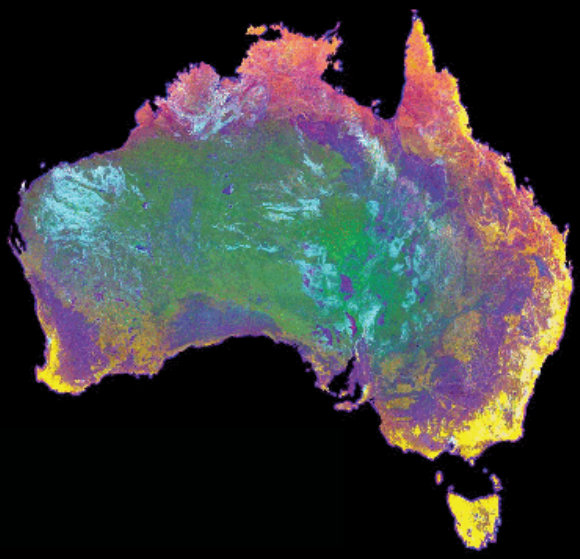
ozius

Environmental Intelligence.

Fit For Purpose Environmental Intelligence.



Making sense of the chaos of an ever-changing natural environment for over 10 years.

CAPABILITY STATEMENT

ozius.earth

ozius biome

Supporting Ecologists, Spatial Professionals, Governments and NGO's

What we do

Technology driven Consulting

Underpinned by the Ozius Biome® analytics engine capabilities.

Tailored services and data products that require higher levels of specificity, such as:

- Incorporating your own field data or remotely sensed data.
- Analysing & measuring specific biodiversity metrics, or regulatory reporting requirements.
- Anomaly detection & ongoing monitoring requirements.

