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Identify synergies for ecosystem services in south east Queensland, Australia

Key words: statistical analysis, ecosystem service relationships, ecosystem service clusters

Abstract:

An understanding of how ecosystem services (ES) are spatially clustered is important to understand synergies and tradeoffs between ES's. An example of a synergy is soil retention and nutrient regulation which are related by retaining soil organic matter. By identifying synergies we can put in place strategies to manage one service while also benefiting other services. At the same time this also reveals information of the relative influence of drivers or management practices to enhance ES's so we gain further understanding of management tradeoffs. A study of synergies for ecosystem functions and ES's was done for the South East Queensland (SEQ) region in Australia following on from a major ES mapping project called the SEQ Ecosystem Services Framework completed in 2010. The objective is to identify clusters of supporting ES's and to see if these areas are protected or have appropriate management practices in place. Statistical correlation analysis is used to identify relationships between pairs of ES's and spatial pattern analysis is used to identify clusters of co-occurring ES's. The results are presented in a poster with maps and charts to illustrate synergies for ES's and where they occur in the landscape. Commentary is also given on land policy and management practices in place to support ES clusters.