Faro Mine
REMEDIATION PROJECT

Remediation Plan



Background

The Faro Mine site is located in central Yukon within the traditional territory of Ross River Dena Council and the Kaska People in an area known as Tsē Zūl. Prior to the development of the Faro Mine, the Tsē Zūl area was a 'breadbasket' that sustained the Kaska People's way of life. Mining activities significantly impacted and altered the lives of Kaska people and disrupted their connection with the Tsē Zūl area.

The Faro Mine began operating in 1969 and became the largest lead-zinc mine in the world. The mine operated for almost 30 years until it was abandoned in 1998 and left behind large amounts of mine waste, making it one of Canada's most complex abandoned mine clean-up projects. Water that flows over and through waste rock and finely crushed particles called tailings can become acidic and contain metals and other elements that are present on the site that are potentially harmful to people, fish and wildlife. A remediation plan has been developed to ensure that these effects are addressed over the long term.

For more information refer to Site History Fact Sheet.

Project Objectives

The process of cleaning up the Faro Mine is called remediation. The purpose of remediation is to improve the conditions at the site in order to reduce effects on the environment – including air, land, and water – and to make the site safe for people and wildlife. The Faro Mine Remediation Project is an effort by the Government of Canada and its partners to:

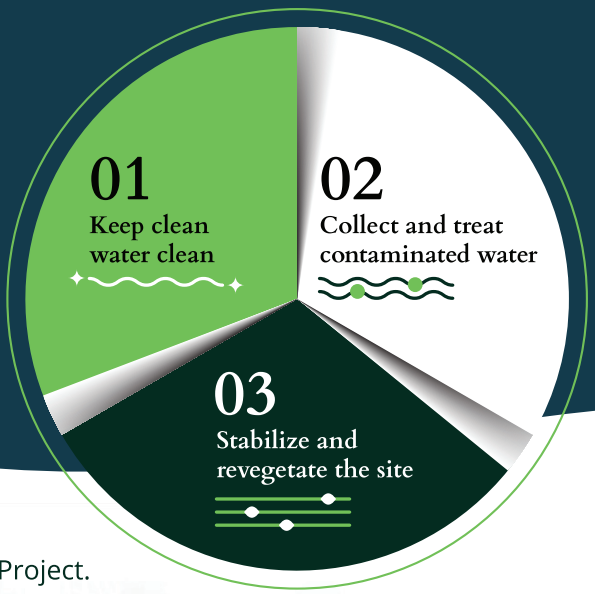
- Protect human health and safety
- Protect and, to the extent practicable, restore the environment including land, air, water, fish, and wildlife
- Return the mine site to an acceptable state of use that reflects pre-mining land use where practicable
- Maximize local and Yukon socio-economic benefits
- Manage long-term site risk in a cost-effective manner