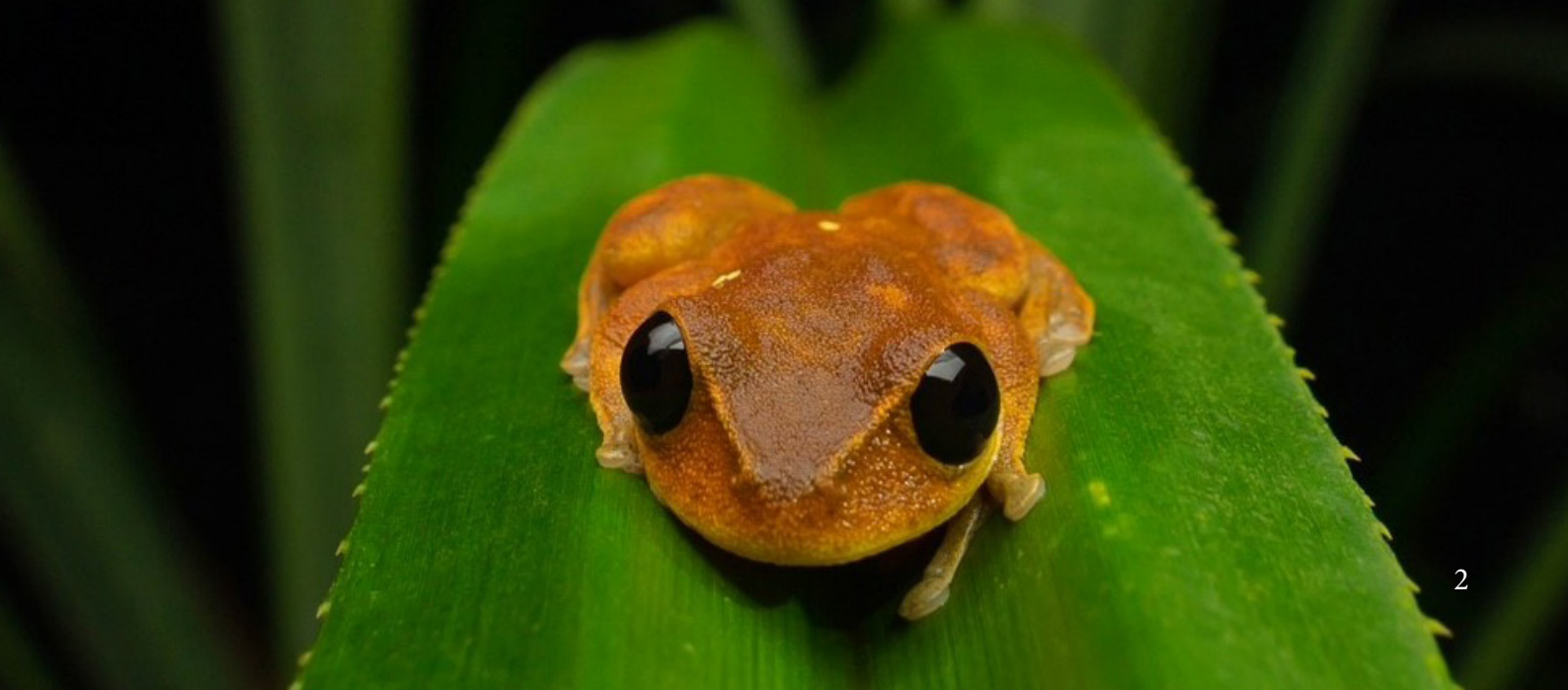
Next Gen Biome

Ozius Biome® Analytics Engine - Ozius Biome® is a powerful AI enabled analytics engine. Biome ingests a myriad of spatial data sources and formats combined with environmental and data science to create some of the worlds most advanced 4-Dimensional information at 10m pixel size anywhere in Australia.

Tip and Cue - vegetation change detection services, Habitat and Biodiversity data layers including: Canopy Cover, Vegetation Height and more, all tuned to your needs.

Trusted by Australia's largest public & private entities in:

- Mining & Resources
- Biodiversity
- Transport & Infrastructure
- Finance & Insurance
- Energy & Utilities
- Defense
- Universities & Research



At Ozius, we understand remote sensing at any scale from national to state.

Using multi modal, multi temporal and multi scale data, we know that not all sensors are equal and not all data are fit for purpose. That is why we design solutions that use the right data for the right job.

Whether your focus is national, catchment or site scale, or all three, we deliver fit for purpose environmental intelligence efficiently and consistently. Our approach scales seamlessly, with the potential to expand across additional continents and integrate on ground datasets such as terrestrial laser scanning.

The result is a custom biodiversity intelligence stack, tailored to your needs, at any site across Australia and beyond.

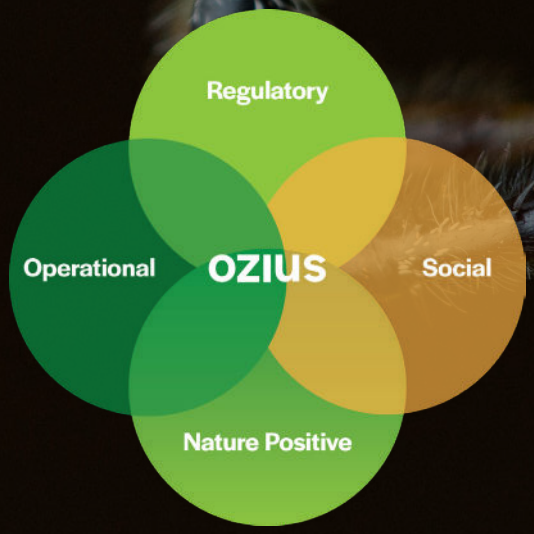
Who we help

Ecology & Sustainability Professionals (Govt & NGOs)

In a role of helping organisations meet environmental and sustainability objectives and regulations.

Works for:

- Energy and Resources (offsets, reporting and rehabilitation progress)
- Environment and Ecology firms (environmental assessment and monitoring) NGO's
- Research Government (all levels)



Environmental Risk Managers & Asset Owners

In a role to identify potential risks to high value assets and designs and manages mitigation measures.

Works for:

- Energy and Resource Enterprises
- Asset management firms
- Environmental Engineering firms
- Defence
- Infrastructure providers

Carbon Market Professionals & Stakeholders

In a role to provide sustainable and high value economic benefits through carbon market investments and activities. Supply Chain Assurance and compliance.

Works for:

- Larger Enterprise
- Carbon and Natural Capital Project Development Firms

The Ozius Heritage

Established in 2014 and based in Southeast Queensland, Australia, Ozius has been delivering innovative solutions across a diverse range of industries to help customers interpret and understand the natural environment.

Since its inception, the company has built a strong reputation for combining scientific expertise with practical application, supporting clients to make informed, data driven decisions about land, water, and ecological systems. Ozius operates across two complementary business streams, Consulting and Biome.

