

Macraes Phase 4

ECOLOGY

OVERVIEW | **ECOLOGY** | ECONOMICS | FRESHWATER | LANDSCAPES | AIR QUALITY | BLASTING & VIBRATION | NOISE
| TRAFFIC | CLOSURE

The MP4 Project would result in the removal of approximately 31 hectares of indigenous or semi-natural vegetation. This is made up of mainly tussock land at Golden Bar, three small ephemeral wetlands (0.06 Ha in total), and small areas of riparian vegetation, rock tors, and shrubland, that together support indigenous plant species.

MP4 is assessed as having a low to moderate effect on the vegetation, birds, lizards and insects that make up the terrestrial ecology in the mining-affected pit and waste rock storage areas. The exception to this is an adverse effect on three ephemeral wetlands at Coronation that are critically endangered, naturally uncommon ecosystems, as well as a high impact on tussock land, desert broom, and the New Zealand falcon and pipit at Golden Bar. We propose to manage these effects through an Ecological Impact Management Plan and the application of the 'effects management hierarchy' as required by national and regional resource management obligations.

The residual adverse effects following avoidance, remediation and mitigation are impacts on tussock land, lizards and lizard habitat, birds and bird habitats, invertebrate habitat and ephemeral wetlands. Where residual adverse effects remain on areas within the MP4 footprint which exhibit significance, OceanaGold is proposing to mitigate and offset those effects. The proposed mitigation and offsetting will be designed to achieve at least a no-net-loss outcome, and preferably, a net gain in indigenous biological diversity.

The mitigation and offsetting proposed by OceanaGold includes creating ephemeral wetlands over a one-hectare area west of Coronation Pit and creating a covenanted, predator-free Ecological Enhancement Area (EEA) in the Murphy's Creek catchment near Golden Bar over an area of around 91 hectares. The EEA will accommodate lizards salvaged and relocated from the proposed open pit extension areas as well as other species of plants, insects and birds whose habitats are affected by the project.

The ecological compensation proposed by OceanaGold includes predator control activities, a lizard enhancement project, rock tor replacement, a bird enhancement project, invertebrate community response to habitat protection, and riparian vegetation protection.

This is a summary of the information available in the Assessment of Environmental Effects (AEE).

A full copy of the AEE and supporting documents will be available on the OceanaGold Macraes website following lodgement to councils. www.oceanagoldmacraes.co.nz/mp4

