



MINE REHABILITATION MONITORING

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Southern Mapping provides solutions for environmental and mine rehabilitation monitoring through its access to daily passing high resolution multispectral satellites and its airborne mounted hyperspectral and LiDAR camera systems.

Utilizing imagery acquired in the short wave infra- red wavelengths of the electromagnetic spectrum it is possible to map the vegetation health of plants. Based on the principal that healthy plants have more chlorophyll in their leaves than unhealthy plants and that infra- red light is both sensitive and strongly reflected by chlorophyll. By mapping the relative chlorophyll content in rehabilitated sites in conjunction with in situ measurements on plant species and performance, it is possible to map stressed zones (often indicative of pollution point sources) and the success of rehabilitation projects month by month or season by season. Using the rich spectral content of the airborne hyperspectral imagery it is also possible to monitor hydrocarbon spills, alien vegetation species, acid mine drainage pollution point sources and water quality as input to environmental programs.

ABOUT SOUTHERN MAPPING

Southern Mapping provides LiDAR, Hyperspectral, Thermal surveys and mapping; as well as satellite imagery and associated product and GIS services for a variety of industries and sectors. These include civil engineering and infrastructure development, mineral exploration and mine management, environmental planning and rehabilitation, and urban and agricultural planning.

