Water Pollution Prevention and Control

Water management is an important aspect of our overall environmental management, and we have created operation specific water management systems that outline specific processes that will aid in reducing our consumption of water, and in the recycling and repurposing of our treated wastewater. The Company recycles and integrates treated water from its mines for use in its processing plants, dust suppression, landscaping, agriculture, and irrigation, to meet its goal of reducing freshwater consumption. We also implement innovative technology to improve efficiency and improve the monitoring of discharged pollutants.

Ying Mining District	Formulating the Environmental Protection Management System and Penalty Standards to regulate and supervise water resource management in terms of sewage discharge, utilization of wastewater from processing plants, reuse of mine water inflow, supervision of mine water inflow treatment facilities, and the protection of household drinking water sources.
GC Mine	Establishing a comprehensive water pollution identification mechanism that has identified 18 environmental factors corresponding to the five operating areas of underground water pump drainage, household sewage treatment, mine water inflow treatment, tailings dewatering process, and tailings dry stacking process; classifying those factors according to their scale, severity, and frequency of environmental impacts, formulating mitigation measures, and regularly assessing the effectiveness of those measures.

Silvercorp's water sources are mainly the reuse of mine water inflow and withdrawal of fresh surface water. In Fiscal 2021, the Company's fresh water withdrawal stood at 823,127 cubic metres. We strive to replace our freshwater usage with mine water inflow and recycled wastewater from ore processing, making every effort to optimize the water use structure and improve water efficiency.

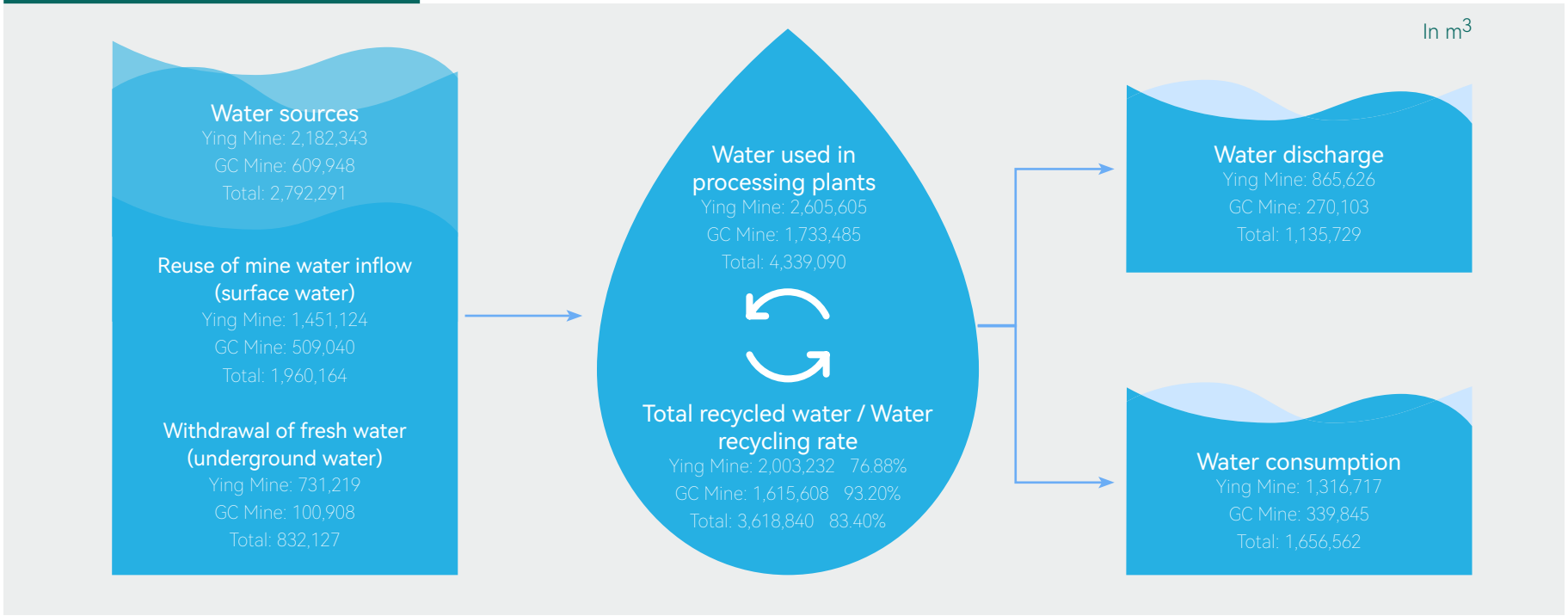
Case Ying Mining District: Maximizing Utilization of Mine Water Inflow

