

CAPABILITY STATEMENT

SUBJECT

# Ecology Site Surveys

MARKETS

Feasibility and Mine Planning | Mine Operations | Mine and Quarry Closure  
Rehabilitation, Monitoring and Research

ISO

9001:2015 | 14001:2015 | 45001:2018





## Ecology Site Surveys

Ecological site surveys are vital in the mining sector, offering critical insights into mining activities', environmental impact and aiding in identifying effective mitigation measures.

These surveys entail thorough assessments of flora, fauna, and ecosystem services within and around mining sites. They evaluate biodiversity, habitat quality, and ecological functions, providing essential data for applications, risk assessments, compliance, and rehabilitation strategies. Furthermore, ecological site surveys encompass monitoring programs that sustain environmentally responsible practices and support ongoing activities. This holistic approach ensures that mining operations are conducted with a deep understanding of their ecological footprint and a commitment to environmental stewardship.

### Key considerations

- 1. Scope and objectives:** Clearly define the scope and objectives including the specific parameters to be assessed such as flora, fauna, habitat quality, and ecosystem services.
- 2. Methodology and techniques:** Determine the appropriate methodology and techniques for data collection based on the site's characteristics, considering factors like survey duration, sampling methods, and equipment needed.
- 3. Biodiversity assessment:** Conduct a thorough assessment of biodiversity, including species diversity, abundance, and distribution, to understand ecological richness.
- 4. Habitat quality:** Evaluate the quality of habitats within the survey area, considering factors like vegetation structure, soil quality, water resources, and presence of sensitive ecosystems.
- 5. Ecological function:** Assess the ecological function, such as nutrient cycling, pollination, water purification, and habitat provision, to gauge overall ecological health and functionality.

### Approach

SGME approaches ecological surveys with a systematic and comprehensive methodology, taking into account both Matters of State Environmental Significance (MSES) and Matters of National Environmental Significance (MNES). It begins with an initial consultation to understand project objectives and requirements, including any MSES or MNES considerations. Based on this, we design a customised survey plan that outlines the scope, methodology, and data collection techniques. Fieldwork is done using appropriate methods including transect surveys, quadrat sampling, and habitat assessments to gather data on flora, fauna, habitat quality, and ecosystem services. Biodiversity assessments, habitat quality evaluations, and analyses of ecological functions are also done to understand the site's ecological richness and functionality. Stakeholder engagement is integrated throughout the process to ensure alignment with project goals and regulatory compliance. The findings are then analysed and compiled into detailed reports with recommendations for mitigation measures and management strategies, considering the protection of both MSES and MNES.



## Outcomes

Engaging SGME for ecological site surveys results in outcomes pivotal for informed decision-making and exemplary environmental stewardship. SGME starts with a rigorous baseline assessment, meticulously examining biodiversity, soil quality, and hydrology to establish a robust understanding of the site's ecological dynamics. These surveys meticulously identify rare or endangered species, requiring targeted conservation strategies. Utilising cutting-edge techniques like LiDAR surveying, SGME accurately maps and evaluates habitats, enhancing precision in data analysis and ecological protection efforts.

Our comprehensive approach includes in-depth vegetation and fauna analysis, uncovering crucial insights into ecosystem health and resilience. By evaluating ecosystem services and environmental sensitivities, SGME unveils hidden potentials and risks, paving the way for sustainable development.

Their actionable recommendations, grounded in scientific rigor, guide impactful mitigation measures and sustainable management practices. SGME's ecological surveys offer not just data but a blueprint for harmonising mining with ecological integrity, driving sustainable practices and environmental conservation initiatives.

## Working with SGME

Engaging SGME as a collaborative partner delivers numerous benefits:

- **Improved return on investment (ROI):** Our expertise maximises ROI to satisfy investor expectations.
- **Reduced mine closure risks and disruptions:** Our strategies minimise complex closure risks to ensure a smooth future land use transition.
- **Addressing environmental, social, and governance (ESG) risks:** We focus on ESG criteria to mitigate environmental impacts and meet regulatory standards.
- **Enhanced strategic insight:** Collaboration boosts your performance through strategic planning.
- **Industry collaboration:** We foster partnerships with mining experts, staying abreast of technology and regulatory advancements.
- **Future risk vigilance:** Our proactive approach anticipates future risks to aid informed decision-making.
- **Innovative solutions for safe execution:** Our expertise delivers innovative solutions to ensure safe execution.

Our proactive and ethical approach ensures adaptability, sustainability and responsible development to safeguard the mining industry and create enduring value.

**CONTACT**

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