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# Development of a state-and-transition model to guide investment in woodland vegetation condition

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### **SUMMARY**

Reversing the decline in the extent and condition of native vegetation is a national priority in Australia, with substantial investments in native vegetation restoration and management being made across the country. However, considerable uncertainty surrounds the determinants of success and the most cost-effective strategies to achieve restoration goals. Targeted monitoring is exceedingly rare in natural resource management (NRM) and consequently there is no reliable way to justify government investment on the basis of measured environmental benefits. This is a critical shortcoming that is frequently exposed as NRM agencies report on their progress towards reaching native vegetation targets.

Process models can represent beliefs about the dynamics of an ecological system and how the ecosystem responds to management. Our team's aim was to develop a process model that could be used to represent, inform, learn about and report on the ecological impact of investment in native vegetation management. We briefly describe the conceptual and quantitative