

## **WA VEGETATION EXTENT MAPPING**

Western Australia's native vegetation supports our unique biodiversity, is internationally renowned and provides a range of benefits to Western Australians like cooling cities, fixing carbon and maintaining water quality. Our current mapping systems don't allow us to track losses and gains in this critical State asset.

Under the Native Vegetation Policy for WA, the State Government has allocated a new \$3.3 million over three years, supporting a pilot for a future Statewide WA Vegetation Extent mapping system, known as WAVE.

The pilot will test and develop how contemporary artificial intelligence-based vegetation mapping technologies perform in the WA setting. It will also clarify what truthing techniques are needed to refine the automated vegetation maps, to ensure they are reliable enough to inform decision-making. An initial suite of maps will be published for use across the public, private and community sectors.

Pending the pilot's success, the State Government intends to develop WAVE as an efficient, single source of truth, publicly accessible dataset to track losses and gains in native vegetation over time, across the State.

WAVE would build capability to track our progress towards a net gain in native vegetation. This is a fundamental need for nature-based accounting, which the State's current mapping functions do not support across the whole State.

The future system will support informed decisions and policy-making by multiple State agencies, guided by robust information on both cumulative impacts, and the revegetation efforts which add balance to our natural capital.

WAVE would also inform regulatory decisions on clearing across multiple agencies and portfolios, and informed policy-making on cumulative impacts. It would provide a tool for environmental reporting and assurance across the public, private and community sectors. Other critical State functions like land use planning, fire mitigation planning and other functions will also use the mapping.

The State Government is aware of high interest in this mapping from community, private and local government stakeholders, and robust stakeholder engagement will inform the pilot and any future system.

Native vegetation extent mapping and monitoring is a basic environmental accounting tool and a core State Government dataset with current and potential relevance to at least 27 government functions and services across multiple portfolios.

The last decade has seen huge advances in artificial-intelligence based ecosystem mapping. Through the pilot, we will test and develop how the technology can be efficiently and robustly applied across our large and diverse State.