

## **Protecting the green behind the gold: integrating catchment management in Gold Coast City**

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The Gold Coast has experienced rapid increases in human population in the past few decades and managers are concerned this has placed considerable pressure on waterway health and threatens the livelihood and lifestyle of residents and tourists. In response, Gold Coast City Council has combined scientific investigations with community consultation to establish a vision and a modified set of water quality objectives (WQOs) for each catchment in the City. An outcome of these assessments is a detailed and focused management action plan. What has been most innovative with this process is the use of predictive computer models to represent existing urbanised areas and the use of a simplistic receiving water quality model to identify opportunities to reduce diffuse pollutant loadings in order to meet identified WQOs. Evidence from the modelling shows that with current land use, sediment and nutrient loads far exceed that which is sustainable for local waterways. As such, the “business as usual” option of land use management is not sustainable. Major reductions in pollutant loads are further required in all natural and constructed waterway catchment areas to ultimately achieve community expectations and visions for the Gold Coast environment. To capitalise on this shortfall, a range of restoration programs are underway in an attempt to improve degraded and protect those healthy catchments and waterways. These works include a blend of in-stream protection and habitat creation, retrofitting urban stormwater infrastructure, weed and riparian restoration, foreshore erosion and protection, and community education and capacity building. The overall success of this program lies in the ability to form close working partnerships with key catchment stakeholders and to coordinate on ground works programs. The applicability of this process of integrated catchment management in other coastal local government areas is envisaged.