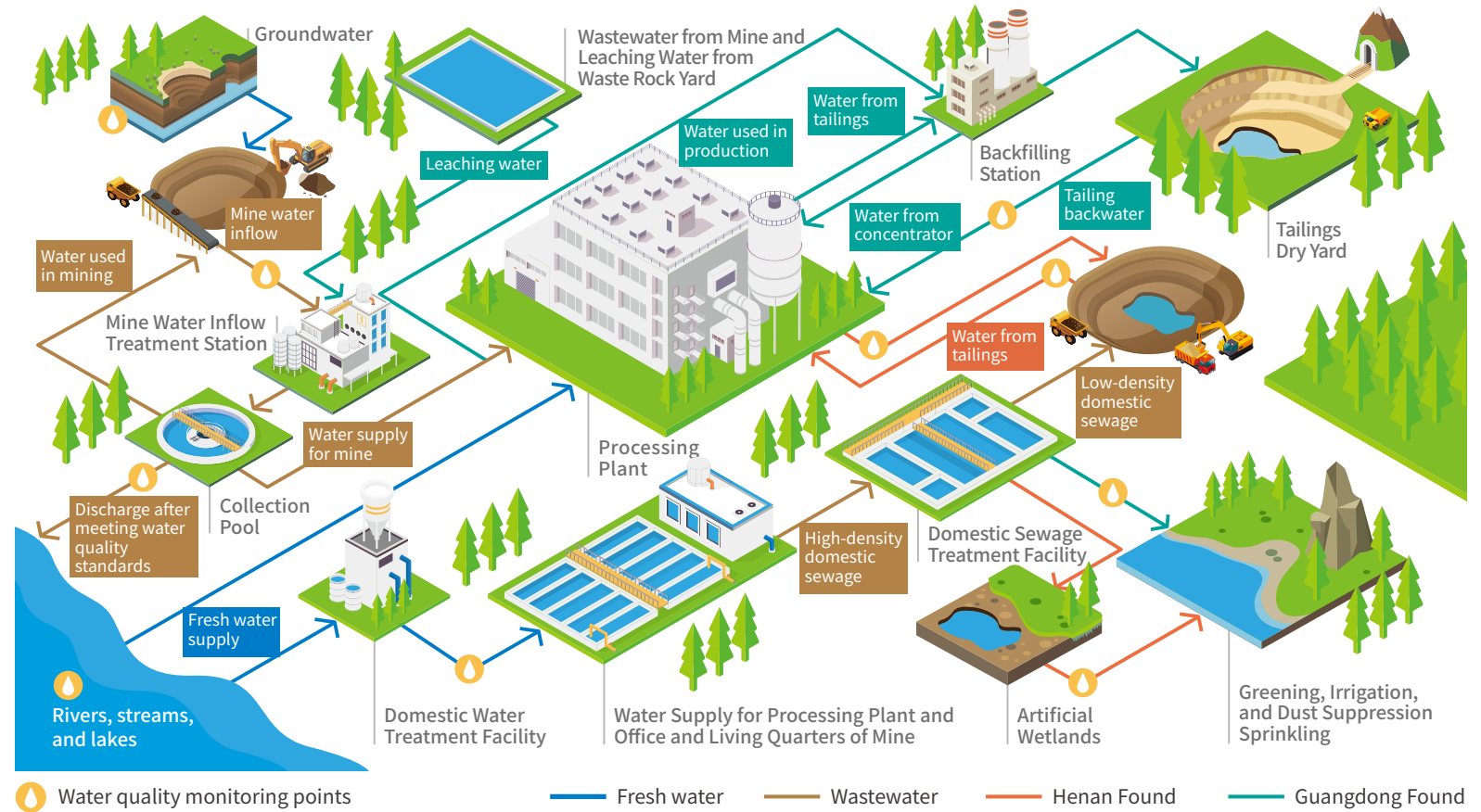
Unit Fresh Water Consumption of Processing