Through its Consulting division, the team provides specialist environmental advice, technical assessments, and tailored project support to government, infrastructure, and private sector clients. Through Biome, Ozius extends its capability into advanced environmental data services and technology, enhancing the way ecological information is captured, analysed, and applied.

Together, these two streams enable Ozius to deliver integrated solutions that bridge science, strategy, and on ground outcomes, reinforcing its commitment to sustainable environmental management.

The Ozius Timeline

2014

Alisa founded Ozius

2016

Ben joined Ozius

Early Biome

Ozius commences development of AI enabled system of workflows and code to improve consulting project efficiency

2018

Peter founded Ozius

RnD begins into scaling Ozius custom workflows and computational efficiencies.

2020

Biome Analytic Engine

with Continental Scale Processing takes shape

2022

Biome Data Products Launched

Australia's first 20 m resolution 3D vertical vegetation structure data sets

2025

Next Gen Biome

Ozius commences development of Next Gen Biome

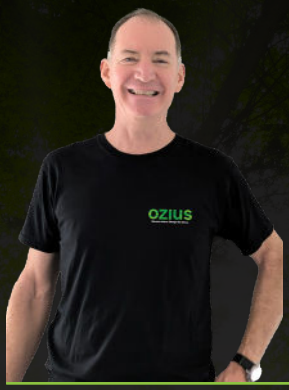
Next Gen Biome: A highly efficient multi-modal x multi- temporal x multi-scale data processing engine

Featured outputs: Australia's first multi-temporal 10m 3D biodiversity data products

Our Team

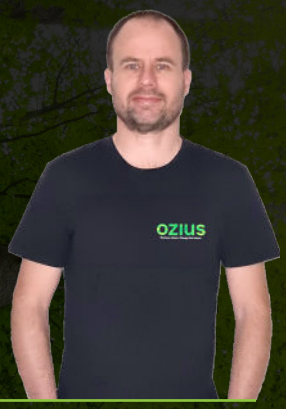
Alisa Starkey
Founder and Chief Science Officer

With a background in Marine Ecology, Alisa learned the benefits of utilising Earth Observation data when completing her Honours at the University of Wollongong.



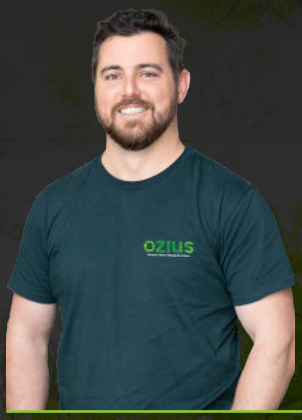
Dr Peter Scarth
Director and Chief Technology Officer

Peter leads the artificial intelligence and data science research at Ozius, working across disciplines to develop rigorous data management systems and validated mathematical models.



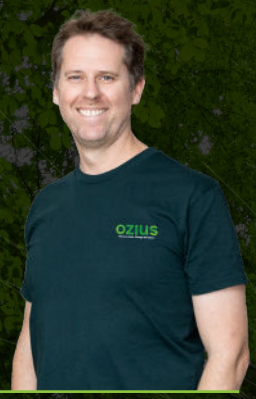
Sam Gillingham
Principle Software Engineer

Sam is a qualified software engineer with specific interest in cloud-based processing and presentation of scientific data, with a particular focus on efficient processing of remotely sensed data.



Tim Hackwood
Environmental Systems Analyst

Tim is an environmental and operations management professional with extensive leadership and project management experience, particularly in ecological restoration, vegetation assessments, and flora and fauna surveying.



Ben Starkey
Managing Director

Ben has a background in Urban Planning and Development leading high performing teams in both public and private sectors, and has been nationally recognised for his contribution within this industry in Australia.

Wayne Schulz
Non-Executive Director and Chairperson

Wayne has over 20 years of professional corporate finance experience focusing on valuations, due diligence, strategic reviews and mergers and acquisitions. He has worked and lived in Australia, Papua New Guinea, and South Africa.

Industries

Ozius delivers a whole new level of precision, delivered fast, to these industries.

From the height of the forest, right down to the ground, through our waterways and across tens of thousands of hectares, Ozius Biome® brings clarity to chaos.

Who needs Ozius?

Natural Capital and Biodiversity

Identify conservation priorities and monitor biodiversity outcomes using real time environmental intelligence.

