

Do environmental report cards provide frameworks for restoration? Waikato River example.

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Environmental report cards are gaining popularity as communication tools because they enable clear messages about the state of the environment, ranging from the whole system to spatial subunits, values and indicators. The 2016 Waikato River Report Card extends the environmental report card concept to also provide more holistic information by including cultural, social and economic aspects based on bicultural values encapsulated in Te Ture Whaimana – the Vision and Strategy for restoration of the Waikato River. The development of this report card produced a system that also provides a framework for focusing restoration efforts towards meeting the Vision and Strategy. Key components for this purpose include: (1) the taura framework that links environmental indicators to the aspirations of the Vision and Strategy – the 8 Taura (Maori for “strands of a rope”) are the mega-values kai (indigenous foods), water security, ecological integrity, experience, sites of significance, economy, water quality, and sites of significance that, if restored, will provide for a healthy and well river and people; (2) the A to D system for grading the 8 Taura and the 64 indicators they are calculated from, and (3) conceptual linkage models of pressure-state-response relationships that identify potential restoration actions for key indicators (e.g., healthy eel and whitebait populations) and environments (e.g., hill farm streams, mainstem river reaches with hydrodams, lowland lakes). The taura and indicator grades for the 5 report card units, and their component mainstem, tributaries and lakes, highlight where and what aspects require focus for restoration and provide a system for tracking progress. The linkage models synthesise existing knowledge on ecological interactions, multiple stressors and the direct and flow-on effects of potential restoration actions. Recent discussions with river iwi indicate that the report card is helping them frame their restoration action plans.