Unit: m³ / tonne



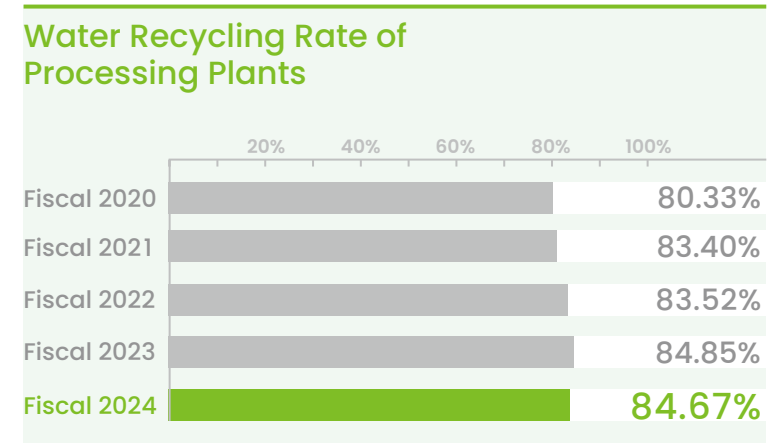
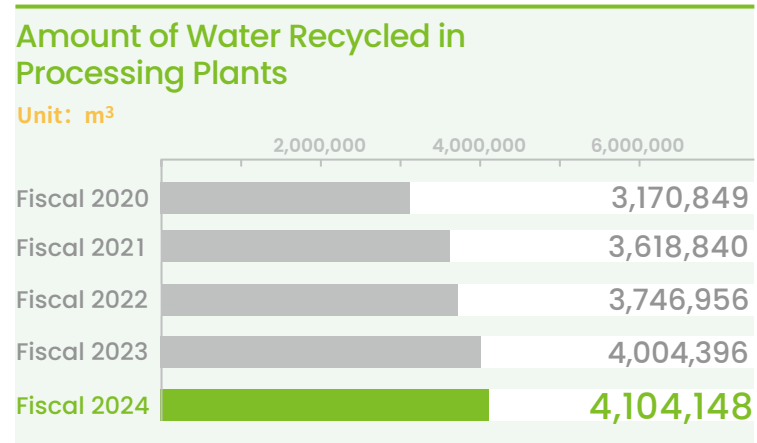
Mine water inflow and leaching water from processing plant are treated and reused in mining operations, processing plants, and backfilling stations. The unutilized wastewater will be treated to meet discharge standards before discharging. Surface water from natural water bodies, such as rivers and lakes, is used as freshwater for processing plants and for domestic and office uses. Wastewater from the processing plants is treated, reused or discharged to the tailings management facilities. Domestic sewage is treated in sewage treatment facilities and reused for mining area greening, forest irrigation, and dust suppression. In addition, to ensure water resource security, the Company has established a comprehensive water monitoring system to closely monitor the water qualities at key water recycling control points, including groundwater withdrawal, tailings management facilities, backwater pools, and domestic sewage treatment facilities, etc.

The Company evaluates the differences in water use patterns of its operation sites and implements relevant water management plans accordingly. We strive to reduce water consumption through technological innovation and process optimization, increasing our water recycling rate with source water optimization, such as using mine water inflow, recycled wastewater from the processing plants, and rainwater instead of new water withdrawal. We also actively cultivate water-saving awareness among employees with thematic training and awareness-raising campaigns, such as the World Water Day event and "A Drop from Me" water-saving campaign.



Silvercorp's Water Resource Management Targets

- 1 Treat domestic sewage and mine water inflow to meet charge standards for reuse and discharge.
- 2 Reuse treated mine water inflow in mining operations as needed.
- 3 No direct wastewater discharge from processing plants. Improve water recycling and utilization rate by 8% by 2030 over the 2020 baseline.
- 4 Reduce freshwater withdrawal intensity by 10% by 2030 over the 2020 baseline.



Wastewater Treatment Compliance

2.3.2

Silvercorp's wastewater mainly includes wastewater from processing plants, domestic sewage, and mine water inflow. Wastewater from processing plants, including wastewater from wet storage tailings ponds and dry-stack tailings yards and tailing water from the filtration process, is collected and reused in ore processing with zero discharge. Domestic sewage is treated in dedicated treatment facilities first and then used for greening operations in mining areas and the surrounding woodlands, also with zero discharge. Mine water inflow is treated with chemical precipitation in mine water inflow pools to meet water quality requirements in accordance with the *Environmental Quality Standards for Surface Water*. Treated mine water inflow is reused in either mining or processing. The Company actively adopts applicable water treatment technologies to meet wastewater discharge standards. During the reporting period, the Company had no violations of laws and regulations related to wastewater discharge.

The Company attaches great importance to the protection of groundwater systems. We construct steel-concrete structures to build drainage ditches and channels in mining areas, avoiding seepage and leakage of production wastewater or other water entering the groundwater system and preventing various water sources from entering the underground soil. We also establish water supply and drainage systems following the optimization principle of "separating clean water from wastewater, separating rainwater from sewage, and maximizing water recycling". This approach aims to maximize the reuse rate of water and the treatment rate of wastewater, thereby preventing rivers and groundwater pollution from wastewater and sewage. We have also implemented a long-term groundwater monitoring mechanism, which includes conducting regular water quality analysis on discharged mine water, production wastewater, as well as groundwater in surrounding areas to ensure compliance with discharge standards.