Canada

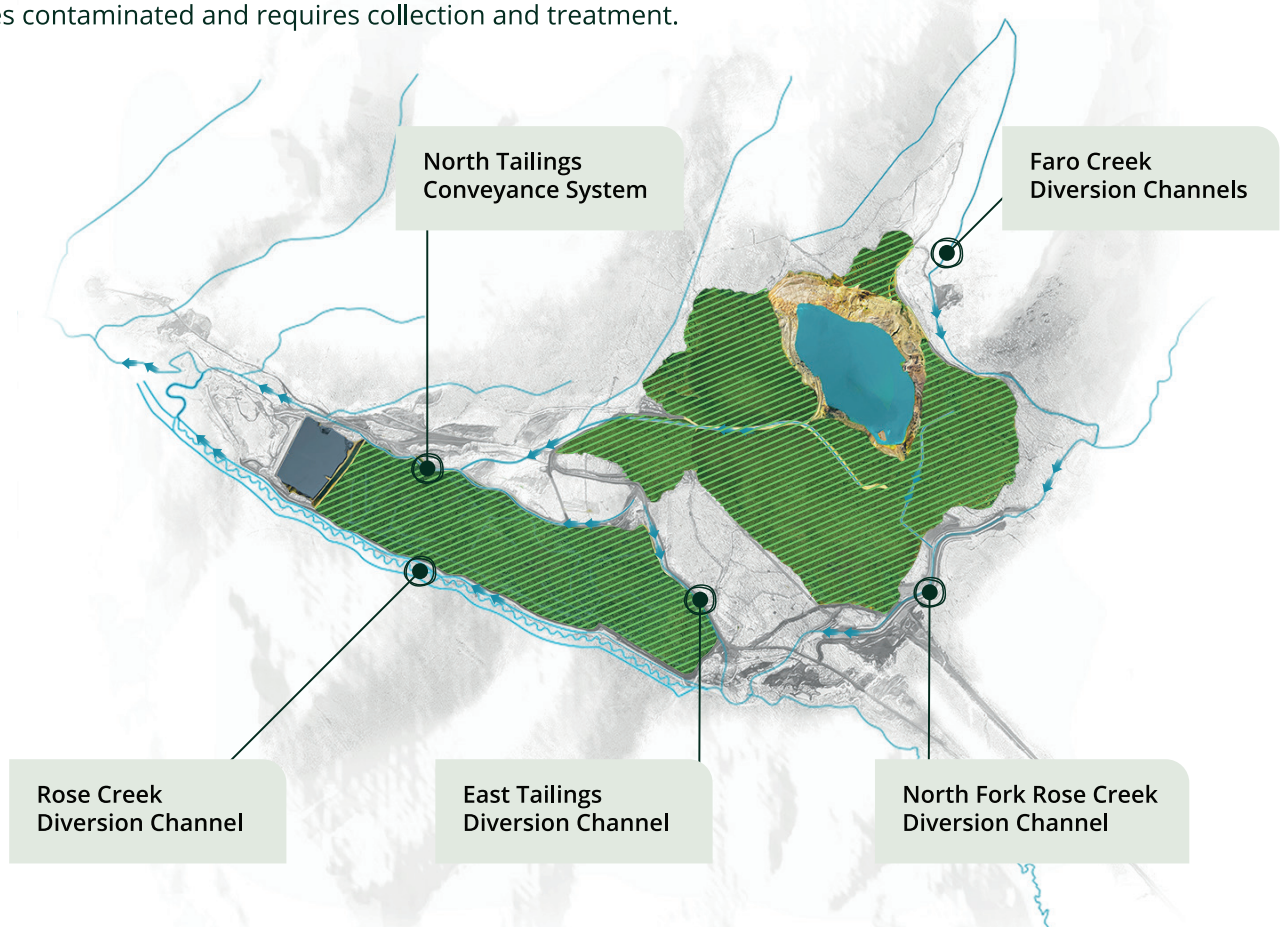
The Remediation Plan

The Faro Mine Remediation Plan is founded on three remediation principles: keep clean water clean; collect and treat contaminated water; and stabilize and revegetate the site. Together, these principles aim to achieve the creation of natural habitat for wildlife and plants.



01 Keep Clean Water Clean

Water quality and quantity is at the centre of the Faro Mine Remediation Project. Clean water that comes into contact with mine waste at the Faro Mine site becomes contaminated and requires collection and treatment.



The Project aims to keep clean water clean through the following measures:

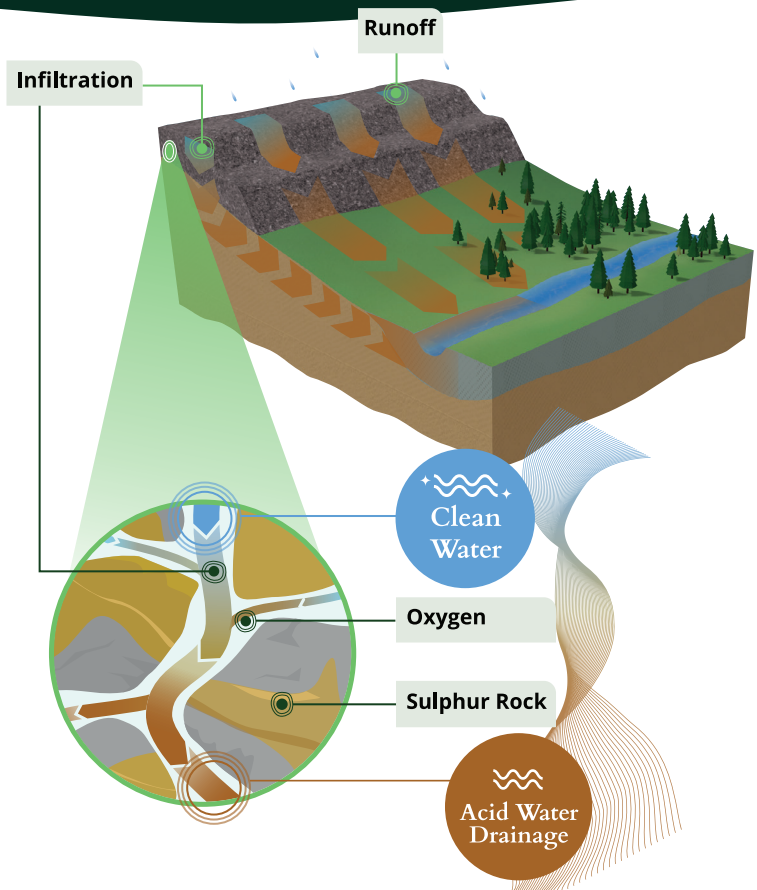
- **Re-slope and cover** waste rock dumps and tailings to help prevent clean rainwater and snowmelt from contacting the underlying contaminated material. The covers will be graded to direct clean water into channels which will safely move it into the downsteam environment.
- Several creeks once traveled through the Faro Mine site and were diverted into channels when the mine was in operation to move the water around mining areas. The remediation of the site will **upgrade these diversion channels, and create new channels where necessary**, to protect the clean water from the effects of the contaminated site. As these diversions are upgraded, elements that promote fish habitat will be integrated where suitable.

