

Northern Star Resources – FY23 Biodiversity Values



Operation / Project	Taxa, Communities & Habitats	Location Relative to Operation/Project	Management Practices
Jundee Bronzewing	Multiple Priority Ecological Communities in association with invertebrates in groundwater calcretes	Within and outside proposed disturbance areas	<ul style="list-style-type: none"> Minimise water abstraction and land disturbance where possible. Subterranean fauna surveys are planned to understand species and extent.
	Brush Tailed Mulgara (<i>Dasyercus blythi</i>) (P4)(LC) Aristida jerichoensis var. subspinulifera (P3) Baeckea sp. Sandstone (P3) Eremophila arguta (P1) Eremophila congesta (P1) Eremophila sp. long pedicels (P2) Eremophila pungens (P4) Goodenia modesta (P3) Micromyrtus chrysodema (P1) Stackhousia clementii (P3) Tribulus adelacanthus (P3) Xanthoparmelia nashi (P3)	Outside proposed disturbance area	<ul style="list-style-type: none"> Avoid where possible and apply hierarchy of mitigation (avoid, minimise & rehabilitate). Biodiversity surveys completed prior to any disturbances within the area. Fauna relocation undertaken in areas of suitable habitat two weeks prior to disturbance. Inspections conducted by suitably trained personnel immediately prior to disturbance activities. Weed management practices are implemented during disturbance to prevent introduction of invasive species. Jundee Biodiversity Management Plan JUN-ENV-054-PLA
Thunderbox	Calytrix (<i>C. erosipetala</i> and <i>C. uncinata</i>) both Priority 3 species	None of these populations have been recorded in areas of planned impact	<ul style="list-style-type: none"> Avoid where possible and apply the mitigation hierarchy (avoid, minimise, rehabilitate, offset). Biodiversity surveys completed prior to any disturbances within the area. Biodiversity Management Plan TBO-ENV-040-PLA Weed and Feral Animal Control TBO-ENV-006-SWP Land Disturbance Procedure NSR-ENV-001-PRO
Carosue Dam	Malleefowl (<i>Leipoa ocellata</i>) (VU)	Within and outside proposed disturbance areas 152.6 ha of disturbance to Malleefowl habitat has been approved for the expansion of the tailings storage facility. In FY23, 127.9 ha of habitat was cleared.	<ul style="list-style-type: none"> Avoid where possible and apply the mitigation hierarchy (avoid, minimise, rehabilitate, offset). Biodiversity surveys completed prior to any disturbances within the area, including targeted Priority flora and fauna surveys in areas of suitable habitat. Biodiversity Management Plan CDO-ENV-051-PLA Rehabilitation Management Work Instruction CDO-ENV-027-SWP Implementation of site Weed Management Plan. Weed and Feral Animal Control CDO-ENV-024-SWP Land Disturbance Procedure NSR-ENV-001-PRO Implementation of Annual Malleefowl Monitoring on site and regional surveys. Avoid clearing or disturbing areas where this species is present.
	<i>Eremophila arachnoides subsp. tenera</i> (P3)	Outside proposed disturbance areas	
Kanowna Belle & South Kalgoorlie Operations	Malleefowl (<i>Leipoa ocellata</i>) (VU) <i>Eremophila praecox</i> (P2)	Outside proposed disturbance areas	<ul style="list-style-type: none"> Avoid where possible and apply hierarchy of mitigation (avoid, minimise & rehabilitate). Weed management practices are implemented during disturbance to prevent introduction of invasive species. Biodiversity surveys completed prior to any disturbances within the area, including targeted Priority flora and fauna surveys in areas of suitable habitat. Land Disturbance Procedure NSR-ENV-001-PRO Various Corporate and Site Procedures
KCGM	<i>Eremophila praecox</i> (P2) <i>Jalmenus aridus</i> (P1) <i>Ogyris subterrestris petrina</i> (CR)	Outside proposed disturbance areas	<ul style="list-style-type: none"> Biodiversity surveys undertaken prior to clearing activities, including targeted surveys for priority flora and fauna. Flora and Fauna Management Plan KCGM-ENV-070-PLA Significant Species Management Plan KCGM-FIM-ENV-010-PLA (Currently Under Assessment) Vegetation Clearing and Rehabilitation Material Stripping KCGM-ENV-036-GUI Managing Weeds on KCGM Leases KCGM-ENV-065-PRO Managing Native Stray Feral and Pest Animals Procedure KCGM-ENV-082-PRO
Pogo	Goodpaster River – breeding ground for Chinook Salmon / King Salmon (<i>Oncorhynchus tshawytscha</i>)	Outside proposed disturbance areas	<ul style="list-style-type: none"> Monitoring of water quality upstream and downstream of our operations. Management practices are outlined in Pogo's Fish Resources Permits and Fish Habitat Permits. Bird nesting surveys prior to clearing. Management practices established in the Migratory Bird Treaty Act. Weed management practices follow guidelines established in ADNR's Strategic Plan for Invasive Weed and Agricultural Management and Prevention in Alaska.
	Federal and state laws protect both migratory and non-migratory species in Alaska. Most birds in Alaska fall under the Migratory Bird Treaty Act (MBTA), which makes it illegal to injure, capture, or kill migratory birds or to interfere with their nests when active.		
Tanami	Landforms and habitats including: <ul style="list-style-type: none"> South-west Tanami Desert Gardiner Range Tanami Range Browns Range Birrindudu Range Central Tanami Paleodrainage Depression Central Tanami Remnant Mulga Bilby (<i>Macrotis lagotis</i>) (VU) Brush-tailed Mulgara (<i>Dasyercus blythi</i>) (LC) Northern Nailtail Wallaby (<i>Onychogalea unguifera</i>) (LC) Spectacled Hare-wallaby (<i>Lagorchestes conspicillatus</i>) Acacia abbreviate Maslin (NTh) <i>Cleome uncifera ssp. Microphylla</i> (NTh) <i>Heliotropium sphaericum</i> (NTh) <i>Heliotropium subreniforme</i> (DD) <i>Hibiscus brachychaenus</i> (NTh) <i>Jacksonia aculeate</i> (DD) <i>Sauropus trachyspermus</i> (NTh)	Potentially within proposed future disturbance areas (no disturbance in FY23)	<ul style="list-style-type: none"> Sites are currently in care and maintenance. Biodiversity Management Plan (Northern Territory). Support of Tanami Regional Biodiversity Monitoring Project, contributing to knowledge of the biodiversity values and better management practices. Wildlife Management Plans for species of conservation significance. Internal Disturbance Permits are required prior to any clearing.

Notes:

- P1 Poorly known species; species known from one or a few locations (generally five or less) which are potentially at risk
- P2 Poorly known species; species known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation and other land with secure tenure being managed for conservation.
- P3 Poorly known species; species known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining area of apparently suitable habitat much of it not under imminent threat.
- P4 Rare, near threatened or other species in need of monitoring
- EPBC Vulnerable - facing a high risk of extinction in the wild in the medium-term future
- NTh Near threatened
- DD Data deficient

Species common names have been included where available:

- NE Not Evaluated IUCN Red List Assessment
- DDi Data Deficient IUCN Red List Assessment
- LC Least Concern IUCN Red List Assessment
- NT Near Threatened IUCN Red List Assessment
- VU Vulnerable IUCN Red List Assessment
- EN Endangered IUCN Red List Assessment
- CR Critically Endangered IUCN Red List Assessment
- EW Extinct In the Wild IUCN Red List Assessment
- EX Extinct IUCN Red List Assessment