

Edna May Gold Project – targeted flora survey and rehabilitation monitoring

Evolution Mining Ltd



CLIENT:

Evolution Mining Ltd

LOCATION:

Edna May Gold Project, Westonia, WA

SERVICES:

- Targeted survey for *Eremophila resinosa*
- Establishment of monitoring transects in analogue communities for rehabilitation assessment

KEY ACHIEVEMENTS:

- Determined that state of decline of *E.resinosa* populations due to natural attrition being a result of reduced frequency of disturbance
- Identified keystone, dominant species to target for revegetation
- Provided the methodological framework for assessing success of future rehabilitation

Evolution Mining Ltd operates the Edna May Gold Project, a conventional open pit gold mine located near Westonia, 312 km east of Perth. Phoenix was commissioned in 2015 to undertake a targeted flora survey and to establish monitoring transects in analogue communities and obtain benchmark data for rehabilitation assessment for the project.

In accordance with the requirements of the Westonia Gold Mine Threatened Flora Management Plan, Phoenix first undertook a targeted survey of *Eremophila resinosa* in order to monitor extent and condition of existing, known populations and capture new populations. The key finding was that all of the natural *E.resinosa* populations are in a state of decline due to natural attrition and not impacts from mining activities. *E.resinosa* is a disturbance species which declines if the frequency of disturbance is low.

Secondly, we established monitoring transects in analogue communities to obtain benchmark data for rehabilitation assessment. The field survey provided quantitative data for native species and identified the dominant (keystone) plant species to be targeted for revegetation.

The report provided the methodological framework for assessing success of future rehabilitated landforms, including comparison of rehabilitated sites to analogue communities, the setting of specific completion criteria and seeding program evaluation.

Phoenix focuses its rehabilitation efforts on identifying and returning dominant species because it is the dominant species that largely determines the vegetation structure. And it is this structure that will give rise to a healthy, functioning ecosystem of flora and fauna, which will see completion criteria met and see bonds returned.

PHOENIX
ENVIRONMENTAL SCIENCES

