Integrated catchment management (ICM): integration, knowledge management and the role of collaborative learning

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Over the past two decades, the challenges facing landowners, resource managers and scientists have multiplied. Where once our rural environments were viewed as single-sector-oriented productive landscapes, they now face demands by new players – such as those voicing their views on issues such as landscape, recreation, conservation and tourism. There are now many perspectives of resource management and the science and other resource information in this arena is frequently subjected to diverse and contested interpretations. To work in these areas ICM practitioners require collaborative approaches that accommodate multiple perspectives and utilise multiple sources of information.

The Motueka ICM research programme in New Zealand is a collaborative, holistic approach to large-scale, regional environmental issues. This programme (http://icm.landcareresearch.co.nz) was founded through extensive consultation with end-users and stakeholders and input from two internationally recognised experts. Seeds were sown during a workshop in 1998 attended by a wide array of stakeholders who identified that holistic and sustainable management of land, river, and coastal resources – a "ridge tops to the sea" perspective – was a top priority. The programme's goal has been to undertake research to help improve the management of land, freshwater, and near-coastal environments in catchments with multiple, interacting, and potentially conflicting land and water uses.

This goal is being accomplished through an innovative combination of historical research, biophysical experimentation, simulation modelling, and social learning that began in July 2000. The addition of social learning to the research mix has been designed specifically to improve interactions between science providers and community stakeholders, and to maximise the uptake and use of new knowledge and tools developed from the research.

This paper outlines where we have got to after 5 years and highlights the contribution and benefits that social science and collaborative learning can make to sustainable land management. It focuses on aspects of integration, collaborative learning, interdisciplinary science, and adaptive management cycles.