To mitigate potential water pollution caused by rainwater dissolving surface pollutants in mining areas, Silvercorp has installed rainwater and sewage diversion systems in the Ying Mining District and the GC Mine to collect rainwater and sewage separately, allowing direct discharge of rainwater to avoid the risk of polluting local river systems from mixed discharge of rainwater and sewage.

In Fiscal 2024, Guangdong Found carried out a production return water pipeline descaling project at its processing plant. The project effectively increased the water utilization efficiency of the processing plant by enabling better control of water-related production parameters such as water quantity and water pressure.



Evaluating Water Risks



2.3.3

In Fiscal 2024, Silvercorp conducted another round of water risk analysis on the Ying Mining District and the GC Mine using the Aqueduct™ Water Risk Atlas tool developed by the World Resource Institute (WRI). The evaluation aimed to utilize the results to enhance our management of current and future water risks. The evaluation results indicated that the Ying Mining District (covering 82.96% of the company's operating income) is located in regions characterized by high water quality risk and water resource stress. All the Company's water withdrawals are from freshwater resources. As such, we have developed relevant response plans to address both current and future water risks, focusing on improving water recycling rates and reducing freshwater withdrawal intensity.

Risk Indicators	Ying Mining District	GC Mine
Overall water stress	Very high (4-5)	High (3-4)
Water quality physical risk	Very high (4-5)	Medium to high (2-3)
Water resource stress	Very high (>80%)	Low to Medium (10-20%)
Regulatory and reputational risk	Medium to high (2-3)	High (3-4)
Future available water volume ¹	10-30cm/year	30-100cm/year
Future water resource stress	Very high (>80%)	Low to Medium (10-20%)

¹ The evaluation uses the SSP1 RCP2.6 future scenario, projecting a global surface temperature rise of 1.3° C to 2.4° C by 2100, with 2030 set as the future scenario time. This scenario provides a forecast of water-related risk assessment for the period from 2015 to 2045.

Future available water volume refers to a forecast volume of the throughput of available renewable freshwater within the basin.

The Company has carried out risk identification and monitoring for acid rock drainage risks in accordance with the *Global Acid Rock Drainage Guidelines*. It has been identified that the GC Mine (covering 12.19% of the company's operating income) has such risks. However, since all wastewater from the GC Mine is reused in the processing plant, these acid rock drainage risks currently have no actual impact. We conduct regular groundwater and soil testing to ensure environmental compliance. Moving forward, we will continuously monitor and research acid rock drainage risks and develop appropriate mitigation plans.

Water Resources Risk Response Plan of Silvercorp

Risks	Responses
<p>Water Scarcity Water supply shortages may affect the industrial use of water, leading to production interruption and other issues.</p>	<ul style="list-style-type: none"> Regularly assess key indicators such as water quality, quantity, and levels in mining areas and surrounding areas, and adjust water resource plans accordingly based on water quality and reserve data. Conduct scenario analysis for future changes in water resources and develop response plans on potential water-related physical and regulatory risks.
<p>Water Quality Safety Improper treatment of production wastewater may lead to water pollution and affect drinking water safety.</p>	<ul style="list-style-type: none"> Strictly monitor and adhere to wastewater discharge standards, treatment processes, and operational protocols, clarify the responsibilities and supervision mechanisms for wastewater management, and ensure standardized and regular management of wastewater discharge. Comprehensively improve the recycling rates of wastewater to minimize discharge.
<p>Ecological Environmental Damage Improper development and utilization of water resources may lead to water ecological imbalance, such as declining groundwater levels and land subsidence due to excessive groundwater extraction.</p>	<ul style="list-style-type: none"> Establish a robust water management system with clearly defined goals, principles, and responsibilities to ensure the rational use and effective protection of water resources. Actively develop and acquire water-saving technologies and equipment to reduce water consumption. Enhance the water recycling rate through process optimization and other means to continuously reduce water withdrawal intensity.
<p>Water-related Community Conflicts Production activities may affect the normal water usage of local communities.</p>	<ul style="list-style-type: none"> Conduct impact analysis on local water resources and research community water use trends to identify community water issues. Actively engage with relevant stakeholders, such as local government and community representatives, to gain a comprehensive understanding of community needs and concerns. Support local drinking water infrastructure projects to improve local water supplies.
<p>Regulatory Risks Regulations on water resource management may become increasingly stringent.</p>	<ul style="list-style-type: none"> Closely monitor trends in national and local water resource management regulations and policies to ensure compliance and establish a regulatory compliance mechanism with regular self-inspections and rectifications to prevent regulatory risks. Establish a water resources risk warning system to timely identify potential risks by monitoring and analyzing water resource data and develop and optimize risk response plans to ensure prompt and effective responses to water resource risk events.