OZIUS Harness chaos. Change the future.

CASE STUDY

Easy Biodiversity Offsets using Ozius Biome

TECHNICAL SNAPSHOT

Feature Product
Ozius Biome Modified Specht (1970) forest classification with a custom land use mask.

Customer Challenge
Identifing locations suitable for biodiversity offsets and fauna relocation sites.

The customer did not have regionally consistent information to identify and quantify habitat availability. The customer also did not have access to suitable information to calculate potential nature impacts for an Environmental Impact Statement project phase of a large, linear infrastructure project.

Customer Segment
Linear Infrastructure projects

Region & Area
Southeast Queensland

Computation
Ozius Biome ® Analytics Engine

Data & Inputs
Ozius Biome® Modified Specht (1970) forest classification.
Custom hydrology and land-use masks supplied by client

Applicability
Global – Linear infrastructure planning and route optimisation phases to minimise Environmental impacts, including Carbon and Nature footprints.

Presenting the challenge.

Despite best efforts to avoid disturbing nature during the construction of large infrastructure projects, there will typically be some unavoidable impacts. In Australia, state and federal governments require that any impacts on nature, such as loss of biodiversity or impacts on threatened species' habitats, must be offset so that there is no net loss of the identified habitats. Offsets are created on a like-for-like basis for the impacted habitats. The Offset site must be within the same bioregion as the impact sites and must achieve a conservation outcome for the impacted species or habitats.

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This client approached Ozius because they did not have access to suitable information to calculate potential nature impacts for an Environmental Impact Statement for their large, linear infrastructure project in Southeast Queensland.

They also did not have regionally consistent information to be able to identify and quantify habitat availability to satisfy the offset requirements.

This is a common challenge for large infrastructure projects as there are many factors that must be considered, including:

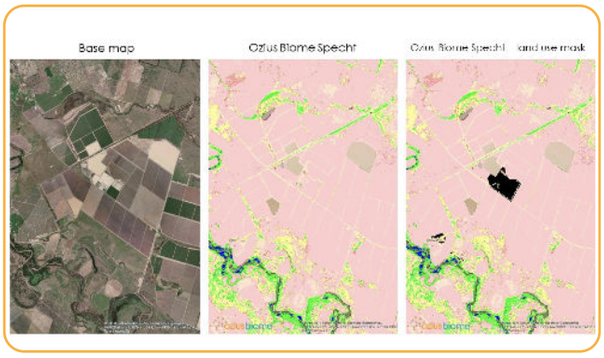
- Identifying and quantifying the habitat types that may be impacted by the project
- Understanding the maturity of the habitats that are identified
- Knowing how the impacted habitats connect with the broader landscape
- Finding like-for-like habitats that may benefit from offset and rehabilitation efforts

Our Solution.

After taking time to fully comprehend the needs of the client, we created a solution for the client using the Ozius Biome Modified Specht product with custom land use and waterbodies layers which would align with the State and Federal government criteria for Biodiversity Offset modelling.

Using satellite + analytics Ozius empowered the client to:

- Clearly identify what habitats would be impacted.
- Hone their modelling to meet their requirements.
- Incorporate a buffer zone surrounding the linear infrastructure alignment to gain a complete understanding of the surrounding natural areas and their connectivity.
- Enjoy seamless integration with other datasets they were using within their modelling and reporting environment.



Wins for the client.

Using the customised Ozius Biome Specht product, our client was able to

- Greatly enhance their modelling and therefore decision-making power with customised datasets and land use masks.
- Satisfy the offset requirements for both State and Federal governments.
- Adjust the spatial scale as required to garner information at all levels.
- Easily identify like-for-like habitats for impacted species.
- Save time and money on in depth field research.

Summary.

This project is a wonderful example of how Ozius can work with you to provide the accurate modelling information you require to make effective decisions without extensive field research. The solution can be customised to work with the data and reporting systems you already have access to and additional real-time data to create a consolidated big picture quickly. All this was delivered just one week after the client's order was confirmed.