02 Collect and Treat Contaminated Water

All contaminated water from the site is collected and sent for treatment. After remediation, the bulk of the contaminated water will be groundwater (water flowing underground through the soil). Contaminated groundwater will be managed through three approaches:

- Collection of seepage by interception through underground pumps to drain groundwater.
- Install covers to limit infiltration and support planting of local plant species, which will in turn prevent erosion and provide habitat for wildlife.
- Reinforcing existing dams will keep them stable to withstand earthquakes and extreme weather.

The project team is currently working towards a water treatment system with the ability to treat an average of 60,000 m³ of water per day.



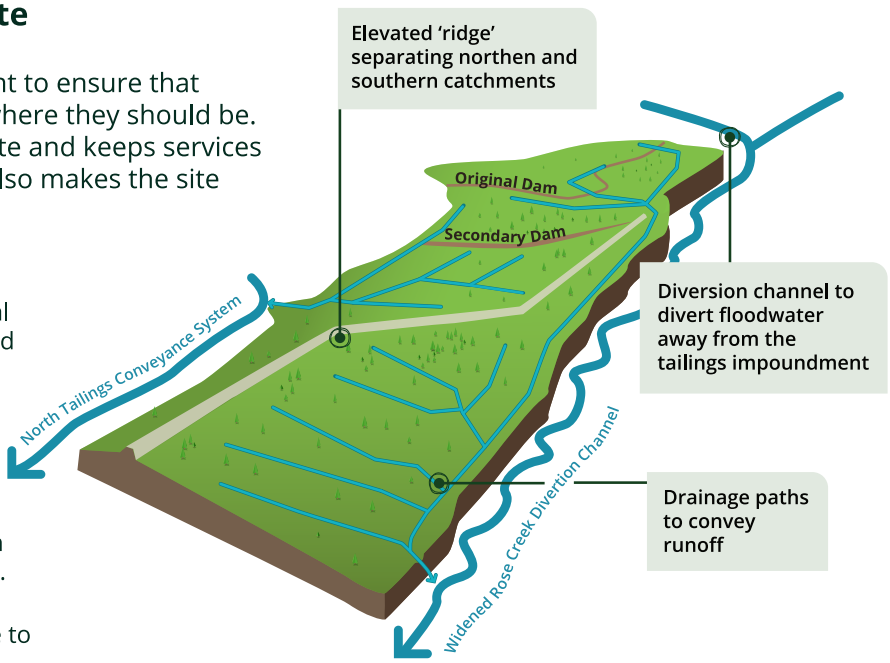
For more information, refer to Water Management Fact Sheet.



03 Stabilize and Revegetate the Site

Stabilizing and revegetating the site is important to ensure that structures like dams, diversions and pits stay where they should be. This affects the water movement around the site and keeps services like roads, pipelines and power lines intact. It also makes the site safer for people and animals.

- Re-slope waste rock dumps to safer grades to prevent infiltration and support planting of local plant species, which will in turn limit erosion and provide habitat for wildlife. Re-sloping will also improve drainage and keep clean water from contacting areas of the site that can cause contamination and make the water unsafe.
- Install covers to limit infiltration and support planting of local plant species, which will in turn prevent erosion and provide habitat for wildlife.
- Reinforcing existing dams will keep them stable to withstand earthquakes and extreme weather.



Creating Natural Habitat for Wildlife and Plants

An important remediation goal is the restoration of the natural environment through the creation of habitat for wildlife and local plants. Some approaches being included in remediation include:

- Community-based revegetation involving members of the Ross River Dena Council has planted more than 100,000 trees since 2021, including white spruce, lodgepole pine, and trembling aspen. Seeds for these and other plants such as fireweed and alder are being collected for planting on-site and to create habitat for wildlife.

The Kaska names for important tree specvies in the region include ts'u (white spruce), gadze (lodgepole pine), choba (trembling aspen). Names for seeds of these and other plants include gūs (fireweed) and kuhsāze (alder).



- Fish monitoring has shown a number of fish are present in the Rose Creek system, including: Grayling, Burbot, Salmon, Sculpin, and Whitefish. The project will protect habitat during construction and create and replace habitat for the future site.



- Wildlife monitoring is ongoing on site to better understand wildlife (e.g., moose, sheep, wolves, bear) numbers and movements at the Faro Mine site to help plan for remediation. This monitoring will continue into the future.

Once treated, the water is safe for people fish and wildlife downstream of site, it is then released to the environment. Even once remediation is complete, water treatment will be required at the Faro Mine site indefinitely.

For More Infomation

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