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What we learned about measuring change in vegetation extent and condition

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It is impractical to try to restore ecosystems to some 'rightful' historical state (Davis et al. 2011).

Hundreds of millions of dollars of public and private funds have been invested in vegetation management programs in Australia over the last 30 years, with a significant proportion in Victoria, the birthplace of the Landcare movement. In just the four years that the Landscape Logic project was active, our three partner catchment management authorities (CMAs) in Victoria invested \$260 million in environmental management programs. A major weakness in all these programs, and a weakness in any claim that we really are practising adaptive management, is the lack of data that enables us to determine the effect of this investment. When Landscape Logic formed, our three partner CMAs in Victoria identified this lack of information as a major gap in their understanding and practice.

Our research questions with respect to native vegetation were therefore as follows: whether we could quantify change in vegetation extent and condition, attribute change due to human intervention and other drivers, and distinguish between change from public and private funding sources.

Chapters 10–16 in Part II have reflected the way those questions were broken down into tractable pieces of research. It soon became apparent that we needed to tackle the questions of extent change (Chapters 10 and 11) and condition change (Chapter 12) separately. Extent change is covered in two chapters, reflecting the need to combine ecological knowledge and