Finance and Insurance

Enhance risk modelling and natural capital investment decisions using scalable environmental intelligence.

Infrastructure and Utilities

Support sustainable infrastructure planning and asset management with accurate spatial environmental data.

Defence Agencies

Improve environmental monitoring, risk assessment and strategic planning across large operational landscapes.

Agriculture

Track land condition, vegetation change and water resources to support sustainable land management.

Energy and Resource Mining

Monitor environmental impacts and support regulatory reporting with fast, reliable landscape intelligence.

Universities and Research Institutions

Accelerate environmental research with rapid access to large scale spatial datasets and ecosystem insights.

Customer Use Cases

Utilities Infrastructure Planning

- Identify environmental risk to assets using high resolution vegetation intelligence
- Support route selection, maintenance and investment with defensible spatial data
- Reduce outages by monitoring change across large networks

Sustainability and Regeneration

- Measure ecosystem condition using vegetation structure and biodiversity indicators
- Prioritise restoration and conservation with defensible spatial intelligence
- Track regeneration outcomes against reference ecosystems and regulatory targets

Transport Infrastructure

- Identify environmental constraints and sensitive habitats during corridor planning
- Support environmental approvals with high resolution vegetation intelligence
- Monitor landscape change along corridors to inform maintenance and compliance

Bushfire Modelling and Planning

- Map vegetation structure and fuels to improve fire behaviour modelling
- Identify elevated fuel loads to support proactive hazard reduction
- Track post fire recovery and landscape change over time

Defence and Intelligence

- Deliver landscape intelligence across remote areas using earth observation data
- Detect environmental change affecting operational planning and mobility
- Monitor strategic environments to support situational awareness and risk assessment

The Engine Behind Environmental Intelligence

Biome is the system that drives Ozius.

Built as a continental scale environmental intelligence engine, Biome fuses artificial intelligence, remote sensing and environmental science to structure the complexity of a rapidly changing natural environment.

It is a multi modal, multi temporal, multi scale data processing platform designed to deliver consistent, defensible insight at any scale, from site to nation.

Next Gen Biome now powers Australia's first multi temporal 10 metre 3D biodiversity data products.

A Multi Sensor, 3D Ecosystem View

- Environmental drivers such as rainfall and temperature
- Ground level niche complexity
- Vertical canopy structure
- Horizontal vegetation patterns

Traditional remote sensing maps what is present.

Biome maps how ecosystems are structured and functioning.

By integrating optical imagery, radar, LiDAR and climate datasets, Biome captures:

- This multi dimensional approach moves beyond 2D canopy cover to reveal structural and functional ecosystem intelligence.
- Biome also recognises that ecological niches are regional. A one size national model is scientifically flawed. Biome stratifies by bioregion to preserve ecological nuance.

Tracking Change Through Time

Built as a time series engine.

It quantifies structural growth, loss, disturbance and recovery across years or decades, enabling rganisations to measure environmental trajectories, not just static snapshots.

From clearing impacts to rehabilitation progress, from climate response to resilience following extreme events, Biome provides objective, scalable evidence to support regulatory reporting, sustainability commitments and operational decisions.

Intelligence at Any Scale

Fit for purpose

Biome delivers fit for purpose environmental intelligence at:

- Environmental drivers such as rainfall and temperature
- Ground level niche complexity
- Vertical canopy structure
- Horizontal vegetation patterns

Applications include sustainability and regeneration, infrastructure planning, environmental risk management, bushfire modelling, defence and natural capital initiatives.

All outputs are calibrated and validated using robust field and ancillary datasets, ensuring trusted, defensible results.

Biome is not just a data product.

It is a scalable environmental intelligence system designed for a nature positive future.

Awards & Recognition for Ozius

2019 Department of Defence/Frontier SI: Australian Geospatial Organisation AGOLABS:

2019 Deloitte Gravity Challenge 1.0 Finalists

2018 Westpac Top 200 Business of Tomorrow

2017 Global Earth Observation Challenge by Airbus Defense and Space -3rd Prize

2016 Australian Technology Competition

2016 National Planning Institute of Australia Award for Improving Planning

> **30 minutes with Ozius saved me three days in the field.**
>
> **The work Ozius produced gave us the confidence to apply these findings over an entire catchment that we could never visit on the ground.**
>
> Queensland Government Water Planning and Ecology Team 2017

ozius Environmental Intelligence.

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