FUGRO
VEGETATION MANAGEMENT

Providing a comprehensive look at the state of vegetation around a network's assets, Roames offers infrastructure managers powerful tools for remote investigation and risk analysis.

VEGETATION MANAGEMENT SERVICES

Roames vegetation management services provide inspection and risk analysis reporting of vegetation encroachments to electrical distribution networks. The reports enable asset operators to increase the safety and reliability of electricity supply, and deliver cost savings through operational efficiencies and use of innovative treatment strategies.

Analysis of a network and the surrounding natural and built environment is derived by Roames captured 3D virtual world.

Precise position of the real-world distribution network location and configuration with all vegetation, provided as part of Roames virtual world, removes the reliance on subjective field inspection for vegetation analysis. The virtual world is refreshed on an annual basis to deliver up-to-date vegetation risk analysis and audit modeled against in-field assets.

Roames provides an end-to-end data capture, storage and cloud delivery service to accelerate adoption and benefits realisation by asset operators. This reduces dependency on in-house sourcing and management of spatial and big data specialists, and the capital investment and ongoing operational expenses for storage infrastructure and management.

Roames vegetation management services include modelling and reporting of feeder level intrusions.


Vegetation inspection to analyse associated risk.

THE BENEFITS

Roames leverages large-scale, precise and detailed data capture and processing technologies to support vegetation management processes. This provides a cost-effective inspection and analysis service to enable:

- Increased frequency inspections of all vegetation
- Empirical metrics on each vegetation cluster within proximity of the network that may pose a risk
- Trend monitoring of vegetation growth
- Simulation of different vegetation strategies to assess work cost (treatment and deployment) and optimise work packages
- Condition based management of vegetation to confidently defer treatments and extend the time between treatment cycles
- Reduction or elimination of costs associated with other methods of inspection
- Reduction in the cost of managing vegetation treatment activity
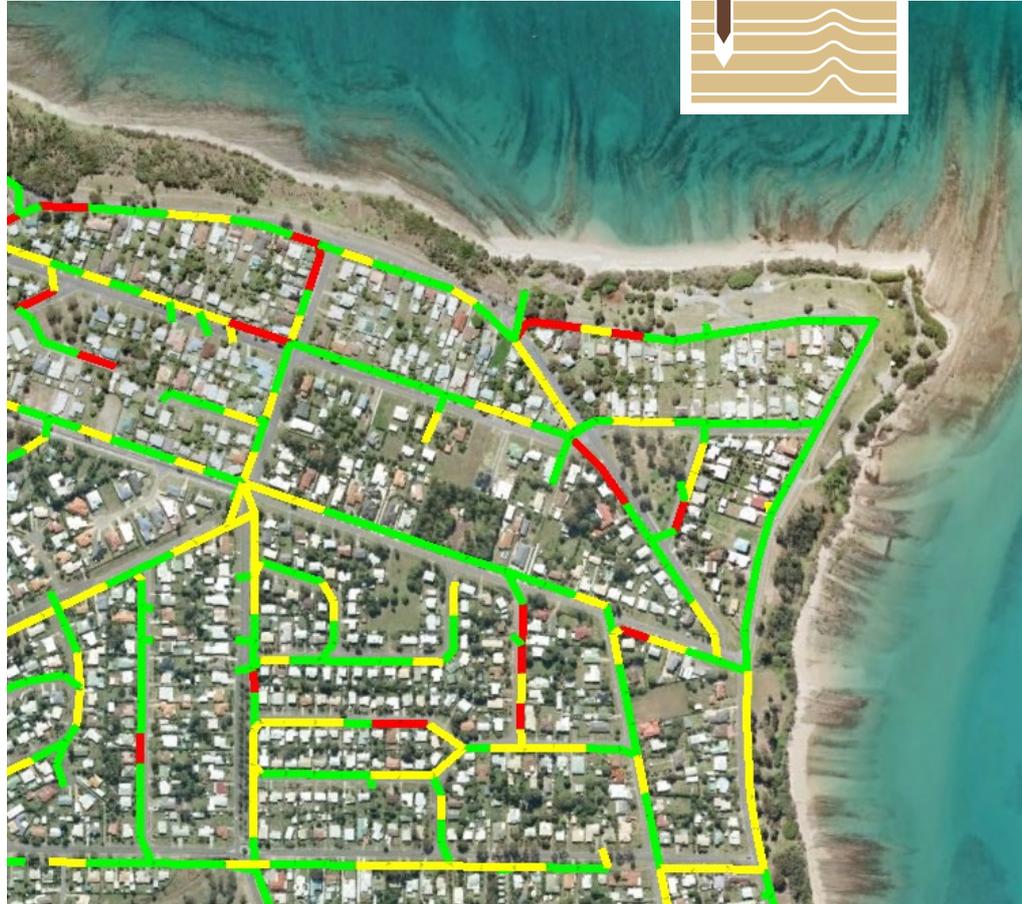
Encroachment reports provide immediate actionable reporting; red networks indicate vegetation in close proximity to conductors, yellow indicates vegetation within a distance categorised for inspection only.

KEY RISKS MITIGATED

From a network overview, to a detailed view of a single tree in 3D or drill down reports, Roames provides instant visibility of vegetation status anywhere, at any level of aggregation, mitigating risks that include:

- Fires caused by the interaction of vegetation and the electrical system
- Electrocutions through climbing or high voltage conductor contact with trees
- Outages as a result of vegetation interfering with the electrical circuit
- Non-compliance to regulations and legislation

CAPTURE CYCLE BENEFITS

Within the first year of operation, Roames generates standard treatment profiles that are used as the basis for assigning risk, providing data for strategic vegetation program management planning. This means savings from deferring treatments and eliminating large portions of inspection. Subsequent year savings are achieved by moving to less frequent vegetation treatment cycles driven by monitored growth rates that are an actual result of varying bioregion and climatic conditions.
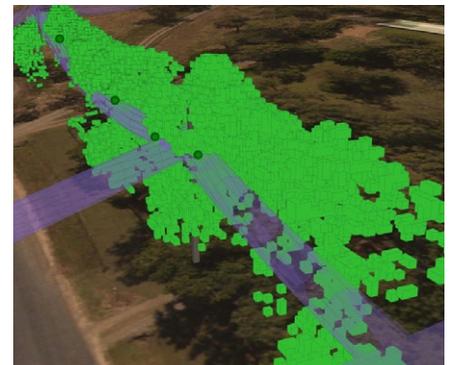
Roames provides rapid reporting of vegetation intrusions for efficient analysis.

VEGETATION RISK ANALYSIS REPORTS

Vegetation Risk Analysis reports provide valuable data for strategic planning and form the basis of a region-wide risk analysis. The categorisation and ranking is defined based on client and regulatory standards and proximity rules. The Roames capture program supplies real-world coordinates and analysis results for every intrusion detected, providing immediate context and relevance for operational staff.
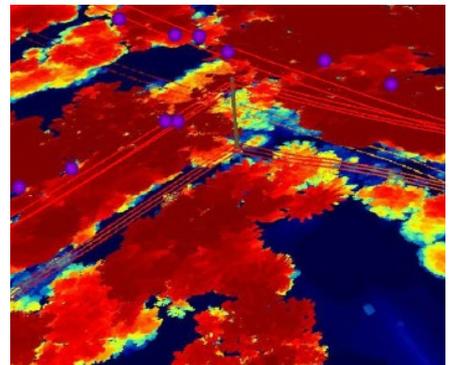
Network proximity zones are modeled to gauge the distance and volume of vegetation encroachments.

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