The Ying Mining District invested nearly US$737,572 in a comprehensive mine water inflow utilization project. Mine water inflow treatment facilities have been installed and put to use at the TLP PD820 and LMW PD924 mining systems. After treatment, the water inflow meets the Standard III of the Environmental quality standards for surface water (GB2002-3838). In September 2020, we further applied the facilities in the SGX Mine. As of the end of Fiscal 2021, the project in the Ying Mining District, Henan Province had reduced the discharge of mine water inflow, COD (Chemical Oxygen Demand) emissions, and nitrogen ammonia emissions by 250,000 tonnes, 1.2 tonnes, and 0.04 tonnes respectively.

Satellite image of mine gushing water reuse pipeline

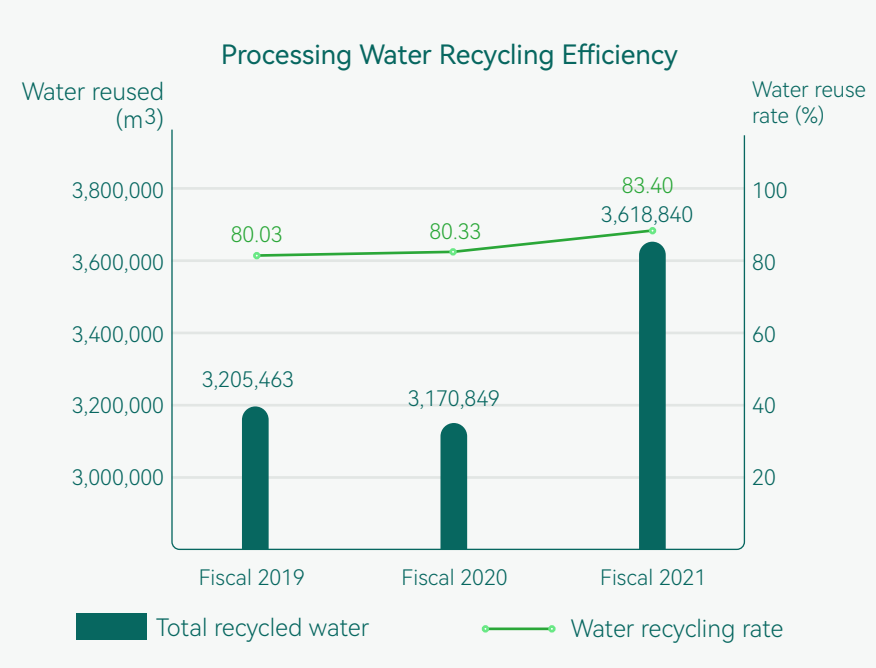
Farmland irrigation planning

Water Usage in Fiscal 2021



Types of Sewage	Main Sources	Measures
Mining wastewater	Mine water inflow from underground mining	We reuse or discharge the mine water inflow after treating it in the mine water treatment plant so that it meets the Class III of the Environmental quality standards for surface water (GB3838-2002). It is mainly reused in underground mining or for ore processing.
Ore processing wastewater	Concentrate dewatering and tailings backwater	Water from concentrate dewatering is transported to the high-level backwater tank through the return pump pipeline in the plant area and tailings backwater is transported to the high-level backwater tank through the pumping station pipeline in the plant area, achieving zero tailings water discharge into the environment and 100% water recycling rate.
Household sewage	Daily life of employees	After centralized treatment in the biochemical sewage treatment system, the sewage meets required standards and the water is used for dust reduction in the mining area and in greening initiatives in the surrounding forestland.

GRI: 303-2, 303-3, 303-4, 303-5, 306-1



Inflow water pump room

Sedimentation basin

Rainwater and process water diversion system at the GC mine

Rainwater and process water diversion

We have implemented rainwater and process water diversion systems in both mining districts to collect and transport rainwater and process water separately, which allows for the rainwater to be directly discharged, thus improving the efficiency of the treatment plant.

Anti-seepage solutions at TMFs

Our TMF dam, anti-seepage systems, and planning are supported by scientific technology and are built in compliance with relevant technical standards. We conduct regular quality inspections on the TMF dam, the anti-seepage membranes, etc., strengthen the daily inspection and observation of the TMFs, and take immediate measures if any safety hazards are identified, and report them.

GRI: 303-2, 306-1